Food Additive Status List

Color Additive Status List

Disclaimer FDA offers this list as a service to the Field Offices. Inclusion of a substance in the Food Additive Status list does not necessarily represent its legal regulatory status. The regulations for food additives in 21 Code of Federal Regulations need to be consulted.

More >>

NOTE: The Food Additives Status List is provided only as a quick look-up on the use limitations for a food additive. It is possible that mistakes or omissions could have occurred. Additionally, there may be cases where the agency has offered interpretations concerning specific provisions of the regulations. For example, in the case of boiler water additives or other minor ingredients, processing aids, or indirect additives, FDA has not objected, in certain cases, to the substitution of ammonium, calcium, magnesium, potassium, or sodium salts for each other when only one is listed in a regulation. The Food Additive Status list is updated at regular intervals, so it may not reflect the latest information. For all these reasons, take care before advising a firm that a use of a particular food additive is prohibited or otherwise limited. Read the actual regulation. If there are any doubts or if a particular situation is unclear, you or your supervisor should consult with the CFSAN, Office of Food Additive Safety (HFS-200) at (240) 402-1200, or the Division of Petition Review (HFS-265) at (240) 402-1264, or the Division of Food Contact Substance Notification Review HFS-275 at (240) 402-1162, or the Division of Biotechnology and GRAS Notice Review HFS-255 at (240) 402-1221.

Forward | Abbreviations

Additives: A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

FOREWORD

This Food Additives Status List, formerly called Appendix A of the Investigations Operations Manual (IOM), organizes additives found in many parts of 21 CFR into one alphabetized list. Additives included are those specified in the regulations promulgated under the FD&C Act, under Sections 401 (Food Standards), and 409 (Food Additives). The Food Additives Status List includes short notations on use limitations for each additive. For complete information on its use limitations, refer to the specific regulation for each substance. New regulations and revisions are published in current issues of the Federal Register as promulgated. Also refer to the Food Ingredient and Packaging inventories in the Foods section of the FDA web site to review several FDA databases of additive categories. For example, Substances Added to Food is a helpful reference within the limitations described at the beginning of the database.

NOTE: Pesticide chemicals from 40 CFR 180 for which EPA has set tolerances in food that are enforced by FDA have been removed from this list.

The Food Additive Status List omits certain categories of additives. Here are the omissions:

Obviously safe substances not cited in a regulation as Generally Recognized as Safe (GRAS). You may find such substances in the GRAS Notice Inventory on the FDA web site. This site contains notices received from companies since 1998, and FDA's response.

Synthetic flavoring substances in 21 CFR 172.515. The CFR does not contain a complete list of permissible flavorings. Certain trade groups such as the Flavor Extract Manufacturers Association have established expert panels to evaluate and make determinations on the GRAS status of their products. If you need help in determining the acceptability of a flavoring after consulting 21 CFR 172.515, contact CFSAN Office of Food Additive Safety (HFS-200) at (240) 402-1200.

Those pending administrative determination.

Substances granted prior sanction for specific use prior to enactment of the Food Additives Amendment. For additional information on these substances, contact the CFSAN Office of Food Additive Safety (HFS-200) at (240) 402-1200.

Indirect food additives, 21 CFR Parts 175, 176, 177, & Part 178 (except that sanitizing agents for food processing equipment as listed in 178.1010 are included in the Food Additives list.) Be aware that as a result of the Food Quality Protection Act of 1996 and Antimicrobial Regulation Technical Corrections Act of 1998, EPA now has jurisdiction over sanitizing solutions applied to permanent or semi-permanent food contact surfaces, other than food packaging. To look up indirect food additives in Parts 175, 176, 177 and 178 go to FDA's Indirect Additives Used in Food Contact Substances. Use it to locate the regulation in which its use is fully described. In 1997, FDA implemented a new Food Contact Notification program for certain food contact substances. These notifications are effective only for the manufacturer or supplier identified in the notification. A list of Effective Food Contact Substance (FCS) Notifications is available on the FDA web site.

Color additives, 21 CFR Parts 70, 71, 73, 74, 80 & 82. Go to the Color Additives Status List.

Please send corrections or additions to the list to Harold Woodall, FDA/CFSAN Office of Food Additive Safety (HFS-206), 5100 Paint Branch Parkway, College Park, Maryland 20740 or e-mail them to harold.woodall@fda.hhs.gov.

ABBREVIATIONS USED

Technical Effects

Technical Effects

Type	Kind, effect or use of additive	Type	Kind, effect or use of additive

AC	Anticaking agent	AF	Antifoaming (or defoaming) agent
AOX	Antioxidant	BC	Boiler compound
BL	Bleaching agent or flour-maturing agent	B&N	Buffer and neutralizing agent
CTG	Component or coating for fruits & vegetables	DS	Dietary supplement
EMUL	Emulsifier	ENZ	Enzyme
ESO	Essential oil and/or oleoresin (solvent free)	FEED	Substances under the Food Additives Amendment added directly to feed
FLAV	Natural flavoring agent	FL/ADJ	Substance used in conjunction with flavors
FUM	Fumigant	FUNG	Fungicide
HERB	Herbicide	HOR	Hormone
INH	Inhibitor	MISC	Miscellaneous
NAT	Natural substances and extractives	NNS	Non-nutritive sweetener
NUTR	Nutrient	NUTRS	Nutritive Sweetener
PEST	Pesticide other than fumigant	PRES	Chemical preservative
SANI	Sanitizing agent for food processing equipment	SDA	Solubilizing and dispersing agent
SEQ	Sequestrant	SOLV	Solvent
SP	Spices, other natural seasonings & flavorings	SP/ADJ	Spray adjuvant
STAB	Stabilizer	SY/FL	Synthetic flavor
VET	Veterinary drug, which may leave residue in edible tissues of animals or in edible animal products		

Regulatory Status

Regulatory Status

Type	Kind, effect or use of additive	Type	Kind, effect or use of additive
BAN	Substances banned prior to the Food Additives Amendment (FAA) because of toxicity. These substances are bolded and italicized.	FS	Substances permitted as optional ingredient in a standardized food
GRAS	Generally recognized as safe. Substances in this category are by definition, under Sec. 201(s) of the FD&C Act, not food additives. Most GRAS substances have no quantitative restrictions as to use, although their use must conform to good manufacturing practices.	GRAS/FS	Substances generally recognized as safe in foods but limited in standardized foods where the standard provides for its use.

	Some GRAS substances, such as sodium benzoate, do have a quantitative limit for use in foods.		
ILL	Substances used or proposed for use as direct additives in foods without required clearance under the FAA. Their use is illegal. These substances are bolded and italicized.	PD	Substances for which a petition has been filed but denied because of lack of proof of safety. Substances in this category are illegal and may not be used in foods.
PS	Substances for which prior sanction has been granted by FDA for specific uses. There are a number of substances in this category not listed herein because they have not been published in the FEDERAL REGISTER.	REG	Food additives for which a petition has been filed and a regulation issued.
REG/FS	Food additives regulated under the FAA and included in a specific food standard.		

Miscellaneous Abbreviations

Miscellaneous Abbreviations

Type	Kind, effect or use of additive	Type	Kind, effect or use of additive
&	and	amt	amount
art	artificially	avg	average
ca	about, approximately	calc	calculated
CFR	Code of Federal Regulations	cnd	canned
cond	conditions	comb.	w/ in combination with; combined with
comp	component	ctg	coating for fruits, vegetables, tablets
do	Same CFR reference as appears earlier in paragraph	dr	dried
F.R.	Federal Register	g	gram(s)
GMP	In accordance with good manufacturing practices; or sufficient for purpose; or quantity not greater than required	incl	including
mfr	manufacture	mg	milligram(s)
min	mineral	ml	milliliter
nonstdzd	nonstandardized	Part	Refers to Part number under Title 21 CFR
pdt	product	pdtn	production
pest	pesticide	pkg	packaging

ppm	parts per million	prepns	preparations
res	residue	sp	special dietary
suppl	supplement	sw	sweetened
tabs	tablets	temp	temporary
veg	vegetable(s)	w/	with
w/o	without	wt	weight
X-ref	cross reference	<	less than
=	less than or equal to	>	greater than
=	greater than or equal to	+	plus

ADDITIVES

A

Acacia (gum arabic)- EMUL/STAB, REG, Used as thickener, emulsifier, or stabilizer at ≤20% of alcoholic beverages-172.780, GRAS/FS, See Reg Part 135, Frozen Desserts; Part 169, Food Dressings and Flavorings; Part 169.179, Vanilla Pwd-184.1330

Acesulfame potassium - NNS, REG, See Regulation -172.800

Acetic acid - B&N/FEED, GRAS/FS, Part 133, Cheese; Part 582.1005, In animal feed practices; 184.1005, 172.814

Acetic anhydride - MISC, REG, In modifying food starch -172.892

Acetone - SOLV, REG, 30 ppm - As residual solvent in spice oleoresins 173.210

Acetone peroxides - BL, REG/FS, GMP, Part 137, Cereal Flours -172.802

Acetyl-(p-nitrophenyl)-sulfanilamide - FEED, REG, See: Sulfanitran

N-Acetyl-L-methionine (free, hydrated, or anhydrous, or sodium or potassium salts) - NUTR, REG, In foods, except infant foods and foods containing added nitrites/nitrates -172.372

Acetylated monoglycerides - EMUL, REG, GMP, Used in food, food processing, food pkg or food stg equipment -172.828

Acidified sodium chlorite solutions - REG, Microbial control agent in water for processing poultry, raw agricultural commodities, processed fruits, processed root, tuber, bulb, legume, fruiting (i.e., eggplant, groundcherry, pepino, pepper, tomatillo, and tomato), curcurbit and leafy vegetables, red meat, red meat parts, organs, processed, comminuted or formed meat food products, and seafood. See 173.325 for specifications and limitations.

Aconitic acid (equisetic acid, citridic acid, achilleic acid) -SY/FL, GRAS/FS - 184.1007

Acrolein - MISC, REG, In modifying food starch - 172.892

Acrylamide -acrylic acid resin - GMP, MISC, REG, < 5 ppm by wt of juice - Used in clarifying beet sugar or cane sugar juice and liquor or corn starch hydrolyzate - 173.5; < 10 ppm by wt of liquor or hydrolyzate; Fixing agent for the immobilization of glucose isomerase for use in manufacturing high fructose corn syrup - 173.357; FEED, REG, GMP, As a thickener & suspending agent in non-medicated aqueous suspensions intended for addition to animal feeds -573.120

Acrylamide-Sodium Acrylate Resin - MISC, REG, 173.5, Boiler Water Additive - 173.310, 172.710 - Adjuvants for pesticide use dilutions

Acrylic Acid 12-acrylamido-2,2-propionic sulfonic acid copolymer - BC, REG, GMP, Boiler water - 173.310

Acrilonitrile copolymers - 180.22

Adjuvants for pesticides use dilutions - ADG/PEST, REG, Surfactants and adjuvants added to pesticide use dilutions to growing crops - 172.710

Adipic acid - B&N/FEED, GRAS, GMP, In animal feed practices - 582.1009 - FLV, GRAS - 184.1009

Adipic anhydride - MISC, REG, In modifying food starch -172.892

Agar-agar - MISC, GRAS/FS, GRAS - 184.1115 - 0.8% -In baked goods and baking mixes; 2.0% - In confections & frostings; 1.2% - In soft candy; 0.25% - In all other candy; Part 135, Frozen Desserts; Part 150 Art Swt Jelly & Preserves

Aklomide (2-chloro-4-nitrobenzamide) - FEED, REG, 4.5 ppm - In liver & muscles of uncooked edible tissue -556.30; 3 ppm - In skin w/fat of chickens - 556.30 - Use 558.35

DL-Alanine - FL/ADJ, REG, 1% of pickling spice - As a flavor enhancer for sweeteners in pickling mix - 172.540 L- Alanine - NUTR, REG - 172.320

Albendazole -VET, REG, Use in cattle as suspension -520.45a; Use in cattle as paste - 520.45b; 0.2 ppm - As residue in uncooked edible cattle tissue - 556.34 (aminosulfone metabolite); 0.6 ppm - As residue in uncooked edible cattle muscles - 556.34; 1.2 ppm - As residue in uncooked edible cattle liver - do; 1.8 ppm - As residue in uncooked edible cattle kidney - do; 2.4 ppm - As residue in uncooked edible cattle fat - do

Alcohol, Denatured Formula 23A - MISC, REG - 73.1 Diluent in color additive mixtures for coloring shell eggs

Alcohol, SDA-3A - MISC, REG - 73.1 - Diluent in color additive for marking food

Alcohols/Phosphate Esters of Same Mixture - MISC, REG - 173.315, May be used at a level not to exceed 0.2 percent in lye-peeling solution to assist in the lye peeling of fruit and vegetables.

Alfalfa, Extract - GRAS - 182.20

Alfalfa herb and seed - SP/ESO, GRAS - 182.10

Algae, brown (kelp), or red - NAT, GRAS, REG -184.1120, 184.1121 and 172.365

Alginic Acid and Salts:
Ammonium alginate - MISC, REG, Boiler Water Additive -173.310

Calcium alginate - GRAS - 184.1187

Potassium alginate - GRAS - 184.1610

Sodium alginate - GRAS, REG - 184.1724, Boiler Water Additive - 173.310

Alginic acid - GRAS, 184.1011

Algin - STAB, GRAS/FS, Part 133, Cheeses; Part 135, Frozen Desserts; Part 150 Jellies and Preserves;

Alkanomide produced by condensation of coconut oil fatty acids and diethanolamine - MISC, REG, < 0.2% by wt application rate - In delinting of cottonseeds - 173.322

n-Alkyl(C12-C18)benzyldimethylammonium chloride -cpds, av mol wt 351-380 - SANI, REG, < 200ppm or 150-400 ppm - Of active quaternary compound in the sanitizing solution - 178.1010

n-Alkyl(C12-C14)dimethylethylbenzylammonium chloride - SANI, REG, 200 ppm - Of active quaternary compound in the sanitizing solution - 178.1010

alpha-Alkyl-omega-hydroxypoly(oxyethylene) - MISC, REG, < 3 ppm in the flume water - In flume water for washing sugar beets prior to slicing operations - 173.315; < 0.3% by wt application rate - In delinting of cottonseeds - 173.322

Alkylene Oxide Adducts of Alkyl Alcohols - MISC, REG, <0.2% in lye peeling - Assist in lye peeling of fruits and vegetables - 173.315

Allspice-SP/ESO, GRAS - 182.10 and 182.20

Allspice oil and oleoresin - ESO, GRAS - 182.20

Almond, bitter - ESO, GRAS, Free from prussic acid -182.20

Aloe - FL/ADJ, REG, GMP, Used only in conjunction w/flavors - 172.510

Alpha-acetolactate decarboxylase - ENZ, REG.GMP enzyme preparation (derived from Bacillus subtillis modified by recombinant methods to contain gene coding for enzyme from B. brevis), Used as a processing aid in the production of alcoholic malt beverages and distilled liquors -173.115.

Alpha-amylase - ENZ, REG, used to modify food starch -172.892

Althea flowers or root (marshmallow root) - FL/ADJ, REG, GMP - Used only in

conjunction w/flavors - 172.510

Aluminum ammonium sulfate - B&N, GRAS - 182.1127

Aluminum calcium silicate - AC, GRAS/FS - 182.2122 -< 2% by wt - Table salt; Part 169.179, Vanilla Powder

Aluminum nicotinate - DS, REG, As a source of niacin in foods for special dietary use - 172.310

Aluminum potassium sulfate - B&N, GRAS

Aluminum salts of fatty acids - MISC, REG, GMP - Binder, emul, and AC agent - 172.863

Aluminum sodium sulfate - B&N, GRAS

Aluminum stearate - AF, REG, X-ref - Defoaming agent comp - 173.340 (Used in processing beet sugar & yeast)

Aluminum sulfate - MISC, GRAS, Part 582 - Animal feed; REG, <2.0% in combo. w/<2.0% of 1-octenyl succinic anhydride -In modifying food starch -172.892; FEED,GMP/GRAS - 582.1125

Ambergris - MISC, GRAS

Ambrette (seed) - SP/ESO, GRAS - 182.10 and 182.20

Amino Acids - 172.320

p-Aminobenzoic acid - MISC, GRAS, <30 mg per day

Aminoglycoside 3'-phosphotransferase II - 173.170

Aminopeptidase from Lactococcus lactis - MISC, GRAS - To make cheddar cheese and protein hydrolysates -184, 1985

Ammoniated cottonseed meal - FEED, REG, <20% of total ration - In feed of ruminants as source of protein and non- protein nitrogen - 573.140; <10% of total ration for laying chickens - In feed of chickens as source of protein and non-protein nitrogen (573.140)

Ammoniated glycyrrhizin, licorice, or glycyrrhiza - MISC, FS, GMP, See Licorice

Ammoniated rice hulls - FEED, REG, <20 % of total ration - In feed of beef cattle as source of crude fiber and sole source of non-protein nitrogen - 573.160

Ammonium alginate - STAB, GRAS; BC, REG, GMP - In boiler water - 173.310

Ammonium bicarbonate - B&N, GRAS/FS, Part 163, Cacao Pdts; Part 582 - Animal feeds - 184.1135

Ammonium carbonate - B&N, GRAS/FS, Part 163, Cacao Pdts; Part 582 - Animal feeds - 184.1137

Ammonium caseinate - MISC, FS, Part 136, Bakery Products

Ammonium chloride - MISC, FS/GRAS, Part 136, Bakery Pdts - 184.1138

Ammonium hydroxide - B&N, GRAS/FS, Part 163, Cacao Pdts; Part 582 - Animal feeds - 184.1137, 184.1139

Ammonium persulfate - MISC, REG, <0.075% - Modifier for food starch - 172.892; <0.05% sulfur dioxide

Ammonium phosphate (mono- and dibasic) - B&N, GRAS/FS, Part 136, Bakery Pdts; Part 582 - Animal feeds -184.1139, 184.1141, 184.1141a, 184.1141b

Ammonium saccharin - NNS, See Saccharin

Ammonium sulfate - MISC, GRAS, GMP - 184.1143

Amoxicillin -VET, REG, 0.01 ppm - In uncooked edible tissues of cattle - 556.38; In milk - 556.38; Use: As Powder & Bolus

Ampicillin -VET, REG, 0.01 ppm neg residues - In uncooked edible tissues of cattle & swine; In milk - 556.40;

Amprolium (1-(4-amino-2-n-propyl-5-pyrimldinylmethyl)-2-picolinium chloride hydrochloride) alone or comb/w other drugs and antibiotics - FEED/VET, REG, 1 ppm - In uncooked liver and kidneys of chickens, turkeys, and pheasants as a residue - 556.50; 0.5 ppm - In uncooked muscle meat of chickens, turkeys, calves, pheasants as a residue - 556.50; 8 ppm - In egg yolks as a residue - 556.50; 4 ppm - In whole eggs as a residue -556.50; 2 ppm - In uncooked fat of edible tissues of calves - 556.60; Use in drinking water - 520.100; REG - Coccidiostats for feed uses, See 558.55, 558.58, 558.60, 558.62, 558.76, 558.78, 558.128, 558.248, 558.274, 558.460, 558.530

Amylase from Aspercillgus Oryzae - ENZ, REG -137.105, 137.155, 137.160, 137.165, 137.170, 137.175, 137.180, 137.185, 137.200, 137.205

Amyloglucosidase Enzyme Product - ENZ, REG, <0.1% by Wt. of gelatinized starch - 173.110 - Degrading gelatinized starch into constituent sugars, in the production of distilled spirits & vinegar

Amyris - FL/ADJ, REG, GMP, Used in conjunction w/flavors - 172.510

Angelica (root, stem, seed) - SP/ESO, GRAS - 182.10 and 182.20

Angola weed - FL/ADJ, REG, GMP, In alcoholic bev only -172.510

Angostura (cusparia bark) - ESO/SP, GRAS - 182.10 and 182.20

Anhydrous ammonia - FEED, REG, > 16% but < 17% ammonia in feed premix - Source of crude fiber & non-pro-tein nitrogen - 573.180

Animal protein hydrolysate, cond - FEED, REG, Source of animal protein - 573.200

Anise, Star Anise - SP/ESO, GRAS

Anoxomer - AOX, REG, 5000 ppm - 172.105

Antibiotics for growth promotion and feed efficiency -FEED, REG, See Bacitracin Methylene Disalicylate; See Bacitracin Zinc, Bambermycins, Chlortetracycline, Erythromycin thiocyanate, Lincomycin, Monensin, Oleandomycin, Oxytetracycline, Tylosin, Virginiamycin;

Anthracite Coal, Sulfonated - MISC, REG - 173.25 - Ion Exchange Resins, Meeting requirements of ASTM method D388-38, Class 1, Group 2

Apramycin - REG, 0.1 ppm - In uncooked muscle of swine - 556.52; 0.3 ppm - In swine liver - do; 0.4 ppm - In kidney & fat of swine - do; Use: Drinking water -520.110

Apricot kernel (persic oil) - NAT, GRAS

Arabinogalactan - EMUL, REG, GMP, In essential oils, non-nutritive sweeteners, flavor bases, non-standardized dressings, and pudding mixes - 172.610; MISC, REG, GMP, Comp of microcapsules for flavoring oils - 172.230

Arginine (L form only) - NUTR/DS, REG - 172.320

Arnica flower extract - FL/ADJ, REG, GMP, In alcoholic beverages only - 172.510

Arsanilic acid - FEED, REG, (See Arsenic) In poultry feed - 558.55; 558.58; 558.62; 558.248; 558.680

Arsenic - FEED, REG, 2 ppm - As residue in liver & kidney of swine - 556.60; 2 ppm - As residue in edible bypdts of chickens & turkeys - do; 0.5 ppm - As residue in muscle meat of chickens & turkeys, in eggs, & in muscle meat and by-products (other than kidney & liver) of swine - do

Artemisia - FL/ADJ, REG, GMP, Finished food thujone free - 172.510

Artichoke leaves - FL/ADJ, REG, GMP, In alcoholic beverages only - 172.510

Asafoetida - ESO, GRAS - 182.20

Ascorbic acid - PRES, GRAS, GMP - 182.3013; DS, GRAS, GMP - 182.5013; NUTR, GRAS, GMP - 182.8013; MISC, GRAS/FS, Part 137, Cereal Flours; 150.141, 150.161, Art Sw Jellies & Preserves; 155.200 - Canned Mushrooms & Artichokes

Ascorbyl palmitate - GRAS - For use as a preservative in foods - 182.3149

Asparagine (L-form) - NUTR/DS, REG - 172.320

Aspartame - NUTRS, REG, GMP, Sweetening agent, sugar substitute uses stated in - 172.804. Sugar substitute tablets, breakfast cereals, chewing gum, dry bases for beverages, instant coffee and tea beverages, gelatins, puddings, fillings, and dairy product analog toppings, ready-to-serve nonalcoholic flavored beverages, tea beverages, fruit juice based drinks where food standards permit such use, fruit flavored drinks and ades, imitation fruit flavored drinks and ades, frozen

stick-type confections and novelties, breath mints, hard and soft candy, refrigerated ready-to-serve gelatins, puddings, and fillings, fruit wine beverages with EtOH <7%, yogurt-type products where aspratame is added after pasteurization and culturing, refrigerated flavored milk beverages, frozen desserts, frostings, toppings, fillings, glazes and icings for precooled baked goods, frozen, ready-to-thaw-and-eat cheesecakes, fruit and fruit toppings, frozen dairy and nondairy frostings, toppings, and fillings, fruit spreads, fruit toppings, and fruit syrups, malt beverages with <7% EtOH and containing fruit juice, baked goods and baking mixes 0.5 wt.-% of ready-to bake products or of finished formulation and prior to baking.

Aspartic acid (L-form) - NUTR/DS, REG - 172.320

Aspergillus Niger - MISC, REG, For Fermentation Production of Citric Acid - 173.280

Azaperone - VET, REG, Use: Swine (Injection) - 522.150

Azodicarbonamide - BL, REG/FS, 45 ppm in flour - Part 137, Cereal Flours & 172.806

B

Bacitracin, manganese bacitracin, zinc bacitracin, Bacitracin methylene disalicylate - FEED/VET, REG, 0.5 ppm (neg res) - As residue in meat and meat by-products of cattle, poultry, pheasants, quail, and swine and in milk & eggs - 556.70; For feed use see 558.55, 558.58, 558.62, 558.76, 558.78, 558.274, 558.430, 558.460, 558.530, 558.680

Bacteria (harmless, lactic acid producing; propionic acid producing) - MISC, FS, Part 133, Cheeses; Part 166, Margarine

Bacterial Catalase - See Catalase, Bacterial **Bakers Yeast Glycan** - EMUL/STAB, REG, <10,000 organisms/gm by APC - 169.150, Salad Dressings; 172.898 as emulsifier; <10 yeast & molds/gm - Thickener, stabilizer or texturizer; < 5% - In salad dressings, 172.898; GMP, In frozen dessert analogs, sour cream analogs, cheese spread analogs, and in cheese-flavored and sour cream-fla-vored snack dips - 172.898

Bakers Yeast Protein (*Saccharomyces Cerevisiae*) -NUTR, REG, <10,000 organisms/gm by APC - In foods as Nutrient supplement, 172.325; <10 yeast and mold/gm in final product

Balm (lemon balm) - SP/ESO, GRAS - 182.10 and 182.20

Balsam of Peru - ESO, GRAS - 182.20

Bambermycins - FEED, REG, For feed uses in chickens, turkeys, & swine - 558.95

Basil - ESO, GRAS - 182.20

Basil (bush and sweet) - SP, GRAS - 182.10

Bay, Bay leaves - SP/ESO, GRAS - 182.10 and 182.20

Bay, (Myrcia Oil) - ESO, GRAS - 182.20

Beeswax (bleached, white wax) - MISC, GRAS

Beeswax (yellow wax) - MISC, GRAS - 184.1973

Beeswax, white (cire d'abeille) - FL/ADJ, REG, GMP, In conjunction with flavors - 172.510

Bentonite - FEED, GRAS, GMP 21CFR 582.1155

Benzathine cloxacillin -VET, REG, 0.02 ppm - As residues in milk - 556.115; Use: Infusion - 526.363

Benzene - MISC, REG, 1.0 ppm - In modified hop extract for beer - 172.560

Benzoic Acid - PRES, GRAS, 0.1%

Benzoin Resin - FL/ADJ, REG, GMP, In conjunction with flavors - 172.510, 73.1

Benzophenone

Benzoyl Peroxide - BL, FS, Part 137, Cereal Flours; Part 133 for milk to be used in certain cheeses

Bergamot (bergamot orange) - ESO, GRAS - 182.20

Beta-carotene - NUTR, GRAS, GMP, Use: Direct human food ingredient - 184.1245

BHA (butylated hydroxyanisole) - AOX/FS, GRAS, 0.02% - Of fat or oil content, incl essential (volatile) oil, or food, incl oleomargarine - Part 166, Margarine; AOX, REG, 10 ppm, alone or w/BHT - In potato granules - 172.110; 32 ppm - In mixed diced, glazed fruits - 172.110; 50 ppm, alone or w/BHT - In dry breakfast cereals, sweet potato flakes, dehydr potato flakes or shreds - 172.110; 90 ppm in mix or <2 ppm in prep food - In dry mixes for beverages and desserts - 172.110; 200 ppm alone or w/BHT - In emulsion stabilizers for shortenings; 0.1% - In active dry yeast -172.110; AOX, REG, 0.1% alone or w/BHT and/or propyl gallate - In chewing gum base - 172.615; AOX, REG, 0.1% of defoamer - For proc. Beet sugar & yeast - 173.340; AOX, REG, 0.5% of essential volatile oil - For use in flavoring substances - 172.515; AOX, REG, In mastitis form, for dairy cattle - 526.820

BHT (butylated hydroxytoluene) - AOX, GRAS, 0.02% -Of fat or oil content, incl essential oil, of food, incl oleomargarine Part 166 - Margarine; FS, 33 ppm in rice - In enriched parboiled rice - Part 137.350; FS, <0.02% in oleomargarine - In any animal fat ingredient permitted in oleo-margarine not to exceed 0.02% by wt of such animal fat content, Part 166 - margarine; AOX, REG, 10 ppm alone or w/BHA - In potato granules - 172.115; 50 ppm alone or w/BHA - In dry breakfast cereals, sweet potato flakes, dehydr potato flakes or shreds - 172.115; 200 ppm alone or w/BHA - in emul stab for shortenings - 172.115; REG, 0.1% alone or w/BHA and/or propyl gallate - In chewing gum base - 172.615; REG, 0.1% of defoamer - For Proc. Beet sugar & yeast - 173.340; REG, In mastitis form, for dairy cattle - 526.820

Bicarbonate of soda - B&N, GRAS/FS - 137.270, Self-rising Cornmeal

Bile salts & Ox Bile Extract - SDA, GRAS - 184.4560

Bioflavonoids, citrus - DS, ILL, Any claim for special dietary use renders the food misbranded (VitaSafe case)

Biotin - NUTR/DS, GRAS, GMP - 182.5159; 182.8159

Bitter almond - ESO, GRAS, Free of prussic acid - 182.20

Biuret, feed grade - NUTR, REG, GMP, In feed for ruminants except those producing milk for human consumption - 573.220

Blackberry bark extract - FL/ADJ, REG, In conjunction w/flavors only - 172.510

Boiler water additives - Ammonium alginate, cobalt sulfate, lignosulfonic acid, monobutyl ether of polyoxyethylene glycol or potassium tripolyphosphate, sodium carboxymethylcellulose, sodium glucoheptonate, sodium humate, sodium metasilicate, sodium metabisulfite, polyoxpropylene glycol, polyoxyethylene glycol, potassium carbonate, sodium acetate, sodium alginate, sodium aluminates, sodium carbonate, sodium hexametaphosphate, sodium hydroxide, sodium lignosulfonate, sodium nitrate, sodium phosphate (mono-, di-, tri-), sodium polyacrylate, sodium polymethacrylate, sodium silicate, sodium sulfate, sodium sulfite (neutral or alkaline), sodium tripolyphosphate, tannin (incl quebracho extract), tetrasodium EDTA, tetrasodium pyrophosphate, 1-hydroxyethylidene-1,1-diphosphonic acid and its sodium & potassium salt - BC, REG, GMP, In steam contacting food - 173.310
Hydrazine - BC, REG, In steam contacting food

Acrylamide-sodium acrylate resin - BC, REG, 0.05% of acrylamide monomer - In steam contacting food

Cyclohexylamine or Morpholine - BC, REG, <10 ppm - In steam contacting food except milk and milk products

Octadecylamine - BC, REG, <3 ppm - In steam contacting food except milk and milk products

Diethylaminoethenol - BC, REG, 15 ppm - In steam contacting food except milk and milk products

Trisodium nitrilotriacetate - BC, REG, <5 ppm in feed water - In steam contacting food except milk and milk products

Polymaleic acid and/or its sodium salt - BC, REG, Total < 1 ppm in feed water - In steam contacting food

Sorbitol anhydride esters (a mixture of sorbitan monostearate, polyoxyethylene (20) sorbitan mono stearate (polysorbate 60) and polyoxyethylene (20) sorbitan

monolaurate (polysorbate 20) - BC, REG, Each component < 15 ppm in steam contacting food

Bois de rose - ESO, GRAS - 182.20

Boldus leaves - FL/ADJ, REG, In alcoholic beverages only - 172.510

Borax - ***MISC, ILL, No petition filed, Illegal for use in foods incl. wax ctg for fruits and vegetables. MID permits use in export meats.***

Boron - MISC, REG, <310 ppm - In modified hop extract from sodium borohydride - 172.560

Boronia flowers - FL/ADJ, REG, GMP, In conjunction w/flavors only - 172.510

Bromelin or Bromelain (spelling optional) - MISC, MIA, To soften tissue of meats; ENZ, REG, As an enzyme preparation (optional ingredient) in bakery products - 136

Brominated vegetable oil - STAB, INTERM/REG, <15 ppm - In fruit flavored beverages where not precluded by a standard - 180.30

Bryonia root - FLA/ADJ, REG, GMP, In alcoholic beverages only - 172.510

Bucha leaves oil - FL/ADJ, REG, GMP, In conjunction w/flavors only - 172.510

Buckbeen leaves - FL/ADJ, REG, GMP, In alcoholic beverages only - 172.510

Buquinolate - FEED, REG, 0.4 ppm - In liver, kidney & skin of chickens - 556.90; 0.1 ppm - Residue in muscle of chickens - do; 0.5 ppm - Residues in uncooked yolk of eggs - do;0.2 ppm - Residues in uncooked whole eggs - do; Feed use in chickens, see 558.62, 558.530 & 558.105

Butadiene styrene rubber - MISC, REG, In chewing gum base - 172.615

Butane, n-butane, isobutane - MISC, GRAS - 184.1165

Butoxy monoether of mixed (ethylene-propylene) polyalkylene glycol - SANI, REG, GMP, Adequate drainage - 178.1010

n-Butoxypolyoxyethylene polyoxypropylene glycol -AF, REG, GMP, X-ref - Defoaming agent component (used in processing beet sugar) - 173.340

Butter Starter distillate - FLAV, FL/ADJ, GRAS, GMP -184.1848

Butyl acetate

Butyl Alcohol - MISC, REG - 73.1, 172.560 - Modified hop extract

1,3-Butylene glycol - SOLV, REG, GMP, In nat & syn flavoring substances except where standards preclude use - 173.220, 573.225. Used in the manufacture of sausage casings as a formulation aid and processing aid - 172.712.

Tert-Butylhydroquinone - AOX, REG, See TBHQ.

Butyl rubber - MISC, REG, Component of chewing gum base - 172.615

Butyl stearate - AF, REG, X-ref - Defoaming agent component (used in proc. beet sugar & yeast) - 173.340

C

Cacao - ESO, GRAS - 182.20

Cadmium sulfide - COLOR, ILL, Prior sanction for use as colorant in polystyrenes withdrawn - FD 1-8-69

Caffeine - MISC, GRAS, 0.02% - Cola-type beverages

Cajeput - FL/ADJ, REG, GMP, In conjunction with flavors

Calamus, root, oil or extract - FLAV, ILL, Illegal in foods

Calcium acetate - SEQ, GRAS - 184.1185

Calcium alginate - STAB, GRAS - 184.1187

Calcium ascorbate - PRES, GRAS - 182.3189

Calcium bromate - BL, FS, <0.0075 part for each 100 parts by wt of flour used - Part 136 - Bakery Products

Calcium bromide - SANI, REG, <200 ppm avail halogen - Adequate drainage - 178.1010

Calcium carbonate - MISC, GRAS/FS, Part 137, admixed w/benzoyl peroxide for bleaching flour; Part 136, Bakery Pdts; Part 135, Frozen Desserts; Part 582, Animal feeds; 184.1191; EMUL, REG, Comb w/any other optional emulsifying ingredients listed in 169.115 including sodium hexametaphosphate; DS/NUTR, GRAS, GMP - 182.5191, 182.8191

Calcium caseinate - MISC, FS, Part 135, Frozen Desserts except water ices; Part 133, Creamed Cottage Cheese

Calcium chloride - MISC, GRAS/FS, 184.1193, Parts 131, 133, 150, 155 & 156 in Evaporated Milk; Cheese & Cheese Products; Part 133; VET, REG, For use in mastitis formulations for treating dairy animals - 526.820

Calcium citrate - MISC, GRAS/FS, Part 133, Process Cheese, Cheese Food & Spread, Part 150, Art Sw Fruit Jelly Preserves & Jam, Parts 155 & 156, certain canned vegetables; Part 31; Part 582 - Animal feeds; DS/NUTR, GRAS,GMP - 182.5195, 182.8195

Calcium cyclamate - NNS, ILL, Removed from GRAS List 10-21-69. Legal only in products complying with drug provisions of the law.

Calcium diacetate - SEQ, GRAS, See calcium acetate

Calcium dioxide (Ca peroxide) - MISC, FS, Part 136

Calcium disodium ethylenediamine-tetraacetate [(calcium ethylenedinitrilo) tetraacetate]; calcium disodium EDTA - AF, REG, 25 ppm - Fermented malt beverages - 172.120; Antigushing agent; MISC, 60 ppm - Spice extractives in soluble carriers; Color & flavor; 100 ppm - Pecan pie filling, promote color retention; 340 ppm - Clams (cooked-canned), promote color retention; 800 ppm - Dry Pinto beans, promote color retention; 310 ppm - Promote color retention in dried lima beans (cooked, canned); 275 ppm -Crabmeat (cooked- canned), retard struvite formation, promote color retention; 250 ppm - Shrimp (cooked-canned), retard struvite formation, promote color retention; 33 ppm - Promote flavor in carbonated soft drinks; 110 ppm - Promote color retention in canned white potatoes; 200 ppm - Mushrooms (cooked, canned); 220 ppm - In pickled cucumbers or pickled cabbage; To promote color, flavor & texture retention; 100 ppm - Promote color retention in artificially colored lemon-flavored and orange-flavored spreads; 100 ppm - Potato salad, preservative; 75 ppm alone or comb with disodium EDTA - French dressing, mayonnaise, and salad dressing; non-standardized dressings and sauces, preservative; 100 ppm alone or comb /w disodium EDTA - Sandwich spread, preservative; 200 ppm by wt of egg yolk portion - Egg product that is hard-cooked & consists, in a cylindrical shape, of egg white w/an inner core of egg yolk, preservative; 25 ppm - In distilled alcoholic beverages - 172.120, promote stability of color, flavor and or product clarity; PRES, REG/MIA, 75 ppm - Oleomargarine - Part 166; 365 ppm - Promote color retention in legumes (all cooked canned, other than dried lima beans, pink beans and red beans) - 172.120

Calcium gluconate - MISC, GRAS/FS, GMP - 184.1199; Part 150, Art Sw Jelly & Preserves; Part 582, Animal feeds Calcium glycerophosphate - NUTR/DS, GRAS, GMP -182.8201, 182.5201

Calcium hexametaphosphate - SEQ, GRAS status under review

Calcium hydroxide - MISC/B&N, GRAS/FS, Part 155, Canned Peas; Part 135, Frozen Desserts; Part 582, Animal feeds - 184.1205

Calcium hypochlorite - SANI, REG, <200 ppm avail Cl - Adequate drainage - 178.1010; MISC, REG, < 0.036% Cl of dry starch - In modifying food starch for use in batter for commercially processed foods - 172.892

Calcium iodate - MISC, FS, <0.0075 parts for each 100 parts by wt. of flour used - Part 136, Bakery Pdts; NUTR. GRAS - 184.1206

Calcium iodobehenate - DS, GRAS, Animal Feed - 582.80

Calcium lactate - MISC, GRAS/FS, Parts 136, Bakery Pdts; Part 150, Art Sw Jelly & Preserves; Part 155, Canned Veg; Part 582, Animal Feeds - 184.1207; MISC, GRAS/FS, < amount which yields 0.051% calcium by wt in finished food - Improve crispness in canned bean sprouts, See Part 155.200

Calcium lactobionate - MISC, REG, GMP, Firming agent in dry pudding mixes - 172.720

Calcium lignin sulfonate (and/or sodium salt) - FEED, REG, <4 % of finished pellets - As

sole pelleting aid in animal feeds - 573.600; < 11% - Surfactant in molasses used in feeds as a source of metabolizable energy - 573.600

Calcium lignosulfonate - SP/ADJ, REG, GMP, Dispersing agent and stabilizer in pesticides for pre- or post-harvest use on bananas - 172.715

Calcium orthophosphate - B&N, FS, GMP GRAS - See calcium phosphate (tribasic)

Calcium oxide - MISC, GRAS/FS, Part 135 Frozen Desserts; Part 582, Animal feeds; DS/NUTR, GRAS, GMP -182.5210, 182.8210, 184.1210

Calcium pantothenate -NUTR/DS, GRAS, GMP, 182.5212, 184.1212

Calcium pantothenate (calcium chloride double salt of) d- or dl-form - DS, REG, GMP, Label of additive container or any intermediate premix prepared there-from shall contain name of the additive and the concentration of additive expressed as pantothenic acid - 172.330

Calcium periodate - FEED, REG, Nutr source of iodine in salt for livestock - 573.240

Calcium peroxide (Same as calcium dioxide) - MISC, FS, <0.0075 parts for each 100 parts wt. of flour used -Parts 136, Bakery Pdts

Calcium phosphate (mono-) - MISC, GRAS/FS, Part 150, Art Sw Jelly & Preserves; Part 155.200, Cnd Potatoes, Cnd Green or Red Sw Peppers, Canned Carrots; Part 155.190(a), Canned Tomatoes; Part 136, Bread; Part 582, Animal feeds

Calcium phosphate (mono-, di-) -NUTR/MISC, GRAS/FS, Part 137, Cereal Flours and other standardized foods

Calcium phosphate (mono-, di, or tribasic) - MISC, GRAS/FS, Part 150, Art Sw Jelly and Preserves; Part 136, Bread; DS/NUTR, GRAS, GMP - 182.5217, 182.8217

Calcium propionate - PRES, GRAS/FS, Part 136 Bakery Pdts; Part 133, Cheeses; Part 150, Art Sw Fruit Jelly & Preserves -184.1221, 184.1784

Calcium pyrophosphate - NUTR/DS, GRAS, GMP -182.5223, 182.8223

Calcium saccharin - NNS, INTERIM, See Saccharin

Calcium salt of partially dimerized rosin - CTG, REG, GMP, X-ref - Coating on fresh citrus fruit - 172.210

Calcium salts - MISC, FS, 0.026% - Part 155.190(k), Cnd Tomatoes; Part 155.200, Canned Potatoes, Green or Red Sweet Peppers, Lima Beans, Carrots; Part 136, Enriched Bread, Rolls & Buns

Calcium salts of fatty acids - MISC, REG, GMP - Binder, emul, and AC agent - 172.863

Calcium silicate (including synthetic) - AC, FS, <2% -Part 169.179 Vanilla Powder; AC, REG, GMP, Max 2% in foods except 5% in baking powder - 172.410; <2% - In animal feeds - 573.260

Calcium sorbate - PRES, GRAS - 182.3225

Calcium stearate - AC, REG/FS, <2% by wt. - Part 169.179, Vanilla Powder; AF, REG, GMP, In beet sugar and yeast - 173.340; MISC, GRAS, GMP - 184.1229

Calcium stearate, feed grade - FEED, REG, GMP, As anti-caking agent in feeds - 573.280

Calcium stearoyl-2-lactylate - MISC, REG/FS, <0.5 part/100 parts flour - Part 136, Bakery Pdts - 172.844; MISC, REG, <0.05% - As a whipping agent in liquid & frozen egg whites; MISC, REG, <0.5% - As a whipping agent in dried egg whites; MISC, REG, <0.3% by wt of finished pdt - As whipping agent in whipped vegetable oil topping; REG, <0.5% - As conditioning agent in dehyd potatoes - do

Calcium sulfate - MISC, GRAS/FS; Part 133, Cheese and Related Cheese Pdts; Part 137, Cereal Flours; Part 136, Bakery Pdts; Part 135, Frozen Desserts; Part 150, Art Sw. Jelly & Preserves; Part 155, Cnd Vegetables; Part 156, Cnd Tomatoes - 184.1230

Calendula - SP, GRAS - 182.10

Calumba root - FL/ADJ, REG, GMP - In alcoholic beverages only - 172.510

Camomile, camomile flowers English, Roman, German, Hungarian - SP/ESO, GRAS - 182.10 and 182.20

Camphor tree - FL/ADJ, REG, GMP, Comp of flavors - safrole free - 172.510

Cananga - ESO, GRAS - 182.20

Candida lipolytica - ENZ, REG, Fermentation organism for production of citric acid - 173.165

Candida guilliermondii - ENZ, REG, Complete absence - Fermentation production of citric acid - 173.160

Candelilla Wax - CTG, GRAS, GMP - 184.1976

Canola oil - MISC, GRAS, X-Ref - Rapeseed oil, Raw Erusic Acid

Capers - SP, GRAS - 182.10

Caproic acid - MISC, REG, <1% aliphatic acids - In peeling soln for fruits & veg - 173.315

Caprylic acid - PRES, GRAS, In cheese wraps; MISC, REG, <1% aliphatic acids - In peeling soln for fruits & vegs -173.315

Capsicum - SP/ESO, GRAS - 182.10 and 182.20

Caramel - MISC, GRAS - 182.1235

Caraway - SP/ESO, GRAS - 182.10 and 182.20

Caraway, black (black cumin) - SP, GRAS - 182.10

Carbadox - FEED, REG, ZERO - Residues in uncooked edible tissue of swine using procedures in 556.100; FEED, REG, Feed Use: 558.115

Carbarsone (not USP) - FEED, REG, 0.025% to 0.0375% in the feed - In feed for turkeys - 558.680, 558.120; FEED, REG, 2 ppm - As residue in edible byproducts of chicken & turkeys - 556.60; 0.5 ppm - As residue in muscle meat of chickens & turkeys & eggs - do

Carbohydrase enzyme derived from *Aspergillus niger* - ENZ, REG. GMP, For removal of visceral mass in clam processing or shell from shrimp - 173.120

Carbohydrase enzyme derived from *Rhizopus Oryzae* - ENZ, REG. Used in the production of dextrose - 173.130

Carbomycin - FEED, REG, ZERO - Residues in edible tissues of chickens - 556.110; Use in comb/w oxytetracycline HCl - 520.1660a (Drinking Water)

Carbon dioxide - MISC, GRAS - 184.1240

Carbon monoxide - MISC, REG, 4.5% by volume - In gas combustion product - 173.350

Carboxymethylcellulose - STAB, FS, Part 133, Cheeses; Part 135, Frozen Desserts; Part 169, Dressings for Foods & Flavorings; GRAS

Cardamom (cardamon) - SP, GRAS - 182.10

Cardamom Oleoresin - ESO, GRAS, 182.20

Cardamom seed (cardamon) - ESO, GRAS - 182.20

Carnauba wax - MISC, GRAS - 184.1978

Carob bean - ESO, GRAS - 182.20

Carob bean extract -ESO, GRAS -182.20

Carob bean gum (locust bean gum) - STAB/EMUL, FA/FS, Part 133, Cheeses; Part 135, Frozen Desserts; Part 169 Dressings for Foods; Part 150, Art Sw Jelly & Preserves; GRAS -184.1343

Carotene - NUTR/DS, GRAS, GMP, 182.5245 - 182.8245

Carrageenan and its ammonium, calcium, potassium, or sodium salts - STAB, REG, GMP, In foods, except for those standardized food that do not provide for such use -172.620, 172.626; STAB, REG/FS, <0.8% by wt of finished cheese - Part 133, various sections, Cheese Prdts

Carrageenan or carrageenan salts with Polysorbate 80 -MISC, REG, 500 ppm polysorbate 80 in final food containing the additives - For producing foods in gel form - 172.623 (See 172.620, 172.626, & 172.840 for specifications)

Carrot - ESO, GRAS - 182.20

Cascara sagrada - FL/ADJ, REG, GMP, In conjunction with flavors - 172.510

Cascarilla bark - ESO, GRAS - 182.20

Cassia, cassia bark (Chinese, Padang or Batavia, Saigon) - SP/ESO, GRAS - 182.10 and 182.20

Cassie flowers - FL/ADJ, REG, GMP, In conjunction w/flavors - 172.510

Castoreum - MISC, GRAS - 182.50

Castor Oil - MISC, REG, < 500 ppm in hard candy - A release and anti-sticking agent - 172.876; GMP, Comp. protect ctg vit & min tabs. Meet Specs in USP XIX; FL/ADJ, REG, GMP, In conjunction w/flavors - 172.510

Catalase, Bacterial (derived from *Micrococcus lysodeikticus*) - ENZ, REG/FS, < 20 ppm of the wt of the milk treated - To destroy hydrogen peroxide in mfr of cheese - 173.135;133.113;

Catechu, black - FL/ADJ, REG, GMP, In conjunction with flavors - 172.510

Cayenne pepper - SP, GRAS - 182.10

Cedar, White (arborvitae) leaves and twigs - FL/ADJ, REG, GMP, Finished food thujone free, Used in conjunction with flavors - 172.510

Ceftiofur - VET, REG, 3.0 ppm - Use as sterile powder -522.313; Residue in muscle - 556.113; 9.0 ppm - Residue in kidney - do; 6.0 ppm - Residue in liver - do; 12.0 ppm -Residue in fat - do

Celery seed - SP/ESO, GRAS - 182.10 and 182.20

Cellulase enzyme derived from *Aspergillus niger* - ENZ, REG, GMP, For removal of visceral mass in clam processing and shell from shrimp - 173.120

Cellulose gum - STAB, GRAS/FS, X-ref - Sodium Carboxymethylcellulose

Cellulose triacetate - MISC, GMP, Fixing agent for the immobilization of lactase for use in reducing the lactose content of milk - 173.357

Centaury (centrurium) herb - FL/ADJ, REG, GMP, In alcoholic beverages only - 172.510

Cephapirin, sodium - VET, REG, 0.02 ppm - Residues in milk, 556.115; Use - 529.365; 0.1 ppm - Residues in uncooked edible tissues of cattle - 556.115; Use: Infusion -529.365

Cephapirin benzathine - VET, REG, 0.02 ppm - As residue in milk - 556.115; Use: Infusion - 526.363

Cetyl Alcohol, synthetic - MISC, REG, GMP, See Fatty alcohols, synthetic - 172.864

Cetylpyridinium chloride - REG, Used as an antimicrobial agent in a fine mist spray to treat the surface of raw poultry carcasses prior to immersion in a chiller at a level not to exceed 0.3 gram cetylpyridinium chloride per pound of raw poultry carcass. The solution shall also contain propylene glycol at a concentration of 1.5 times that of the cetylpyridinium chloride-173.375

Chamomile Flower - SP, REG - 182.10

Chamomile Flower, English, Oil - ESO, REG - 182.20

Chemicals for controlling micro-organisms in cane sugar and beet sugar mills-REG 173.320

Chemicals used in delinting cottonseed - 173.322

Chemicals used in washing fruits & vegs. or to assist in peeling fruits and vegs. Polyacrylamide, Potassium bromide, Sodium dodecylbenzenesulfonate, Sodium hypochlorite, sodium 2-ethyl-l- hexylsulfate, sodium n-alkylbenzene sulfonate, sodium mono- and dimethyl-naphthalene sulfonates- mol wt 245-260, Alkylene oxide adducts of alkyl alcohols and phosphate esters of alkylene oxides. Adducts of alkyl alcohols mixtures -MISC, REG, Use of chemicals followed by rinsing to remove residues. X-ref - Individual chemicals, 173.315 limits amounts of some in wash water

Cherry-laurel leaves - FL/ADJ, REG, GMP, In conjunction w/flavors only; <25 ppm prussic acid - 172.510

Cherry-laurel water - FL/ADJ - 172.510

Cherry, pits, extract - FL/ADJ, REG, GMP, In conjunction w/flavors only; <25 ppm prussic acid - 172.510

Cherry, wild, bark - ESO, GRAS - 182.20

Chervil - ESO/SP/FLAV, GRAS - 182.10

Chervil extract -ESO, GRAS - 182.20

Chestnut leaves/extract - FL/ADJ, REG, In conjunction w/flavors - 172.510

Chewing gum base - MISC, REG, GMP, Chicle, chiquibul, crown gum, gutta hang kang, jelutong, massaranduba balata, massaranduba chocolate, nispero, lechi caspi, pendare, perillo, rosidinha, Venezuelan chicle, Leche de vaca, Niger gutta, tunu, chilte, natural rubber, glycerol ester of tall oil resin, etc. - 172.615

Chicle - MISC, REG, Comp of chewing gum base - 172.615

Chicory - ESO, GRAS - 182.20

Chilte - MISC, REG, Chewing gum base - 172.615

Chilquibul - MISC, REG, Comp of chewing gum base -172.615

Chirata (Chiretta, East Indian Bolonong) & herb extract - FL/ADJ, REG, GMP, In alcoholic beverages only - 172.510 Chives - SP, GRAS - 182.10

Chloramphenicol - VET, REG, ZERO - Drug in any form may not be used in food (meat, milk,

and egg) producing animals

Chlorhexidine dihydrochloride -VET, REG, ZERO Residue in edible tissues of calves - 556.120

Chlorine & chlorine dioxide - BL, FS, GMP, Part 137, Cereal Flours

Chlorine dioxide - MISC, REG, Used as an antimicrobial agent in poultry process water at a concentration not to exceed 3 ppm residual chlorine dioxide. Used as an antimicrobial agent in water used to wash fruits and vegetables that are not raw agricultural commodities at a level not to exceed 3 ppm residual chlorine dioxide - 173.300

Chlorine dioxide, stabilized - SANI, REG, For use as rinse for food processing equipment - 178.1010

Chlorobutanol - VET, REG, ZERO - In milk from dairy animals from use of mastitis formulations - 526.820; As residues - 556.140

Chlorofluorocarbon-113 - MISC, REG, GMP, To cool or freeze chickens - 173.342

Chloromethylated aminated styrene di-vinylbenzene resin - MISC, REG, 500 ppm in sugar liquor - To clarify sugar liquor - 173.70

2-Chloro-4-nitrobenzamide - FEED, REG, See Aklomide

Chloropentafluoroethane alone or comb/w carbon dioxide nitrous oxide, propane, or octafluorocyclobutane - MISC, REG, Used as a propellant and aerating agent in food except where food standards preclude use -173.345

Clorsulon -VET, REG, Use: As a drench for cattle -520.462; 1.0 ppm - As residue in uncooked edible muscle tissue of cattle - 556.163; 2.0 ppm - As residue in uncooked liver - do; 3.0 ppm - As residue in kidney - do; 4.0 ppm - As residue in uncooked cattle fat - do; As injection for cattle; combination with Ivermectin - 522.1193

Chlortetracycline - FEED/VET, REG, 4 ppm - Residues in uncooked kidneys of chickens & turkeys; 1 ppm - In uncooked muscle, liver, fat & skin of chickens and turkeys as residue - 556.150; ZERO - Residues in eggs - 556.150; 4 ppm - Residues in uncooked kidney of swine - 556.150; 2 ppm -Residues in uncooked liver of swine - 556.150; 1 ppm - Residues in uncooked muscle of swine - 556.150; 0.2 ppm - Residues in uncooked fat of calves - 556.150; 4 ppm Residues in uncooked liver & kidneys of calves - 556.150; 1 ppm - Residues in uncooked muscle & fat of calves -556.150; 0.1 ppm - In uncooked kidney, liver, and muscle of beef cattle & non-lactating dairy cows as residue; ZERO -Residue in uncooked fat - 556.150; ZERO - Residue in milk - 556.150; 1 ppm - Residues in uncooked kidney of sheep -556.150; 0.5 ppm - Residues in uncooked liver of sheep -556.150; 0.1 ppm - Residues in uncooked muscle of sheep - 556.150; For feed use: 558.55, 558.58, 558.105, 558.128, 558.175, 558.274, 558.368, 558.430, 558.530, 558.680

Chlortetracycline - FEED, REG, Sulfa: 0.1 ppm (neg residue) - Residue in uncooked edible

tissues of swine, 556.690;
+Procaine Penicillin - Penicillin: 0 - Residue in uncooked edible tissues of swine, 556.510;
+Sulfathiazole - Chlortetracycline: 4 ppm - Residue in uncooked edible tissue of swine kidney - 556.150; 2 ppm -Residue in uncooked edible tissue of swine liver - 556.150; 1 ppm - Residue in uncooked edible tissue of swine muscle - do;0.2 ppm - Residue in uncooked edible tissue of swine fat - do; Uses & other information - 558.155

Chlortetracycline - FEED, REG, Sulfa: 0.1 ppm (neg residue) - Residues in uncooked edible tissues of cattle & swine - 556.670
+Procaine Penicillin - Penicillin: 0 - Residue in uncooked edible tissues of swine - 556.510
+Sulfamethazine - Chlortetracycline: - 4 ppm - Residue in uncooked kidney of swine, 556.150; 2 ppm - Residue in uncooked liver of swine, 556.150; 1 ppm - Residue in uncooked muscle of swine, 556.150; 0.2 ppm - Residue in uncooked fat of swine - 556.150; Uses & other information, 558.145

Choline bitartrate - NUTR/DS, GRAS, GMP - 182.5250, 182.8250

Choline chloride - NUTR/DS, GRAS, GMP - 182.5252. 182.8252

Choline xanthate - FEED, REG, GMP, For poultry, swine & ruminants - 573.300

Chymosin enzyme preparation derived from E. Coli K12 - ENZ, GRAS, GMP, As a stabilizer & thickener -184.1685; derived from Aspergillus niger - ditto.

Cinchona bark, red or yellow - FL/ADJ, REG, < 83 ppm total - Cinchona alkaloids in finished beverage - 172.510

Cinnamon & bark & leaf, Ceylon, Chinese, and Saigon -O/SP, GRAS, 182.10 and 182.20

Cinnamyl anthranilate - SYL/FL, BAN, ZERO - 189.113

Cinnamyl formate

Cire d'abielle - FL/ADJ, REG, GMP, X-ref Beeswax, white -172.510

Citric acid - SEQ/B&N, GRAS/FS - 182.1033, 182.6033 -GMP, Part 169, Dressings; Part 133, Part 146 Canned Fruit Juices; Cheese; Part 166, Oleomargarine; FEED, GRAS, GMP, Part 582.1033 - Animal feeds; REG - 172.755, 173.165

Citronella - ESO, GRAS - 182.20

Citrus bioflavonoids - DS, ILL, Any claim for special dietary use renders the food misbranded (Vitasafe Case)

Citrus peels - ESO, GRAS - 182.20

Civet (zibeth, zibet, zibetum) - ESO, GRAS - 182.20

Clary (clary sage) - SP/ESO, GRAS - 182.10 and 182.20

Clopidol (3,5-Dichloro-2,6-dimethyl-4-pyridinol) - FEED, REG, 0.02 ppm - Residues in

milk - 556.160; 0.2 ppm -Residues in cereal grains, vegs, fruits, meat of cattle, sheep and goats, and in edible tissues of swine - 556.160; 1.5 ppm - Residues in liver of cattle, sheep & goats - 556.160; 5 ppm - Residues in muscle of chicken & turkeys - 556.160; 5 ppm - Residues in liver & kidneys of chickens & turkeys -556.160; Uses in chicken & turkey feeds - 558.175

Cloxacillin -VET, REG, 0.01 ppm - Residues in milk; uncooked edible tissue of cattle - 556.165

Clove, bud, leaf, and stem - ESO, GRAS - 184.1257

Clover - SP/ESO, GRAS - 182.10 and 182.20

Cloves - SP, GRAS - 184.1257

Coatings on fresh citrus fruits - CTG, REG, GMP -172.210

Cobalt (acetate, carbonate, chloride, oxide, sulfate) -NUTR, GRAS, As nutritional dietary supplement in animal feed - 582.80

Cobaltous salts (acetate) - MISC, ILL, Illegal for use, 172.260 revoked chloride, sulfate) 8/12/66

Coca (decocainized) - ESO, GRAS - 182.20

Cocoa butter substitute from palm oil - GRAS, GMP - In the following food categories: confections and frostings; coatings of soft candy; sweet sauces and toppings -184.1259

Cocoa butter substitute from coconut oil, palm kernel oil or both - ESO, REG, Coating material for vitamins, citric acid, succinin acid and spices. In lieu of cocoa butter in sweets - 172.861

Cocoa with dioctyl sodium sulfosuccinate for manufacturing -FLV,REG, 75 ppm of finished beverage -0 172.520

Coffee - ESO, GRAS - 182.20

Cognac oil, white and green - MISC, GRAS - 182.50

Cola nut - ESO, GRAS - 182.20

Colloidal Silicon dioxide - AC, REG, X-ref - Silicon dioxide

Combustion product gas - MISC, REG, GMP, To displace or remove oxygen in processing, stg, or pkging of beverage pdts and other foods, except fresh meats - 173.350

Condensed animal protein hydrolysate - FEED, REG, < 5% poultry feed - For use - 573.200; < 10% cattle feed

Copaiba - FL/ADJ, REG, GMP, In conjunction w/flavors -172.510

Copals, Manila - MISC, REG, 73.1 - Diluents in color additive mixtures

Copolymer condensates of ethylene oxide and propylene oxide - STAB, REG, GMP,

Stabilizing agent in flavor concentrates; processing aid and wetting agent w/DSS for fumaric acid - 172.808; MISC, REG, 0.5% by weight of flour - In yeast leavened bakery products as a dough conditioner, if Standards permit its use - 172.808; Part 136 - Bakery Products; < 0.05% - Surfactant and defoaming agent in scald baths for poultry defeathering - 172.808

Copper (carbonate, chloride, gluconate, hydroxide, orthophosphate, oxide, pyrophosphate, sulfate) - NUTR, GRAS, As nutritional dietary supplement in animal feed -582.80

Copper gluconate - NUTR/DS, GRAS, GMP, In any food -182.5260, 182.1260

Copper (cuprous) iodide - NUTR/DS, GRAS, <0.01% - In table salt as a source of dietary iodine - 184.1265

Copper sulfate - NUTR/SUPPL, GRAS, GMP, Processing aid - 184.1261

Coriander - SP/ESO, GRAS - 182.10 and 182.20

Cork, oak - FL/ADJ, REG, GMP, In alcoholic beverages only - 172.510

Corn dextrin - NUTRS, GRAS, GMP - 184.1277

Corn gluten - GRAS, GMP - 184.1321

Corn silk - ESO, GRAS - 182.20

Corn sugar - NUTRS, GRAS, GMP - 184.1857

Corn syrup - NUTRS, GRAS, GMP - 184.1865

Corn Syrup, High Fructose - NUTRS, GRAS, GMP -182.1866

Costmary - FL/ADJ, REG, GMP, In alcoholic beverages only - 172.510

Costus root - FL/ADJ, REG, GMP, In conjunction w/flavors -172.510

Cottonseed & soybean fatty acids - MISC, REG, GMP In foods as a lubricant, binder, defoaming agent & component in manufacture of other food grade additives - 172.860

Cottonseed flour (cooked and partially defatted) -MISC, REG, See 172.894 for specifications

Cottonseed Products (modified) - MISC, REG, 60 ppm N-hexane < 1% fat by wt of finished product - Decorticated ground cottonseed kernels - 172.894

Coumaphos (O,O-Diethyl O-(3-chloro-4-methyl-2-oxo-2H-1-benzopyran-7-yl) phosphorothioate) - Uses in cattle & chicken feeds -558.185

Coumarin - SY/FS, BAN, Any food containing coumarin added as such or as a constituent of tonka beans or tonka extract is adulterated.

Coumarone-indene resin - CTG, REG, < 200 ppm fresh wt basis on fruit - As protective

coating for fruit - 172.215

Crambe meal, heat toasted - 573.310

Cubeb - FL/ADJ, REG, MP, In conjunction w/flavors - 172.510

Cumin (cummin) - SP/ESO, GRAS - 182.10 and 182.20

Cumin, black (black caraway) - SP, GRAS - 182.10

Cuprous iodide - NUTR/DS, GRAS, 0.01% - In table salt as a source of dietary iodine -184.1265

Curacao orange peel (orange, bitter, peel) - ESO, GRAS -182.20

Curdlan - MISC, EMUL, STAB, REG/FS, GMP - 172.809

Currant black, buds & leaves - FL/ADJ, REG, GMP, In conjunction w/flavors - 172.510

Cusparia bark - ESO, GRAS - 182.20

Cyclamates - NNS, ILL, NOT LEGAL IN FOOD

Cyclohexane - MISC, REG, 73.1 - Diluents in color additive mixtures

Cyclohexylamine - BC, REG, 10 ppm in steam - Except in steam in contact with milk and milk products - 173.310

Cyfluthrin - INSECT, REG, Tolerances for Residues 180.436

Cysteine (l-form) - MISC, FS, 0.009 parts per 100 parts flour by wt. - Part 136 - Bakery Products; 184.1271; 184.1272; NUTR/DS, REG - 172.320

Cysteine (l-form) monohydrochloride - MISC, GRAS -184.1272 - Used to supply up to 0.009 part of total L-cys-teine per 100 parts of flour in dough as a dough strengthener

Cystine (l form) - NUTR/DS, REG - 172.320

D

Damar Gum (Shorea dipterocarpaceae) - Diluents in color additives - 73.1

Damiana leaves - FL/ADJ, REG, GMP, In conjunction w/flavors - 172.510

Dandelion, dandelion root - ESO, GRAS,

Dandelion, fluid extract (Taraxacum spp.) - GRAS -182.20

DDVP - FEED, REG, See Dichlorvos

Decalactone alone or comb/w dodecalactone - FLAV, REG, <10 ppm alone or <20 ppm comb - As artificial flavoring in oleomargarine. Part 166 - 172.515

Decanoic Acid - SANI, REG, 109 - 218 ppm total fatty acids - Component of sanitizing solution -

178.1010, Coating for fruits and vegetables - 172.210, Fatty acids -172.860, Defoaming agents - 173.340

1-Decanol - SYN fatty alcohol - 172.864

Decoquinate - FEED, REG, 2 ppm - In uncooked edible tissue, other than skeletal muscle, of chicken and goats as a residue - 556.170; 1 ppm - In skeletal muscle of chickens as a residue - 556.170; Use: In dry and liquid medicated feed - 558.195

Decyl alcohol, synthetic - MISC, REG, GMP, See Fatty alcohols, synthetic - 172.864

Defoaming agents and components Dimethylpolysiloxane, polyoxyethylene 40 monostearate, Polysorbate 60, Polysorbate 65, propylene glycol alginate, silicon dioxide, sorbitan monostearate, aluminum stearate (For use in processing beet sugar and yeast only - 173.340); **butyl stearate, BHA, BHT, calcium stearate, fatty acids, hydroxylated lecithin, isopropyl alcohol, magnesium stearate, mineral oil, petrolatum, odorless light petroleum hydrocarbons, Petroleum waxes, Synthetic isoparaffinic petroleum hydrocarbons, Oxystearin, Polyethylene glycol, Polyoxyethylene (600) dioleate, Polyoxyethylene (600) mono-ricinoleate, polypropylene glycol, polysorbate 80, potassium stearate, propylene glycol mono & diesters of fats and fatty acids, soybean oil fatty acids - hydroxylated; tallow - hydrogenated, oxidized, or sulfated; hydrogenated tallow alcohol. n-Butoxypolyoxyethylene** (AF, REG, For use in processing beet sugar only - 173.340); **polyoxypropylene glycol formaldehyde, sodium polyacrylate, synthetic petroleum wax, oleic acid from tall oil fatty acids** - AF, REG, In foods. See individual chemicals for uses and limitations - 173.340

Defoaming agents, butter, oleomargarine, lard, corn oil, coconut oil, cottonseed oil, mono- and diglycerides of fat-forming fatty acids - AF, REG/FS, GMP, In fruit butters, jellies, preserves and related products - Part 150

Dehydroacetic acid or its Na salt - PRES, REG, 65 ppm as the acid - In cut or peeled squash - 172.130

Dextrans (avg mol wt <100,000) - MISC, GRAS

Diacetyl - SY/FL, GRAS, GMP - 184.1278

Dextrin - GRAS - 184.1277

Dextrose - GRAS - 184.1857

Diacetyl tartaric acid esters of mono- and diglycerides of edible fats or oils, or edible fat-forming fatty acids EMUL, GRAS/FS, Part 136, Bakery Products - 184.1101

2,4-Diamino-5-(6-methylveratryl)pyrimidine -FEED, REG, See Ormetoprim

Di-n-alkyl(C8-C18-from coconut oil)dimethylammonium chloride - PEST, REG, 5% by weight - 172.710

Dialkanolamide (1 mole of methyl laurate w/ 1.05 mole of diethanolamine) - MISC, REG, < 2 ppm in flume - Used in flume water for washing sugar beets prior to slicing operation - 173.315

Diammonium phosphate - FEED, REG, < 2.0% of crude protein in total daily ration - Source of non-protein nitrogen & phos in ruminant feeds. See 573.320

Diatomaceous earth - FEED, REG, 2% - As an inert carrier or anti-caking agent in animal feed - 573.340

2,2-Dibromo-3-nitrilopropionamide - PRES, REG, 2.0 -10.0 ppm in raw cane or beets - Used alone for control of microorganisms in cane and beet sugar mills, byproducts not for use in animal feeds - 173.320

Dicalcium phosphate - NUTR/FS, GRAS/FS, Part 137; XREF calcium phosphate

Dichlorodifluoromethane - MISC, REG, GMP, Direct contact freezing agent for foods - 173.355; With ethylene oxide as fumigant for ground spices

3,5-Dichloro-2,6-dimethyl-4-pyridinol - See Clopidol

Dichloroisocyanuric acid - SANI, REG, <100 ppm avail halogen - Adequate drainage - 178.1010

Dichlorvos (2,2-dichlorovinyl dimethyl phosphate or DDVP) - FEED, REG, 0.1 ppm - In edible tissues of swine -556.180; Use & other information - 558.205: 520.600

Diethanolamide condensate from soybean oil fatty acids (C16-C18) - Adjuvants for pesticide use dilution -172.710

Diethanolamine condensate from stripped coconut oil fatty acids (C10-C18) - Adjuvants for pesticide use dilution - 172.710

Diethylaminoethanol - BC, REG, 15 ppm - X-ref; Boiler water additives - 173.310

Diethylene glycol monoethyl ether - SANI, REG, GMP, Adequate drainage - 178.1010

Diethylenetriamine - Ion-exchange membranes - 173.20

Diethylenetriamine crosslinked with epichlorohydrin -Ion-exchange resins - 173.25

Diethylamino-cellulose - MISC, GMP, Fixing agent for the immobilization of glucose isomerase for use in the manufacture of high fructose corn syrup, in accordance with Sec. 184.1372 - 173.357

Diethylstilbestrol (DES) - FEED, BAN, Not legal for animal use (drug or feed)

Diethyl pyrocarbonate (DEPC) - INH, ILL, Not legal in food

Diethyl tartrate

Dihydrosafrole - SY/FL, PD/ILL, Not legal in food

3,5-Diiodosalicylic acid - DS, GRAS, Animal feed - 582.80

Dilauryl thiodipropionate - AOX, GRAS, 0.02% of fat or oil incl essential oil content of food - 182.3280

Dill - SP/ESO, GRAS - 184.1282

Dill, Indian - FL/ADJ, REG, GMP, In conjunction w/flavors only - 172.510

Dimethylamine-Epichlorhydrin Copolymer - REG, 150 ppm - Decolorizing agent in clarification of sugar liquors and juices - 173.60

Dimethylamine-epichlorohydrin resin - MISC, GMP, Fixing agent for the immobilization of glucose isomerase for use in manufacturing high fructose corn syrup - 173.357

Dimethyldialkyl(C14-C18)ammonium chloride - MISC, REG, <700 ppm by wt of sugar solids - Decoloring agent in the manufacture of sugar, alkyl groups (C14-C18) derived from tallow - 173.400

Dimethyl dicarbonate - MISC, REG, Microbial control agent in the following beverages under normal circumstances of bottling, canning, or other forms of final packaging, where the viable microbial load has been reduced to 500 microorganisms per milliliter or less by current good manufacturing practices such as heat treatment, filtration, or other technologies prior to the use of dimethyl dicarbonate:; 1) In wine, dealcoholized wine, and low alcohol wine in an amount not to exceed 200 parts per million. (2) In ready-to-drink teas in an amount not to exceed 250 parts per million. (3) In carbonated or noncarbonated, nonjuice-containing (less than or equal to 1 percent juice), flavored or unflavored beverages containing added electrolytes (5-20 milliequivalents/liter sodium ion (Na+) and 3-7 milliequivalents/liter potassium ion (K+)) in an amount not to exceed 250 parts per million. (4) In carbonated, dilute beverages containing juice, fruit flavor, or both, with juice content not to exceed 50 percent, in an amount not to exceed 250 parts per million - 172.133

Dimethylethanolamine - Component of Ion-exchange membranes - 173.20

Dimethylpolysiloxane - AF, REG, ZERO - In milk -173.340; 110 ppm - In dry gelatin dessert mixes; 250 ppm In salt for cooking purposes; 10 ppm - In other food in its ready-for-consumption state, 145.180(a), Cnd Pineapple; 146.185(a), Cnd Pineapple Juice

Dimetridazole - FEED/VET, REG, ZERO - NOT LEGAL FOR ANIMAL USE

Di-n-alkyl(C8-C10)dimethyl-ammonium chloride -SANI, REG, 150 ppm - Of active quaternary compound in the sanitizing solution - 178.1010

Di-n-alkylC8-C10)dimethylammonium chloride, n-alkyl(C12-

C18)benzyldimethylammonium chloride, ethyl alcohol and alpha-(p-nonylphenyl)-omega-hydroxypoly(oxyethylene) - SANI, REG, 150 - 400 ppm -For use as components of sanitizing solution to be used on food contact surfaces - 178.1010

3,5-Dinitrobenzamide - FEED, REG, ZERO - In edible tissues and by-products of chickens; As residue 556.220; Feed use - 558.376

Dioctyl sodium sulfosuccinate - SDA, REG/FS, <0.5% of wt of gums or hydrophilic colloids - As solubilizing agent for gums & hydrophilic colloids used in food as stabilizing or thickening agents - 172.810; <0.4% by wt - In cocoa for manufacturing - 163.117, 172.810; 75 ppm - In finished beverage made with cocoa with DSS - 172.520; 15 ppm in finished gelatin - Wetting agent in fumaric acid acidulated gelatin desserts, including: Dry Gelatin Desserts; 10 ppm in finished beverage or fruit juice drink - dry beverage base, and fruit juice drinks when standards of identity do not preclude such use - 172.810; 25 ppm of finished beverage - As emulsifying agent for cocoa fat in non-carbonated bev containing cocoa - do; REG, <0.5 ppm per percent of sucrose -Processing aid in mfr of sugar - 172.810 <25 ppm in final molasses - Diluents in color additives, 73.1 - Copolymer condensates of ethylene oxide and propylene oxide, 172.808

Dipotassium phosphate - SEQ, GRAS/FS, Part 133.169, Past Process Cheese - 182.6285

Disodium cyanodithioimidocarbonate - MISC, REG, 2.5 ppm in raw cane - For control of micro-organisms in cane sugar mills - 173.320; <2.9 ppm in raw cane or sugar beets with potassium N-methyldithiocarbamate for control of microorganisms in cane sugar and beet sugar mills - 173.320

Disodium EDTA (Disodium ethylenediaminetetraacetate) - MISC, REG/FS, 100 ppm - Promote color retention in frozen white potatoes, incl cut potatoes - 172.135; 110 ppm - Canned potatoes 155.200; 165 ppm - For color retention in cnd cooked legumes (all cooked, canned other than black-eyed peas) or kidney beans; 315 ppm - Promote color retention in dried banana comp of ready-to-eat cereal pdts; 145 ppm - Promote color retention in canned black-eyed peas, 155.200; 500 ppm - Promote color retention in canned strawberry pie filling, Part 145; 150 ppm - w/iron salts as a stabilizer for Vitamin B12 in liquid multivitamin preparations; 50 ppm - In gefilte fish balls; 36 ppm - As cure accelerator in cooked sausage; MISC, REG, 75 ppm alone or w/Ca disodium EDTA - In non-standardized dressings, sauces; French dressings, mayonnaise, salad dressing -172.135; 100 ppm alone or w/Ca disodium EDTA - In sandwich spread; 0.1% by wt of the dry sweeteners - As a sequestrant in non-nutritive sweeteners; FEED, REG, <240 ppm in feed - Used to solubilize trace minerals which are added to animal feeds - 573.360

Disodium cyanodithioimidocarbonate - For control of micro-organisms in cane sugar and beet sugar mills -173.320

Disodium ethylenebisdithiocarbamate - PRES, REG, 3.0 ppm in raw cane - w/Na dimethyldithiocarbamate for control of microorganisms in mills - 173.320; 3.0 ppm in raw cane or sugar beets - w/ethylenediamine and Na dimethyldithiocarbamate for control of micro- org. in

cane sugar and beet sugar mills - ibid

Disodium guanylate - MISC, REG/FS, GMP, Part 155, Cnd Vegs - 172.530

Disodium inosinate - FL/ADJ, REG, GMP, Part 155, Cnd Vegs - 172.535

Disodium phosphate (X-ref - Sodium phosphate, mono-, di-, & tri-) - SEQ, GRAS/FS, Part 137.305, Enriched Farina; 136.3, Bakery Pdts; EMUL, GRAS/FS, 139, Alimentary Pastes; 131.130 NFDM; 133, Cheeses, Various; 135.30, Ice Cream; 150, Art Sw Jelly

Dodecylbenzenesulfonic acid - SANI, REG, <400 ppm in soln - Adequate drainage; May be used on glass containers for holding milk - 178.1010

alpha-(p-Dodecylphenyl)-omega-hydroxypoly(oxyethylene) - PEST, REG, GMP, Adj for pesticide use - 172.710

Dog grass (quackgrass, triticum) - ESO, GRAS - 182.20

Dulcin - NNS, ILL - Not legal in food

Dulse - NAT, GRAS

E

EDTA - See Calcium disodium EDTA and Disodium EDTA

EDTA, Tetrasodium - Components of boiler water additives - 173.310 - washes for peeling fruits and vegetables, 173.315

Efrotomycin -VET, FEED, - Swine to improve feed efficiency - 558.235

Elder Flowers - SP/ESO, GRAS - 182.20, 182.10

Enanthic acid - MISC, REG, <1% aliphatic acids - In peeling soln for fruits & vegs - 173.315

Enzyme-modified soy protein - MISC, FD, GMP, Foaming agent in soda water

Enzymes, carbohydrase & cellulase, from *Aspergillus niger* - ENZ, REG, GMP, For removal of visceral mass in clam processing - 173.120

Enzymes from *Aspergillus oryzae* - ENZ, FS, Part 136, Bakery Pdts

Enzymes from plant and animal sources - ENZ, GRAS, GMP - GRAS affirmation of the following: bromolein -184.1024, catalase - 184.1034, ficin - 184.1316, animal lipase - 184.1415, malt - 184.1443a, pancreatin 184.1583, pepsin - 184.1595, trypsin - 184.1914

Enzymes (for milk clotting) from *Endothis parasitica, Bacillus cereus, Mucor pusillus , Mucor miehei Cooney et Emerson,* or *Aspergillus oryzae* modified by recombinant aspartic proteinase enzyme from *Rhizomucor miehei* - ENZ, REG, GMP, For use in preparation of standardized cheese or cheese products, except enzyme from *B cereus* is

not suitable for cheese in Sec. 133.195, 133.196 - 173.150

Enzyme-Modified Fats - FLAV/ADJ, GRAS, GMP -184.1287

Epichlorohydrin - MISC, REG, < 0.1% with propylene <10% added in combination or in any sequence - Residual propylene chlorohydrin < 5 ppm in food starch modified -172.892; < 0.1% followed by propylene oxide < 25% -172.892

Epoxidized soybean oil - STAB, REG, Not to exceed 1 percent - Use as a halogen stabilizer in brominated soybean oil - 172.723

Erythorbic acid - PRES, GRAS/FS, X-ref - Isoascorbic acid

Erythromycin, Erythromycin thiocyanate or phosphate - FEED, REG, ZERO - In uncooked edible tissues of chickens, turkeys - 556.230; 0.125 ppm - In uncooked edible tissue of beef cattle, and in milk - 556.230; Use: In drinking water as phosphate - 522.842; 0.1 ppm (neg res) - In uncooked edible tissues of swine; 0.025 ppm - In uncooked eggs as residue - 556.230; Use: 558.55, 558.58,558.62, 558.248, 558.680

Esterase-lipase from *Mucor miehei* - ENZ, REG, GMP, Flavor enhancer in cheese, fat, oils, milk products - 173.140

Estradiol - VET, REG, Use: Implant in cattle (steers/heifers) - 522.840

Estradiol benzoate - VET, REG, ZERO*** - In uncooked edible tissues and by-products of heifers, lambs & steers as residue - 556.240; Use as implants - 522.842; In combination w/testosterone propionate - 522.842; In combination w/progesterone - 522.19406; ***Tolerances in the Part Per Trillion (ppt) range have been established for these residues - See 556.240

Estradiol valerate - VET, REG, ZERO - Use: As implant in combination with progesterone - 522.1940; ***NOT TO BE USED WITH VEAL CALVES***

Estragole (or esdragol, estragon, esdragon, tarragon) -SP/ESO, GRAS - 182.20

Ethopabate - FEED, REG, 1.5 ppm - In uncooked liver & kidneys of chickens as residue - 556.260; 0.5 ppm - In uncooked muscle of chickens as residue - 556.260; Feed uses - 558.55, 558.58, 558.62, 558.76, 558.78, 558.248, 558.460, 558.530

Ethoxylated mono- and diglycerides - MISC, REG, Total not to exceed 0.5% of flour used - In yeast leavened bakery products as a dough conditioner and as an emulsifier in pan-release agents for yeast-leavened bakery products -172.834; EMUL, REG, Not to exceed 0.45% by wt. of finished topping - In whipped vegetable oil toppings and topping mixes - 172.834; Not to exceed 0.5% by wt. of finished icing - In icing & icing mixes - 172.834; Not to exceed 0.2% by wt of finished dessert - Emulsifier in frozen desserts, 172.834; Part 135, Frozen Desserts; Not to exceed 0.4% by wt of finished vegetable fat-water emulsions - In solid state, edible fat water emulsions as Coffee Creamer Substitute -172.834; Not to exceed 5% of dry ingredients - In cakes & cake mixes - 172.834

Ethoxyquin - FEED/AOX, REG, 5 ppm from use in forage crops - In uncooked fat of meat from animals except poultry - 172.140; AOX, REG, 100 ppm - For preserving of color in prod of chili powder, ground chili, and paprika - 172.140; 3.0 ppm (0.0003%) - In or on uncooked liver & fat of poultry; 0.5 ppm (0.00005%) - In or on uncooked muscle meat of animals; 0.5 ppm (0.00005%) - In poultry eggs; Zero - In milk - 172.140; 150 ppm - In animal feed, fish food, and canned pet food - 573.380, 573.400

Ethyl acetate - SY/FS, MISC, REG, GMP, GRAS - 182.60, In decaffeination of coffee & tea - 173.228

Ethyl Alcohol (Ethanol) - INH, GRAS - 184.1293, 2.0% by wt - On pizza crusts prior to baking - 170.3; SANI, REG, GMP, Adequate drainage - 178.1010

Ethyl cellulose - MISC, REG, GMP, As binder or filler in dry vitamin prepns or component of protective ctg for vit & min tabs, or as fixative in flavor compounds - 172.868; 573.420; In anima diamine dihydroiodide - DS, GRAS, Animal feed

Ethylene dichloride - SOLV, REG, 30 ppm - In pdtn of spice oleoresins - 173.230; MISC, REG, < 0.2 ppm in flume water - Used in flume water for washing sugar beets prior to slicing operation - 173.315; SOLV, REG, 300 ppm in extracted by-products - In extraction processing of animal by-products for use in animal feeds - see section 573.440; PEST, REG, GMP, Adjuvant for pesticide use - 172.710

Ethylene glycol monobutyl ether - SANI, REG, GMP, Adequate drainage - 178.1010; MISC, REG, < 1 ppm in flumewater - Used in flume water for washing sugar beets prior to slicing operation - 173.315

Ethylene oxide copolymer condensates - REG, 172.808; STAB, REG- 300 ppm by wt - Foam stabilize in fermented malt beverages - 172.770

Ethylene oxide polymer, alkyl adduct - MISC, REG, NTE

0.2 percent in lye-peeling solution to assist in the lye peeling of fruits and vegetables - 173.315

Ethylene oxide polymer, alkyl adduct, phosphate ester -MISC, REG, NTE 0.2 percent in lye-peeling solution to assist in the lye peeling of fruits and vegetables - 173.315 Ethylene oxide/propylene oxide copolymer REG, SDA - See specs section 172.808; MISC, Defoaming agent - 173.340 for use as prescribed in 172.808

Ethylene oxide/propylene oxide copolymer, alkyl adduct - MISC, REG, NTE 0.2 percent in lye-peeling solution to assist in the lye peeling of fruits and vegetables -173.315

Ethylene oxide/propylene oxide copolymer, alkyl adduct, phosphate ester - MISC, REG, NTE 0.2 percent in lye-peeling solution to assist in the lye peeling of fruits and vegetables - 173.315

Ethyl 4,4'-dichlorobenzilate - INSECT, REG, 5.0 ppm - As residue in/on citrus fruits -

180.109; 0.5 ppm - As residue in fat, meat, meat by-products of sheep & cattle - do

Ethyl ester of fatty acids - MISC, REG, Comp of coatings for raisins - 172.225

Ethyl formate - SY/FL, GRAS, GMP, (See specs 184.1295); FL/ADJ

Ethyl methylphenylglycidate - GRAS, SY/FL, GMP -

Ethyl 4-hydroxy-6,7-diisobutoxy-3-quinolinecarboxylate - FEED, REG, X-ref - Buquinolate

Ethyl vanillin - SY/FL, GRAS/FS, Part 163, Chocolate and Cacao Pdts; Part 169, Vanilla Extract and Related Pdts - 182.60, 182.90

Eucalyptus globulus leaves - FL/ADJ, REG, GMP, In conjunction w/flavors - 172.510

Eucheuma cottonii extract - MISC, EMUL, STAB, REG, GMP, FS, See carrageenan - 172.620

Eucheuma spinosum extract - MISC, EMUL, STAB, REG, GMP, FS - 172-620

Eugenol - SY/FL, GRAS - 184.1257

Exfoliated hydrobiotite (Verxite) - FEED, REG, <5% wt. finished feed - In poultry, swine or ruminant feed as anti- caking, blending agent, pelleting aid or nonnutritive carrier for incorporation of nutrients - 573.1000; <1.5% -Anticaking, blending agent, etc. in dog feed - 573.1000

F

Famphur (O,O-dimethyl O-[p-(dimethylsulfamoyl)phenyl] phosphorothioate) - PEST/VET, REG, Use: In animal feed - 558.254; As pour on liquid - 524.900; As paste in combination with Levamisole - 520.1242g

Fatty acids - one or any mixture of straight chain monobasic carboxylic acids & assoc. fatty acids from edible fats and oils (capric, caprylic, lauric, myristic, oleic, palmitic, and stearic acids) - MISC, REG, GMP, In foods as a lubricant or binder; comp in mfr of other food-grade additives - 172.860; REG, GMP, Defoaming agent comp used in processing beet sugar and yeast - 173.340

Fatty acids, salts of (aluminum, calcium, magnesium, potassium, and sodium) - MISC, REG, In foods as binder, emulsifier, and anticaking agent - 172.863; FEED, REG, GMP, 573.640; CTG, REG, X-ref - coatings on fresh citrus fruit - 172.210

Fatty alcohols, synthetic hexyl, octyl, decyl, lauryl, myistyl, cetyl, and stearyl alcohols - MISC, REG, As substitutes for the corresponding naturally derived fatty alcohols permitted in foods by existing regulations - 172.864

Fenbendazole - VET, REG, 0.8 ppm - Residues in Cattle liver - 556.275; Use: Cattle (Suspension) - 520.905a; (Powder) - 520.905d; (Block) - 520.905e; (Feed) - 558.258

Fennel, common - SP, GRAS - 182.10

Fennel, sweet (Finochio, Florence) - SP/ESO, GRAS -182.10, 182.20

Fenprostalene -VET, REG, 10 ppb - Residues in uncooked edible muscle - 556.277; 20 ppb - Residues in uncooked edible liver - do; 30 ppb - Residues in uncooked edible kidney - do; 40 ppb - Residues in uncooked edible fat - do;100 ppb - Residues at the injection site - do; Use as injection: Induce abortion: Feedlot heifers - 522.914; Estrus control: Beef/non-lactating dairy cattle - 522.914

Fenthion - PEST/VET, REG, As pour on liquid-524.920

Fenugreek - SP/ESO, GRAS - 182.10, 182.20

Fermentation derived milk-clotting enzyme - ENZ, REG, In production of cheese for which permitted by standards of identity - Part 133; Limited to certain organisms, (See specs in 173.150)

Fermented ammoniated condensed whey - See Whey, fermented ammoniated condensed

Ferric ammonium chloride - NUTR, GRAS, GMP - 184.1296

Ferric chloride - NUTR, GRAS, GMP - 184.1297

Ferric citrate - NUTR, GRAS, GMP - 184.1298

Ferric phosphate - NUTR/DS, GRAS, GMP - 182.5301,184.1301

Ferric pyrophosphate - NUTR/DS, GRAS, GMP - 182.5304, 184.1304

Ferric sodium pyrophosphate - NUTR/DS, GRAS, GMP - 182.5306

Ferric sulfate - NUTR, GRAS, GMP - 184.1307

Ferrous ascorbate - NUTR, GRAS, GMP - 184.1307a

Ferrous carbonate - NUTR, GRAS, GMP - 184.1307b

Ferrous citrate - NUTR, GRAS, GMP - 184.1307c

Ferrous fumarate - DS, REG, Consistent w/good nutrition practices - Used as source of dietary iron in special dietary foods - See section 172.350

Ferrous gluconate - NUTR/DS, GRAS, GMP - 182.5308, 184.1308

Ferrous lactate - NUTR/Color fixative for ripe olives, GRAS, GMP -184.1311, DS, GRAS, GMP - 182.5311

Ferrous sulfate - NUTR/DS, GRAS, GMP - 182.5315, 184.1315

Fir ("pine" & "balsam") needles and twigs - FL/ADJ, REG, GMP, In conjunction w/flavors - 172.510

Fish protein concentrate, whole - DS, REG, (See specs in 172.385)

Fish protein isolate - DS, REG, (See specs in 172.340)

Flavoring substances, natural - FLAV, REG, GMP -172.510

Fluorine - containing compounds (Sodium, potassium, or calcium fluoride) - MISC, PD, ILL - Petition for extension in dietary supplements terminated in of 7-1-73. Addition of fluorine compounds to foods limited to that from fluoridation of public water supplies and to that resulting from the fluoridation of bottled water within limits set in 103.35. Refer to section 170.45 for statement of policy.

Folic acid (folacin) - NUTR, REG, May be added to foods subject to a standard of identity when standard of identity provides for addition of folic acid. May be added 400 µg per serving to breakfast cereals, to infant formula 4 µg per 100 kcal of infant formula, 1 mg/1 lb. of corn grits, to foods represented as meal-replacement products 400 µg/serving if the food is a meal- replacement that is represented for use once/day or 200 µg/serving if the food is a meal-replace-ment that is represented for use more than once/day. May be added to medical food at levels not to exceed the amount necessary to meet the distinctive nutritional requirements of the disease or condition for which the food is formulated, and for food for special dietary use not to exceed the amount necessary to meet the special dietary needs for which the food is formulated - 172.345.

Food additives for use in milk producing animals for treatment of bovine mastitis - VET, REG, 528.820 - See BHA & BHT

Food starch, modified - MISC, REG, GMP, See 172.892. Add "amylolytic enzymes" to various chemicals permitted in modifying food starch that are listed in the regulation.

Food starch esterified with n-octenyl succinic anhydride treated with beta -amylase; For use as a stabilizer or emulsifier in non-alcoholic beverages and beverage bases

Formaldehyde (paraformaldehyde) - PRES, REG, Comp of defoaming agent - 173.340; MISC, REG, GMP, In animal feeds composed of oilseed meals and animal fat - 573.460; See also formalin

Formalin - FUNG, REG, Use: In water of salmon, trout, largemouth bass, catfish and bluegills - 529.1030; See also formaldehyde

Formic acid (x-ref - Ethyl formate) - PEST, REG, 2.25% of Silage on a dry basis -or- 0.45% when direct cut, 573.480; Preservative for silage. Silage not to be fed to live stock within 4 weeks of treatment. GRAS, GMP - 186.1316

Fumaric acid and its calcium, magnesium, potassium, and sodium salts - MISC, REG/FS, GMP, (See specs in 172.350); Part 150.140, Fruit jellies; Part 150.160, Fruit preserves

Fumaric acid-Ferrous salt - DS, REG, Consistent w/good nutrition practices - X-ref Ferrous fumarate

Furazolidone - VET, REG, ZERO NOT PERMITTED FOR USE IN ANIMAL FEEDS -

USE WITHDRAWN 8/23/91

Furcelleran - MISC, EMUL, STAB, REG/FS, GMP, 133.128; 172.655 Part 135.30, Ice Cream

Furcelleran, salts of ammonium, calcium, potassium, or sodium - MISC, EMUL, STAB, REG/FS, GMP - 172.660 Part 135.30, Ice Cream

G

alpha-Galactosidase from *Mortierella vinaceae* var. raffinoseutilizer - ENZ, REG, No residue in finished product - Used in the production of sugar (sucrose) from sugar beets and increase sucrose yield in molasses - 173.145

Galanga (galangal root) - SP/ESO, GMP, GRAS - 182.10,

Galanga, greater - FL/ADJ, REG, GMP, In alcoholic beverages only - 172.510

Galbanum - FL/ADJ, REG, GMP, In conjunction w/flavors only - 172.510

Gambir (catechu, pale) - FL/ADJ, REG, GMP, In conjunction w/flavors only - 172.510

Garlic - SP/ESO, GRAS, GMP, 182.10, 182.20, 182.1317

Gas, combustion product - MISC, REG, X-ref Combustion product gas - 173.350

Gellan Gum - MISC, REG, As a stabilizer & thickener; (See specs in 172.665)

Genet Flowers - FL/ADJ, REG, GMP, In conjunction w/flavors only - 172.510

Gentian rhizome & roots - FL/ADJ, REG, GMP, In conjunction w/flavors only - 172.510

Gentian, stemless - FL/ADJ, REG, GMP, In alcoholic beverages only - 172.510

GENTIAN VIOLET - FUNG, REG, VET, PROHIBITED FROM USE IN ANIMAL FEEDS - 589.1000

Gentamicin Sulfate -VET, REG, 0.1 ppm - Residues in uncooked edible tissue of turkey - 556.300; Residues in swine muscle - do; 0.3 ppm - Residues in swine liver - do; 0.4 ppm - Residues in swine fat & kidney - do; Use: Oral Solution, 520.1044a, 520.1044b; Soluble Powder 520.1044c; Injection, 524.1044;

Geraniol (3,7-dimethyl-2,6 and 3,6-octadien-1-ol) -SY/FL, GRAS - 182.60

Geranium - SP/FLAV/ESO, GRAS - 182.20

Geranium, East Indian or rose - ESO, GRAS - 182.20

Geranyl acetate (geraniol acetate) - SY/FL, GRAS - 182.60

Geranyl isobutyrate

Germander, chamaedrys or golden - FL/ADJ, REG, GMP, In alcoholic beverages only -

172.510

Ghatti gum - EMUL, GRAS, Limited to 0.2 percent of foods defined in § 170.3(n)(3) and 0.1 percent in all other foods; (See specs in 184.1333)

Gibberellic acid and its potassium salt - MISC, REG, <2 ppm - In malt; <0.5 ppm - In finished malt beverage; ZERO - In distilled spirits - 172.725

Gigartina extracts - MISC, EMUL, STAB, REG, FS, See Carrageenan - 172.620

Ginger - SP/ESO, GRAS - 182.10, 182.20

Gluconate salts of Ca and Na - MISC, FS, See limitations on use levels for Ca salt in 184.1199; GMP, Na salt 182.6757

Glucono delta-lactone - MISC, GRAS, GMP, FS, As curing or pickling agent, leavening agent, sequestrant, or pH control agent (See specs in 184.1318)

Glutamic acid (or hydrochloride) - NUTR/DS, REG, (See specs in 172.320); GRAS as a salt substitute in 182.1045 and 182.1047

Glutamic acid, condensed extracted fermentation product - FEED, REG, <5% of total ration - Protein supplement in poultry feed - 573.500; <10% of feed - Protein supplement in cattle feed

Glutamine - NUTR, REG, (See specs in 172.320)

Glutaraldehyde - MISC, GMP, Fixing agent for the immobilization of gloucose isomerase for use in the manufacture of high fructose corn syrup, in accordance with Sec. 184.1372 - 173.357

Glycerides and polyglycides of hydrogenated vegetable oils - MISC, Used as an excipient in dietary supplement tablets, capsules, and liquid formulations - See 172.736 for specifications and limitations.

Glycerin - MISC, GRAS/FS, GMP, Part 169, Food Flavorings, 182.1320; Part 582 - Animal feeds

Glycerin, synthetic - MISC, REG, GMP, In food. (See 172.866 for specs)

Glycerol - See glycerin

Glycerol ester of gum rosin - MISC, REG, ≤100 ppm in beverages - 172.735; GMP, Softener for chewing gum base (See specs in 172.615)

Glycerol ester of partially dimerized rosin - MISC, REG, GMP, Comp of chewing gum base (See specs in 172.615)

Glycerol ester of partially hydrogenated gum or wood rosin - MISC, REG, GMP, Comp of chewing gum base (See specs in 172.615)

Glycerol ester of polymerized rosin - MISC, REG, GMP, Softener for chewing gum base (See

specs in 172.615)

Glycerol ester of tall oil rosin - MISC, REG, GMP, Softener for chewing gum base (See specs in 172.615)

Glycerol ester of wood rosin - MISC, REG, =100ppm in beverages-172.735; GMP, Softener for chewing gum base-172.615

Glycerol (glyceryl) tributyrate (tributyrin, butyrin) -SY/FL, GRAS, GMP - as flavoring agent and adjuvant - 184.1903

Glyceryl behenate - MISC, GRAS, GMP, As formulation aid in tablets - 184.1328

Glyceryl-lacto esters of fatty acids - EMUL, MISC, REG, GMP - 172.852

Glyceryl monooleate - MISC, GRAS, SY/FL, GMP, As flavoring agent and adjuvant - 184.1323

Glyceryl (glycerol) monostearate (monostearin) - MISC, GRAS/FS, GMP, 184.1324; <2% of product - Macaroni products - 139.110; <3% of product - Noodle products -139.150

Glyceryl palmitostearate - GRAS, GMP, Use as a formulation aid in excipients for tabs - 184.1329

Glyceryl triacetate (triacetin) - MISC, SY/FL, GRAS, GMP. As flavoging agent and adjuvant - 184.1901

Glyceryl tristearate - MISC, REG, See Reg - 172.811

Glycine - MISC, REG, 0.2% of fin bev or bev base Masking agent for saccharin in beverages & bases -172.812; STAB, 0.02% - In mono- and diglycerides -172.812; NUTR - 172.320

Glycoryrrhiza - SP/ESO, GRAS, See Reg - 184.1408

Glycyrrhizin, ammoniated - ESO, GRAS/FS, See Reg -184.1408

Gonadorelin - VET, REG, Use: As injection for cattle - 522.1077

Gonadotropin (Serum) and Gonadotropin (Chorionic) -VET, REG, Use: As injection for cattle - 522.1079

Grains of paradise - SP, GRAS, GMP - 182.10

Grapefruit - ESO, GRAS, GMP - 182.20

Ground Limestone - GRAS, GMP - 184.1409

Guaiac - FLAV, REG, GMP, In alcoholic bevs only - 172.510

Guarana - FL/ADJ, REG, GMP, In conjunction w/flavors -172.510

Guar gum - STAB, GRAS/FS, See Reg - 184.1339; Parts 133, Cheese (to include cold pack cheese food); Part 135, Ice Cream; Part 169, Dressing for Foods; Part 150, Art Sw Jelly & Preserves

Guava - ESO, GRAS, GMP - 182.20

Gum arabic (Acacia) - STAB**,** GRAS/FS, GMP, See Reg -184.1330; Part 169, Dressings for Foods; Part 135, Ice Cream; Part 169, Vanilla Powder

Gum ghatti - STAB, GRAS/FS, < 0.2% As emulsifier in non-alcoholic bevs - 184.1333; < 0.1% in all other foods - 184.1333

Gum gluten - STAB, FS, GMP, Part 139, Macaroni Products

Gum karaya - STAB, GRAS/FS, See Reg - 184.1349; Part 133, Cheese; Part 169, Dressings for Foods; Part 135, Ice Cream; Part 150, Art Sw Fruit Jelly & Jam

Gum tragacanth - STAB, GRAS/FS, See Reg - 184.1351; Part 133, Cheese; Part 135, Ice Cream; Part 169, Dressings for Foods; Part 150, Art Sw Fruit Jelly & Jam

Gums (natural) of vegetable origin - MISC, REG, GMP, Chewing gum base - 172.615

Guta Hang Kang - MISC, REG, GMP, Chewing gum base - 172.615

H

Halofuginone hydrobromide - FEED, REG, Use: In broiler chicken feed - 558.625; 0.1 ppm - As residue in uncooked edible tissues of chickens - 556.308; 0.3 ppm -As residue in uncooked liver of chicken - do; 0.2 ppm - As residue in uncooked skin (w/fat) of chicken - do

Haloxon - VET, REG, 0.1 ppm - Residues in edible tissues of cattle, sheep, & goats: 556.310; Use - 520.1120

Haw, black bark - FL/ADJ, REG, GMP, In conjunction w/flavors only - 172.510

Helium - MISC, GRAS - 184.1355

Hemicellulose extract - FEED, REG, GMP, As a source of metabolizable energy in animal feed - 573.520

Hemlock needles & twigs - FL/ADJ, REG, GMP, In conjunction w/flavors only - 172.510

Heptylparaben (n-heptyl p-hydroxybenzoate) - INH, REG, 12 ppm - In -fermented malt beverages to inhibit microbiological spoilage, 172.145; 20 ppm - In non-carbonated soft drinks and fruit based beverages when allowed by established standards of identity - 172.145; PRES, REG, <12 ppm - In fermented malt beverages - 193.285

Hexachlorophene - VET, REG, Permission in animal products restricted - 500.46

Hexane - SOLV, REG, 25 ppm as residue - In spice oleoresins (173.270); 2.2% by weight - As residue in hops extract, extract added before or during cooking of beer -173.270; MISC, REG, 25 ppm - In modified hop extract for beer - 172.560; MISC, REG, 5 ppm as residue in fish protein isolate - 172.340

Hexitol oleate - EMUL,ILL - No petition filed. Was used as an ice cream emulsifier.

Hexyl alcohol, synthetic - MISC, REG, GMP, See Fatty alcohols, synthetic - 172.864

Hickory bark - ESO, GRAS, GMP - 182.20

Histidine (l form only) - NUTR/DS, REG, Food Additive Reg - 172.320

Hop extract, modified - FLAV, REG, GMP, In beer - 172.560

Hops - ESO, GRAS, GMP - 182.20

Horehound (hoarhound) - SP/ESO, GRAS, GMP -182.10, 182.20

Horsemint - ESO, GRAS, GMP - 182.20

Horseradish - SP, GRAS, GMP - 182.10

Hyacinth Flowers - FL/ADJ, REG, GMP, In alcoholic bevs only - 172.510

Hydrazine - BC, REG, ZERO - For steam contacting food -173.310

Hydriodic acid - SANI, REG, <25 ppm I2 in soln Adequate drainage - 178.1010

Hydrobiotite, exfoliated - FEED, REG, See Verxite -573.1000

Hydrochloric acid - MISC, REG, GMP, Modifier for food starch - 172.892; B&N, GRAS/FS - 182.1057; Acidifier in skim milk - 131.1444 and cottage cheese making -133.129 and Cnd Tom Prods Processing - 155 and dried eggs - 160.105 and dried egg yolks - 160.185 and modified hop extract - 172.560; In animal feed practices - 582.1057

Hydrocortisone (as acetate or sodium succinate) - VET, REG, 10 ppb neg res - In milk as residue - 556.320; VET, REG, In mastitis formulation - 556.820

Hydrogen peroxide - MISC, REG, Used in combination with acetic acid to form peroxyacetic acid 59 ppm in wash water for fruits and vegetables that are not raw agricultural commodities- 173.315.

Hydrogenated corn syrup - REG, GMP, In dog/cat foods as humectant - 573.530

Hydrogenated menhaden oil - GRAS, GMP - 184.1472

Hydrolyzed leather meal - FEED, REG, 1% by wt of feed In swine feed - 573.540

Hydrolyzed vegetable protein - FLAV, FS, GMP, 161.190, Cnd Tuna; Part 155, Vegetables

1-Hydroxyethylidene-1,1-diphosphonic acid - MISC, REG, GMP, Used with peroxyacetic acid for washing fruits and vegetables that are not raw agricultural commodities at levels < 4.8 ppm in wash water - 173.315

alpha-Hydro-omega-hydroxypoly(oxyethylene)poly(oxypropylene) (minimum 15 moles) poly(oxyethylene) block copolymers - AF, REG, <0.05% by wt - As surfactant &

defoaming agent in scald baths > 125 ^{0}F for poultry defeathering, then potable water rinse - 172.808; < 5 gm per hog - As foam control and rinse adjuvant in hog dehairing machines - 172.808

alpha-Hydro-omega-hydroxypoly(oxyethylene)poly(oxypropylene)(53-59moles) poly(oxyethylene)(14-16 moles) block copolymer, (mol wt 3500-4125) - SDA, REG, 10 ppm total in finished beverage or fruit juice drink In combination with dioctyl sodium sulfosuccinate -172.810, 172.808

alpha-Hydro-omega-hydroxy-poly(oxyethylene)poly(oxypropylene) (55-61 moles) poly(oxyethylene) block copolymers, (mol wt. 9,760-13,200) - SDA/STAB, REG, GMP, Solubilizer and stabilizer in flavor concentrates -172.808

alpha-Hydro-omega-hydroxypoly(oxyethylene)poly(oxypropylene)(51-57moles) poly(oxyethylene) block copolymer (Mol. wt. 14,000) - MISC, REG, <0.5% wt. of flour used - Dough conditioner 172.808

1-Hydroxyethylidene-1,1-diphosphonic acid - REG, May only be used with peroxyacetic acid, < 4.8 ppm in wash water for fruits & vegs that are not raw agricultural commodities- 173.315.

Hydroxylated lecithin - EMUL, FS, Part 136, Bakery Products; REG, GMP, In foods except standardized foods not providing for such use - 172.814; AF, REG, GMP, Defoaming agent for processing beet sugar and yeast -173.340

4-Hydroxymethyl-2,6-di-tert-butylphenol - REG antioxidant alone or in combination with other antioxidants so total antioxidants do not exceed .02 per cent of oil or fat content of the food - 172.150

Hydroxypropyl cellulose - MISC, REG, GMP, EMUL, STAB - 172.870

Hydroxypropyl methylcellulose - EMUL, REG/FS, GMP - 172.874;Part 169, Dressings; Part 135, Fr Desserts

8-hydroxyquinoline sulfate - MISC, BAN, Was used as comp. of a cottage cheese coagula

Hygromycin B - FEED, REG, ZERO - In eggs of poultry and in uncooked edible tissues & by-products of swine and poultry as residue - 556.330, 558.55, 558.58, 558.76, 558.78, 558.128, 558.274, 558.460, 558.625, 558.630, 558.680

Hyssop - SP/ESO, GRAS - 182.10, 182.20; Use in chicken & swine feeds

I

Iceland moss - FL/ADJ, REG, GMP, In alcoholic beverages only - 172.510

Immortelle - ESO, GRAS, GMP - 182.20

Imperatoria - FL/ADJ, REG, GMP, In alcoholic bevs only -172.510

Inositol - NUTR/DS, GRAS, GMP, 182.5370, 184.1370

Insoluble Glucose Isamase enzyme preparations - ENZ, GRAS, GMP, 184.1372

Intrinsic Factor complex (Liver-stomach concentration) DS,ILL, See section 250.201 - X-ref; Liver-stomach concentrate

Invert sugar - NUTR, GRAS/FS, GMP - 184.1859; Part 145 Canned fruit; Part 146 Canned fruit juices; Part 169 Food dressings and flavorings

Iodine - SANI, REG, <25 ppm I2 in soln - Adequate drainage - 178.1010

Iodine (from potassium iodide) - DS, REG - 172.375, <0.225 mg I2 per day - w/o reference to age or physical state; <0.045 mg I2 per day - infants; <0.105 mg I2 per day - children <4 years old; <0.225 mg I2 per day - adults and children > 4 years; <0.3 mg I2 per day - Pregnant or lactating women

Iodine (calcium iodate, calcium iodobehenate, cuprous iodide, 3,5-diiodosalicylic acid, ethylenediamine dihydroiodide, potassium iodate, potassium iodide, sodium iodate, sodium iodide, thymol iodide) - NUTR, GRAS, As nutritional dietary supplement in animal feed - 582.80

Iodinated casein - FEED, REG, 100 - 200 gms/ton - In duck feed - 558.295; 1/2 to 1 1/2 lb/100 lb body weight - In dairy cow feed - 558.295

Ion exchange membranes - MISC, REG, In production of grapefruit juice - 173.20

Ion exchange resins - MISC, REG, For purification of food and water - 173.25

Ipronidazole - FEED, REG,ZERO - NOT LEGAL FOR ANIMAL USE; VET, REG, ZERO, do - NADA WITHDRAWN 1-17-89

Irish Moss, extract of - X-ref - Carrageenan

Iron (ascorbate, carbonate, chloride, citrate, fumarate, gluconate, lactate, oxide, phosphate, pyrophosphate, sodium pyrophosphate, sulfate, reduced iron) - NUTR, DS, GRAS, As nutritional dietary supplement in animal feed - 582.80;X-Ref Ferric and Ferrous listings

Iron ammonium citrate - AC, REG, <25 ppm - In salt for human or animal consumption - 172.430, 573.560

Iron-choline citrate complex - FEED, REG, GMP, As source of iron - 573.580; NUTR/DS, REG, In foods for sp diet use - 172.370

Iron (harmless salts of) - NUTR, FS, Part 137, Flour; Part 139, Macaroni & Noodles; Part 136, Bakery Pdts

Iron, elemental - NUTR/DS, GRAS, GMP - 184.1375

Iron, reduced DS, GRAS, GMP - 182.5375

Iron salts - X-ref; Ferric and Ferrous listings

Irradiated enzymes - MISC, REG, Dose not to exceed 10 kilograys - Control of microorganisms - 179.26

Irradiated food - MISC, REG, Dose not to exceed 1 kilo-gray -To control arthropod pests in any food or to inhibit maturation of fresh foods - 179.26

Irradiated meats - MISC, REG, Minimum dose 44 kilogram - For sterilization of frozen, packaged meats, NASA -179.26

Irradiated molluscan shellfish - MISC, REG, Max dose 5.5 kGy - Control of Vibrio bacteria and other microorganisms in or on fresh and frozen molluscan shellfish -179.26

Irradiated pork - MISC, REG, Min. dose 0.3 kilograys. Max dose 1 kilogray - Control of Trichinella spiralis - 179.26

Irradiated poultry - MISC, REG, Dose not to exceed 3.0 kilograys - To control pathogens in fresh or frozen uncooked poultry - 179.26

Irradiated poultry feed - FEED, REG, Dose range 2 to 25 kilogray gamma radiation from cobalt-60 - to render poultry feed salmonella negative - 579.40

Irradiated yeast - NUTR, FS, Part 137.305 - Enr Farina, source of Vit D.

Irradiated spices, herbs & seasonings - SP, REG, Dose not to exceed 30 kilograys - Control of microorganisms -179.26

Irradiation - 579.22 and 179; also see "Radiation"

Isoascorbic acid - PRES, GRAS, X-ref - Erythorbic acid -182.3041

Isobutane - GRAS, MISC, propellant, aerating agent -184.1165

Isobutylene-isoprene copolymer - MISC, REG, GMP, Comp of chewing gum base - 172.615

Isobutylene resin, polyisobutylene - MISC, REG, GMP, Comp of chewing gum base - 172.615

Isoleucine (l form only) - NUTR/DS, REG, Food Additive Reg - 172.320

Isoparaffinic petroleum hydrocarbons, synthetic MISC, REG, GMP, 172.882

Isopropanol, isopropyl alcohol - SOLV, REG, <250 ppm as residue in modified hop extract - 172.560; <50 ppm as residue - In mfr of spice oleoresins - 173.240; 6 ppm - In mfr of lemon oil - 173.240; 2% by wt - In hop extract as residue from extraction of hops in mfr of beer - 173.240; AF, REG, GMP, Comp of defoaming agent for processing beet sugar and yeast - 173.340; SANI, REG, GMP, Adequate drainage - May be used on food processing equip and on food-con-tact surfaces - 178.1010(b)(17); SANI, REG, < 40 ppm Adequate drainage; May be used on food processing equip

and on glass containers for holding milk - 178.1010(b)(7)

Isopropyl citrate - GRAS/FS, <0.02% - 182.6386; <0.02% in oleomargarine - 166.110

Iva - FL/ADJ, REG, GMP, In alcoholic beverages only -172.510

Ivermectin - VET, REG, 15 ppb - As a residue in liver of cattle and reindeer - 556.344; 20 ppb - As a residue in liver of swine - 556.344; Use: As injection for cattle; Combination with clorsulon - 522.1193; Use: Cattle (Paste) - 520.1192; Use: Cattle, swine, reindeer (Injection) - 522.1192

J

Jasmine - ESO, GRAS - 182.20

Jelutong - MISC, REG, GMP, as chewing gum base

Juniper (berries) - ESO, GRAS - 182.20

K

Karaya gum - STAB, GRAS/FS, See Reg - 184.1349; X-ref - Gum Karaya

Kelp - DS, REG, <0.225 mg 12 per day - w/o reference to age or physical state; <0.045 mg 12 per day - Infants; <0.105 mg 12 per day - <4 years old; <0.225 mg 12 per day - Adults and children > 4 years old; <0.30 mg I2 per day -Pregnant or lactating women; Source of iodine in foods for special dietary use prepared from Macrocystis pyrifera, Laminaria digitata, Laminaria saccharina, and Laminaria cloustoni - 172.365

Kelp (see algae, brown) - NAT, GRAS, GMP - 184.1120, 172.365

Kola nut - ESO, GRAS, GMP - 182.20

L

Labdanum - FL/ADJ, REG, GMP, In conjunction w/flavors -172.510

Lactase Enzyme Preparation from Kluyveromyces lactis - ENZ, GRAS, GMP - 184.1388

Lactic acid - B&N, GRAS/FS - 184.1061, Part 136, Bakery Pdts; Part 133, Cheese; Part 135, Frozen Desserts; Part 150, Fruit Butters, Jellies & Preserves; In animal feed practices - 582.1061

Lactose - NUTRS, FS, Nutritive Sweetener - 168.122; Part 133 (133.124, 133.178, 133.179) - Cheeses; 169.179 Vanilla powder; 169.182 - Vanilla-vanillin powder

Lactose, Hydrolyzed - NUTRS, FS, Nutritive Sweetner; Part 133 (133.124, 133.178, 133.179) - Cheeses

Lactylated fatty acid esters of glycerol and propylene glycol - EMUL, REG, GMP, In food

as an emulsifier, plasticizer, or surface active agent - 172.850

Lactylic esters of fatty acids - EMUL, REG, GMP, For use in foods where standards do not preclude use - 172.848

Lactylic stearate - MISC, REG/FS, < 0.5 part/100 parts flour - Part 136, Bakery Pdts - alone or comb/w calcium stearoyl -2-lactylate, sodium stearyl fumarate or succinylated monoglycerides - l72.844

Lanolin - MISC, REG, GMP, Comp of chewing gum base -172.615

Lasolocid sodium - FEED, REG, 0.05 ppm - Res in edible tissues of chicken - 556.347; Use - 558.311; 4.8 ppm - Res in cattle liver - 556.347; Use: Feed Suppl, Finished Feed, Premix, Liquid Feed Suppl - 558.311

Lasalocid sodium - FEED, REG, 10.3 ppm - Res in skin of chicken - 556.347(a); 7.2 ppm - Res in chicken liver -556.347(a); 0.7 ppm - Res in cattle liver - 556.347(a); Use in chicken, cattle & sheep feed products (finished feeds, suppls, premixes, & liquid feed suppls) - 558.311

Latex (butadiene styrene rubber) - MISC, REG, GMP, Comp of chewing gum base - 172.615

Laurel berries, leaves - ESO, GRAS - 182.20

Laureth 23 - See Polyoxyethylene (23) Lauryl Ether

Lauric acid - MISC, REG - CTG fresh fruit - 172.210, 172.860; AF - 173.340

Lauryl alcohol, synthetic - MISC, REG, GMP - See Fatty Alcohols, synthetic - 172.864

alpha-Lauryl-omega-hydroxypoly (oxyethylene) (avg. mol wt 400) - SANI, REG, GMP, Adequate drainage; May be used on beverage containers including milk containers & equipment - 178.1010

Lavandin - ESO, GRAS - 182.20

Lavender - SP/ESO, GRAS - 182.10; 182.20

Lavender, spike - ESO, GRAS - 182.20

Leather meal, hydrolyzed - FEED, REG, 1% by wt of feed - In swine feed - 573.540

Lecithin, hydroxylated lecithin - MISC, GRAS/FS -184.1400, Part 163, Cacao Pdts; Part 136, Bakery Pdts; Part l66, Oleomargarine; Part 133, Cheese Pdts; Part 582 Animal feeds; REG, GMP, Comp of defoamer - 173.340; EMUL, REG, GMP, In foods where standards do not preclude use - 172.814

Lemon, lemon peel - ESO, GRAS - 182.20

Lemon balm (See Balm) - ESO, GRAS - 182.20

Lemon grass - ESO, GRAS - 182.20

Lemon-verbena - FL/ADJ, REG, GMP, In alcoholic beverages only - 172.510

L-Leucine - NUTR/DS, REG, Food Additive Reg -172.320; MISC, REG, 3.5% of tab wt - In aspartame tabs as lubricant - 558.240

Levamisole hydrochloride -VET/FEED, REG, 0.1 ppm neg res - In edible tissues of cattle, sheep & swine as res -556.350; Use & other information: Feeds (cattle & swine)-558.315; Dosage forms - 520.1242, 524.900, 558.254; Injection as phosphate - 522.1244

Licorice and derivatives (ammoniated glycyrrhizin, glycyrrhiza) - FLAV, GRAS, < 0.05% Baked goods - Flavor, Flavor enhancer, a surface active agent; < 0.1% - Alcoholic Beverages; < 0.15% - Nonalcoholic Beverages; < 1.1% Chewing Gum; < 16.0% - Hard Candy; < 0.15% - Herbs & Seasoning; < 0.15% - Plant Proteins; < 3.1% - Soft Candies; < 0.5% - Vitamins & Minerals; < 0.1% - All other food - 184.1408

Lignin sulfonate, ammonium, calcium, magnesium, sodium includes lignin from Abaca - FEED, REG, < 4% of finished pellets - Sole pelleting aid in animal feeds -573.600; As binding agent in flaked grains; < 11% of molasses - As a surfactant in molasses used in feeds

Lime (citrus) - ESO, GRAS - 182.20

Limestone, Ground - GRAS, GMP - 184.1409

Linaloe wood - FL/ADJ, REG, GMP, In conjunction w/flavors - 172.510

Linear undecylbenzenesulfonic acid - MISC, REG, < 3.0 ppm in flume water - Used in flume water for washing sugar beets before slicing operation - 173.315

Lincomycin hydrochloride - VET/FEED, REG, 0.15 ppm neg res - Res in milk - 556.360; 0.1 ppm neg res - In edible tissues of chickens & swine - 556.360: Uses & Info -558.58; 558.145; 558.105; 558.195; 558.355; 558.680; 558.511; 558.515; 558.530; 558.530; As soluble powder in drinking water - 520.1263b/c; In swine & chicken feeds -558.325; As injection - 522.1260;

Linden flowers - SP/ESO, GRAS - 182.20

Linden leaves - FL/ADJ, REG, GMP, In alcoholic beverages only - 172.510

Linoleic acid - NUTR/DS, GRAS, GMP, Prepared from edible fats & oils & free from chick edema factor - 182.5065, 184.1065

Liver-stomach concentrate w/ intrinsic factor complex DS, ILL, Any food containing the intrinsic factor is adulterated - PART 250.201(f)

Locust bean - ESO, GRAS - 182.20

Locust (carob) bean gum - STAB, GRAS/FS, X-ref Carob bean gum - 184.1343, Part 133 (133.178, 133.179), Cheeses; Part 135, Frozen Desserts; Art Sw Jellies & Preserves, Part 150; Dressings for Food, Part 169

Lovage - FL/ADJ, REG, GMP, In conjunction w/flavor -172.510

Lungmoss - FL/ADJ, REG, GMP, In conjunction w/flavors -172.510

Lupulin - ESO, GRAS - 182.20

L-Lysine - NUTR/DS, REG - 172.320

M

Mace - SP/ESO, GRAS - 182.10

Madurimicin ammonium aka "CYGRO" - FEED, REG, Use: In feed - 558.340; 0.24 ppm - Safe concentrate in muscle - 556.735; 0.72 ppm - Safe concentrate in liver - do; 0.48 ppm - Safe concentrate in skin/fat - do; 0.38 ppm - Res in fat of chicken - do; VET, REG, Use in chicken feeds -558.340; 0.24 ppm - As res in uncooked chicken muscle tissue - 556.375; 0.72 ppm - As res in uncooked chicken liver - do;0.48 ppm - As res in uncooked chicken skin - do; 0.48 ppm - As res in uncooked chicken fat - do

Magnesium carbonate - B&N, GRAS/FS - 184.1425; Part 163, Cacao Pdts; Part 137, Cereal Flours; Part 133, Cheeses; Part 155, Cnd Peas; Part 135, Frozen Desserts: Part 582 - Animal Feeds

Magnesium chloride - B&N, GRAS/FS; 172.560, Modified Hop Extract - 184.1426

Magnesium cyclamate - NNS, ILL, Removed from the GRAS list 10-21-69, Legal only in pdts complying with drug provision of the law - 189.135

Magnesium hydroxide - MISC, GRAS/FS - 184.1428; Part 155, Cnd Peas; Part 582 - Animal Feeds

Magnesium oxide - MISC, GRAS/FS, GMP - 184.1431; Part 163, Cacao Pdts; Part 155, Cnd Peas; Part 135 Frozen Dessert; DS/NUTR, GRAS, GMP - 182.5431; Part 582 Animal feeds

Magnesium phosphate (di-, tri- basic) - NUTR/DS, GRAS, GMP - 182.5434, 184.1434

Magnesium silicate - AC, GRAS/FS, GMP - 182.2437; < 2.0% - In table salt; Part 169.179, Vanilla Powder

Magnesium stearate - MISC, GRAS, GMP - 184.1440; As migratory substance from pkg materials when used as a stabilizer; AF, REG, Defoaming agent comp - 173.340; anti-caking agent -172.863

Magnesium sulfate - NUTR/DS, GRAS, GMP - 182.5443, 184.1443

Maidenhair fern - FL/ADJ, REG, GMP, In Alcoholic Beverages only - 172.510

Malic acid, L-malic acid - MISC, GRAS/FS, GMP -184.1069; < 3.4% - Nonalcoholic Beverages; < 3.0% Chewing Gum; < 0.8% - Gelatins, Puddings & Fillings; < 6.9% - Hard Candy; < 2.6% - Jams & Jellies; < 3.5% Processed Fruits & Juices; < 3.0% - Soft Candy; < 0.7% -All other food;

131.144, Acidified Skim Milk; 146.113, Cnd Fruit Nectars; Part 150 (150.141, 150.161), Fruit Pdts; Part 169 (169.115, 169.140, 169.150), Dressings & Flavorings; Part 582 - Animal feeds

Malt (extract) - ESO, GRAS

Malt syrup (malt extract) - FLAV, GRAS, GMP -184.1445; nutrs in Part 133 (133.178, 133.179, 133.180); comp of color additive caramel - 73.85

Maltodextrin - GRAS, GMP - From corn and potato starch -184.1444

Maltose - NUTRS, Part 133 (133.124, 133.178, 133.179, 133.180) - Cheeses

Mandarin oil - ESO, GRAS - 182.20

Manganese bacitracin - FEED, REG, See Bacitracin, manganese

Manganese chloride -DS/NUTR, GRAS, GMP -182.5446, 184.1446

Manganese citrate - DS/NUTR, GRAS, GMP - 182.5449, 184.1449

Manganese gluconate - DS/NUTR, GRAS, GMP -182.5452, 184.1452

Manganese glycerophosphate - DS/NUTR, GRAS, GMP-182.5455, 182.8455

Manganese hypophosphite - DS/NUTR, GRAS, GMP -182.8458

Manganese sulfate - DS/NUTR, GRAS, GMP - 182.5461, 184.1461

Manganese salts (acetate, carbonate, chloride, soluble citrate, gluconate, ortho-phosphate, dibasic phosphate, sulfate, oxide) - NUTR/DS, GRAS, In animal feed - 582.80

Manganous oxide - DS/NUTR, GRAS, GMP - 182.5464

Mannitol - NUTR, GRAS/INTERIM, < 98.0% - Pressed Mints; < 5.0% - Hard Candy; < 31.0% - Chewing Gum; < 40.0% - Soft Candy; < 8.0% - Frostings; < 15.0% - Jams & Jellies; < 2.5% - all other food; Label "Excess consumption may have laxative effect" if daily ingestion < 20 g mannitol, In foods - 180.25

Maple, mountain - FL/ADJ, REG, GMP, In conjunction w/flavors - 172.510

Marigold, pot - SP, GRAS - 182.10

Marjoram, pot - SP, GRAS - 182.10

Marjoram, sweet - SP/ESO, GRAS - 182.10, 182.20

Massaaranduba balata - REG, GMP, Comp of chewing gum base - 172.615

Massaaranduba chocolate - REG, GMP, Comp of chewing gum base - 172.615

Materials used as fixing agents in the immobilization of enzyme preparations - 173.357

Mate - ESO, GRAS - 182.20

Melengestrol acetate - FEED, REG, ZERO - In edible tissues & by-products of cattle as a res - 556.380; Use in cattle feeds - 558.342, 558.542

Melissa (see Balm) - ESO, GRAS - 182.20

Menadione - DS, PD, Extension for use as a dietary suppl w/limit of 1 mg/day revoked 3/22/63. No food additive regulation authorizing use of menadione in prenatal suppls or any other food pdt issued

Menadione dimethylphyrimdinol bisulfite (2-hydroxy-4, 6- dimethyl pyrimidinol salt of menadione) - FEED, REG, 2.0 g/ton - As nutritional suppl in chicken & turkey feed for prevention of vitamin K deficiency 573.620; 10.0 g/ton - In swine feed - 573.620

Menhaden oil (hydrogenated and partially hydrogenated) - NUTR, GRAS - 184.1472

Menthol - ESO, GRAS - 182.20

Menthyl acetate - ESO, GRAS - 182.20

N-(Mercaptomethyl)phthalimide S-(O,O-dimethyl phosphorodithioate) - VET/PEST, REG Use: Liquid - 524.1742

Methacrylic acid-divinyl benzene copolymer - MISC, REG, GMP - Carrier for Vitamin B12 in nutritional suppls -172.775

Methionine (L- & -DL forms) - NUTR, REG - 172.320, DL form not for infant foods; Animal Feeds - 582.5475

Methionine hydroxy analog and its calcium salts -NUTR/DS, GRAS, Animal feeds - 582.5477

Methyl alcohol residues - SOLV, REG, < 50 ppm - As residual solvent in mfr of spice oleoresins; < 2.2% by wt - In hop extract for beer - 173.250; < 100 ppm - In modified hop extract for beer - 172.560

Methylcellulose (USP methylcellulose) -MISC, GRAS/FS, Except methoxy content - 27.5 & 31.5% dr wt basis - 182.1480; Part 150 (150.141, 150.161), Fruit Butters, Jellies; VET, REG, For use in mastitis formulation for treating dairy animals - 526.820

Methylene chloride - SOLV, REG, < 30 ppm - As residual solvent in mfr of spice oleoresins - 173.255; < 10 ppm - In decaffeinated roasted coffee & decaffeinated soluble (instant) coffee; < 2.2% - As res in hop extract. Extract added before or during cooking of beer; MISC, REG, < 5 ppm - In modified hop extract for beer - 172.560

Methyl ester of rosin - partially hydrogenated - MISC, REG, GMP, As a constituent of chewing gum base - 172.615

Methyl esters of fatty acids produced from edible fats & oils - MISC, REG, < 3% wt of aqueous & < 200 ppm raisins - In dehydrating grapes to produce raisins, > 90% methyl esters of fatty acids; < 1.5% unsaponifiable material 172.225

Methyl esters of higher fatty acids - FEED, REG, In animal feed - 573.640

Methyl ethyl cellulose - MISC, REG, GMP, In food as aerating, emulsifying & foaming agent - 172.872

Methyl glucoside - coconut oil ester - MISC, REG, GMP, In mfr of sucrose & dextrose - 172.816; FEED, REG, < 320 ppm - Used as surfactant in molasses intended for use as comp of animal feeds - 573.660

Methylparaben (methyl-p-hydroxybenzoate) - PRES, GRAS/ FS - 184.1490; < 0.1% by wt - Part 150, Art Sw Jelly (150.141) & Preserves (150.161); REG, ZERO - Res in milk from dairy cows treated with mastitis formulations -556.390; Use & Info - 526.820

Methyl prednisolone - VET, REG, 10 ppb - Res in milk -556.400

Metoserpate hydrochloride -VET, REG, 0.02 ppm neg res - In edible tissues of chickens - 556.410: Use - 520.1422

Microcapsules - MISC, REG, GMP, For flavoring oils & spices, Capsules contain succinylated gelatin, arabinogalactan, silicon dioxide, glutaraldehyde, n-octyl alcohol & petroleum wax - 172.230

Microcrystalline cellulose - MISC, FS, Unlisted GRAS

Microparticulated protein product - MISC, GRAS, GMP, Thickener & texturizer in frozen dessert-type pdts. May not be used to replace milk fat in standardized frozen desserts.-184.1498

Milk Clotting Enzymes - 173.150 see Enzymes

Mimosa (black wattle) flowers - FL/ADJ, REG, GMP, In conjunction w/flavors only - 172.510

Mineral oil, white (Use limitations include all petroleum hydrocarbons that may be used in combination with white mineral oil) - AF, REG, < l50 ppm - In yeast from defoamer comp - 173.340; < 0.008% of wash water - Comp of defoaming agents in wash water for sliced potatoes - do; CTG, REG, GMP, on fruits & veg - 172.878; MISC, REG, GMP, Protective float on brine used in curing pickles - do; GMP, Float-sealant on fermentation fluids in mfr of vinegar & wine - do; < 0.6% - In food as release agent, binder & lubricant in/on capsules & tabs containing food for sp diet use - do; < 0.02% - Dr fruits & veg as release agent in drying pans - do; < 0.95% - Frozen meat as hot melt coating do; < 0.10% - Egg white solids as release agent in drying do; < 0.15% - Bakery pdts as release agent & lubricant - do; < 0.15% - Yeast as release agent, binder & lubricant - do; < 0.2% - Release, sealing & polishing agent in confectionery - do;< 0.25% - Antidusting agent in sorbic acid for food use - do;< 0.3% - In molding starch used in mfr of confectionery - do;< 0.6% - Release agent, binder &/or lubricant in/on capsules or tabs containing

concentrates of flavors, spices, condiments, & nutrients intended for addition to food, excluding confectionery; & in capsules & tabs containing foods for sp diet use - do; < 0.02% by wt - A dust control agent for wheat, corn, soybean, barley, rice, rye, oats, & sorghum - do; < 0.08% by wt - A dust control agent for rice; REG, < 10 ppm - In food as lubricant on food-processing equipment - 178.3570; FEED, REG, 0.06% - Of total ration of animal - 573.680; 3.0% - In mineral suppls - do; GMP, In feed grade biuret - do

Mixed Carbohydrase and Protease enzyme product - ENZ, GRAS, GMP - 184.1027

Modified Hop Extract - FLAV, REG, GMP - IN BEER 172.560

Molasses (extract) - ESO, GRAS - 182.20

Molecular sieve resins - MISC, REG, GMP, For final purification of partially delactosed whey - 173.40

Monensin, monensin sodium - FEED, REG, 0.05 ppm As res in edible tissues of cattle - 556.420; 1.5 ppm - As res in muscle tissue of chicken & turkey - do; 3.0 ppm - As res in skin w/fat of chicken & turkey - do; 4.5 ppm - As res in liver of chicken - do; Uses in chicken & cattle feeds -558.355, 558.1448b; Use as a medicated block for cattle -520.1448a; Use in Liquid Feed for cattle - 558.355; VET, REG, Use in goat feed - 558.340; 0.05 ppm - As res in edible tissues of cattle & goats - 556.420

Monoammonium glutamate - MISC, GRAS - 182.1500

Monobutyl esters of polyethylene-polypropylene glycol produced by random condensation of a 1:1 mixture by weight of ethylene oxide & propylene oxide with butanol - BC, REG, GMP, Boiler water compound -173.310

Monocalcium phosphate (calcium phosphate monobasic) - B&N, GRAS/FS, X-ref - calcium phosphate, monobasic - 182.1217, 182.5217, 182.6215, 182.8217; < 0.75 parts/100 parts of flour (Part 136, Bakery Pdts - 136.110, 136.115, 136.130, 136.160, 136.180); < 4.5 parts including sodium bicarbonate/100 parts of cereal pdt, Part 137 (137.180, 137.270); > 0.25% and < 0.75% phosphated flour; In Self-rising Cereal Flours or Meals - (Part 137 -137.165, 137.175); In Fruit Butters, Jellies & Preserves, Part 150 (150.141; 150.161); < 0.1% wt of finished pdt Part 155 (155.170, 155.190, 155.200), Cnd Vegs

Monochloracetic acid - PRES, BAN, Any amount in beverages & other foods will serve to adulterate them -189.155

Monoester of alpha -hydro -omega -hydroxy -poly (oxyethylene)poly (oxypropylene) poly (oxyethylene) ((minimum 15 moles) blocked copolymer derived from low erucic acid rapeseed oil - Defoaming agent component used in processing beet sugar - 173.340

Monoethanolamine - MISC, REG, < 0.3 ppm in flume water - Used in flume water for washing sugar beets prior to slicing operation - 173.315

Monoglyceride citrate - MISC, REG, < 200 ppm, As a synergist & solubilizer for antioxidants in oils & fats - 172.832

Monoglycerides, distilled - VET, REG, For use in mastitis formulations for treating dairy animals - 526.820

Monoglycerides of fatty acids - STAB, REG, GMP, Used in mfr of stearyl monoglyceridyl citrate for shortenings -172.755

Mono- & diglycerides of edible fats or oils, or edible fat forming acids - MISC, GRAS/FS - 184.1505; EMUL <0.5% - 166.40, Oleomargarine; comb w/monosodium phosphate derivatives <0.5% - Part 163 (163.123, 163.130, 163.135, 163.140, 163.145, 163.150, 163.153, 163.155) Cacao Pdts; FS, <20.0% of shortening ingredients - Part 136 (136.110, 136.115, 136.130, 136.160, 136.180), Bakery Pdts

Monoisopropyl citrate - SEQ, GRAS, GMP - 182.6511, X-ref - "Isopropyl Citrate"; EMUL Part 166 (166.40, 166.110) Margarine

Monopotassium glutamate - MISC, GRAS - 182.1516; NUTR/DS, REG - 172.320

Monopotassium phosphate (potassium phosphate, monobasic) - MISC, GRAS/FS, < 0.5% - In Frozen Eggs Part 160.110

Monosodium glutamate - FLAV, GRAS/FS, GMP - 182.1; Part 155 (155.120, 155.130, 155.131, 155.170, 155.200, 155.201) - Cnd Vegs; 158.170 - Frozen peas; 161.190 - Cnd Tuna; Part 169 (169.115, 169.140, 169.150) Food Dressings; NUTR/DS, REG -172.320; In animal feeds -582.156

Monosodium phosphate (sodium phosphate, monobasic) - GRAS/FS, GMP, X-ref - sodium phosphate (monobasic) & sodium phosphate (mono-, di-, and tribasic), MISC -182.1778, DS - 182.5778, SEQ - 182.6085, 182.6778, NUTR - 182.8778; Part 133 (133.173, 133.174), Cheeses, Various; Part 150 (150.141, 150.161), Art Sw Jellies, Jams & Preserves; < 0.5% - In frozen eggs - 160.110; Part 163 (163.123, 163.130, 163.135, 163.140, 163.145, 163.150, 163.153, 163.155), Chocolate Products

Monosodium phosphate derivatives of mono- & diglycerides of edible fats or oils, or edible fat-forming fatty acids - EMUL, GRAS, GMP - 184.1521

Morantel Tartrate - FEED/VET, REG, 1.2 ppm - As res in uncooked edible cattle muscle tissue - 556.425; 2.4 ppm As res in cattle liver - do; 3.6 ppm - As res in cattle kidney do; 4.8 ppm - As res in fat - do; 0.4 ppm - As res in milk do; Use: As bolus - 520.1450; In cattle feed - 558.360; As sustained release triaminate cylinder sheet - 520.1450c

Morpholine - CTG, REG, GMP, As the salt(s) of one or more fatty acids meeting 172.860 specs as comp of protective coatings applied to fresh fruits & veg - 172.235; BC, REG, 10 ppm in steam - Except in steam in contact w/milk or milk pdts - 173.310

Mullein flowers - FL/ADJ, REG, GMP, In alcoholic beverages only - 172.510

Musk (tonquin musk) - MISC, GRAS - 182.50

Mustard, brown or black - SP, GRAS - 182.10

Mustard, white or yellow - SP, GRAS - 182.10

Myristic acid - CTG, REG, GMP - 172.210; NUTR, GMP -172.860; AF used to process sugar beets and yeast -173.340

Myristyl alcohol, synthetic - MISC, REG, GMP, See fatty alcohols, synthetic - 172.864

Myrj 45 (polyoxyethylene 8-stearate) - EMUL, ILL, (No petition filed) Use in foods unauthorized

Myrrh - FL/ADJ, REG, GMP, In conjunction w/flavors only -172.510

Myrtle leaves - FL/ADJ, REG, GMP, In alcoholic beverages only - 172.510

N

Naphtha - SOLV, in color additive mixtures for shell eggs, w/o penetration of color to interior of shell - 73.1

Narasin - FEED, REG, Use: In broiler chicken feeds - 58.363

Naringin - ESO, GRAS - 182.20

NDGA - AOX, ILL, See Nordihydroguaiaretic acid -189.165

Natamycin (pimaricin) - FUNG, REG, applied on cheese as an antimycotic not to exceed 20 milligrams per kilogram (20 ppm) in the finished product -172.155

Natural Flavoring Substances - see individual flavoring or go to 172.510 for complete list

Natural gas - x-ref combustion product gas - 173.350

Neomycin - VET, REG, 0.15 ppm neg res - As res in milk - 556.430:Use - 520.455; 0.25 ppm neg res - As res in edible tissues of calves - do; Use - 520.1484

Neotame - NNS, REG, GMP, Sweetening agent and flavor enhancer in foods generally, except in meat in poultry, and in sugar substitute tablets - 172.829

Nequinate - FEED, REG, 0.1 ppm neg res - As res in uncooked edible tissue of chickens - 556.440; Use in chicken feeds - 558.365

Neroli, bigarade - ESO, GRAS - 182.20

Niacin - NUTR/DS, GRAS/FS - 182.5530, 184.1530; Part 137 (137.165, 137.185, 137.235, 137.260, 137.305, 137.350) Cereal Flours; Part 139 (139.115, 139.117, 139.122, 139.155, 139.165), Macaroni & Noodle Pdts; 136.115, Enriched Bread

Niacinamide -NUTR/DS, GRAS/FS -182.5535, 184.1535; Part 137 (137.165, 137.185, 137.235, 137.260, 137.305, 137.350), Cereal Flours; Part 139 (139.115, 139.117, 139.122, 139.155, 139.165), Macaroni & Noodle Pdts; 136.115, Enriched Bread

Nicotinamide-ascorbic acid complex - DS, REG, In multi-vitamin prepns as source of ascorbic acid & nicotinamide - 172.315

Nicarbazin - FEED, REG, 4 ppm - As res in uncooked muscle, liver, skin, & kidney of chickens - 556.445; Use in chicken feeds - 558.366

Nickel - GRAS, GMP - 184.1537

Nisin preparation - MISC, GRAS - 184.1538; < 250 ppm -Antimicrobial in Cheese pdts, Part 133 (133.175., 133.176, 133.179, 133.180)

Nitarsone - FEED, REG, 0.5 ppm as arsenic - As res in muscle meat & eggs of chicken - 556.60; Use: Feeds -558.369

Nitrites (sodium and potassium) - X-ref sodium nitrite & potassium nitrite, PRES, PS, curing red meat & poultry pdts -181.34

Nitrofurazone - VET, REG, NOT PERMITTED FOR USE IN ANIMAL FEEDS - USE WITHDRAWN 8/23/91

Nitrogen - MISC, GRAS/FS - 184.1540; Part 169 (169.115, 169.140, 169.150), Dressings for Foods; Part 582.1540 - Animal Feeds

Nitrogen oxides - BL, FS, Part 137 (137.105, 137.155, 137.160, 137.165, 137.170, 137.175, 137.180, 137.185), Cereal Flours

3-Nitro-4-hydroxyphenylarsonic acid (Roxarsone) FEED, REG, 0.5 ppm as arsenic - In muscle meat & eggs of chickens as res - 556.60; 2.0 ppm as arsenic - As res in edible by-products, turkeys, & swine - 556.60; 0.5 ppm as arsenic - As res in muscle tissue & by-products other than liver & kidney - 556.60; For feed uses see: 558.530, 558.55, 558.58, 558.76, 558.78, 558.128, 558.376, 558.450, 558.410, 558.680

Nitroimide w/Sulfanitran - FEED, REG, ZERO res for Nitroimide - As res in uncooked edible chicken tissue -556.220; Use in chicken feeds - 558.376

Nitrosyl chloride - BL, FS, GMP, Part 137 (137.105, 137.155, 137.160, 137.165, 137.170, 137.175, 137.180, 137.185, 137.200, 137.205), Cereal Flours

Nitrous oxide - MISC, GRAS, Propellant for dairy & veg-fat toppings in pressurized containers - 184.1545

Nonanoic acid - SANI, REG - 178.1010

alpha-(p-Nonylphenyl)-omega-hydroxypoly(oxyethylene) - SANI, REG, GMP, Adequate drainage

Nordihydroguaiaretic acid (NDGA) - AOX, ILL, Not legal for use in foods - 189.165

Novobiocin - FEED/VET, REG, 0.1 ppm - In milk from dairy animals - 556.460; 1.0 ppm - In uncooked edible tissues of cattle, chickens, turkeys, & ducks - 556.060; Uses in chicken, turkey, & duck feeds - 558.415; 525.1590

Nutmeg - ESO/SP, GRAS - 182.10

Nystatin - FEED, REG, ZERO - In eggs of poultry & in uncooked edible tissues & by-products of swine & poultry from use in feed as res - 556.470; Use in chicken & turkey feeds - 558.430

O

Oak moss - FL/ADJ, REG, GMP, Thujone free Comp of flavors - 172.510

Oak, white, chips - FL/ADJ, REG, GMP, In conjunction w/flavors - 172.510

Oak, (English), wood - FL/ADJ, REG, GMP, In alcoholic beverages only - 172.510

Oat gum - STAB, GRAS, GMP, Part 135.30, Frozen Desserts; Part 133 (133.178, 133.179, 133.180), Cheese Pdts

Octadecylamine - BC, REG, < 3.0 ppm in steam Excluding use of such steam in contact w/milk & milk pdts -173.310

Octafluorocyclobutane - MISC, REG, GMP, Propellent for food pdts - 173.360

n-Octanoic (caprylic) acid - X-ref caprylic acid, MISC, GRAS 184.1025; < 0.013% baked pdts, < 0.04% cheeses, < 0.005% fats & oils, 0.016% snack foods, < 0.001% all other food categories - 182.1025; CTG, GMP, fresh citrus fruit, 172.210; MISC, REG, GMP, 172.860; part of aliphatic acid mixture < 1.0% lye peeling soln for fruits & vegs, 173.315; AF, REG, in processing beet sugar & yeast, 173.340; SANI, REG, 109-218 ppm - Comp of sanitizing solution - 178.1010; PRES, GRAS, GMP, in cheese wraps -186.1025

1-Octenyl succinic anhydride-MISC, REG, < 3.0% alone or < 2.0% w/ < 2.0% aluminum sulfate - Modifier for food starch - 172.892; SANI - 178.1010

n-Octyl alcohol - AF, REG, GMP, Comp of microcapsules -172.230

Octyl alcohol, synthetic - MISC, REG, GMP, See Fatty alcohols, synthetic - 172.864; SOLV, REG, extraction process for citric acid - 172.280

Octyldimethylamine and a mixture of n-carboxylic acids - SANI, REG - 178.1010

Octyl gallate - PRES, REG, <0.0075% in margarine -166.110

Oil of sassafras - FL/ADJ, BAN - Illegal for use in foods 189.180

Oil of sassafras, safrole free - FL/ADJ, REG, GMP, Flavoring in food, See section 172.580 for

specs

Oleandomycin - FEED, REG, 0.15 ppm - As res in edible tissues of chickens, turkeys & swine - 556.480; Uses -558.435

Oleic acid - MISC, REG, GMP - In foods as a lubricant, binder, & defoaming agent & as comp in mfr of other "food grade" additives - 172.840, 172.860, 172.863; CTG, GMP, fresh citrus fruit, 172.210; MISC, REG, < 1.0 ppm in flume water - Used in flume water for washing sugar beets prior to slicing operation - 173.315; GRAS, GMP, substance migrating from cotton in dry food pkg - 182.70; GRAS, GMP, substance migrating to food from paper pdts - 182.90

Oleic acid derived from tall oil fatty acids - MISC, REG, GMP - As a comp in mfr of food-grade additives - 172.862; CTG, GMP, on fresh citrus fruit, 172.210; AF, GMP, in processing beet sugar & yeast - 173.340

Olestra - REG, May be used in place of fats and oils in prepackaged ready-to-eat savory snacks, and prepackaged, unpopped popcorn kernels that are ready-to-heat. In such foods, the additive may be used in place of fats and oils for frying or baking, in dough conditioners, in sprays, in filling ingredients, or in flavors - 172.867

Olibanum oil - FL/ADJ, REG, GMP, In conjunction w/flavors - 172.510

Onion - ESO, GRAS - 182.20

Opopanax - FL/ADJ, REG, GMP, In conjunction w/flavors 172.510

Orange-bitter, flowers, peel-ESO, GRAS - 182.20

Orange-sweet, leaf, flower, peel - ESO, GRAS - 182.20

Oregano (origanum, Mexican oregano, Mexican sage, origan) - SP, GRAS - 182.10

Origanum - ESO, GRAS - 182.20

Ormetoprim (2,4-Diamino-5(6-methylveratryl)pyrimi-dine) - FEED, REG, 0.1 ppm - As res in edible tissues of chickens, ducks, turkeys, salmonids & catfish - 556.490; Use in animal feed w/sulfadimethoxine - 558.575

Orris root -FL/ADJ, REG, GMP, In conjunction w/flavors -172.510

Ox bile extract - EMUL, GRAS, GMP, < 0.002% cheese -184.1560

Oxides of nitrogen - BL, FS, GMP, Part 137, Cereal Flours

Oxfendazol - VET, REG, Use: As suspension for cattle -520.1630; 0.8 ppm - As res in cattle; liver (target tissue) -556.495

Oxystearin - INH, REG, 0.125% comb wt of oil, plus the additive - In cottonseed & soybean cooking & salad oils -172.818; INH, REG/FS, Part 169, Dressings for Foods; AF, REG, GMP, Comp of defoamer - 173.340

Oxytetracycline - FEED/VET, REG, 3 ppm - As res in uncooked kidneys of chickens & turkeys - 556.500; 1 ppm -In uncooked muscle, liver, fat & skin of chickens & turkeys as res - 556.500; 0.1 ppm neg res - In uncooked edible tissues of salmonids, catfish, & lobsters as res - 556.500; 0.1 ppm neg res - In uncooked edible tissue of swine & beef cattle as res - 556.500; For feed uses, see: 558.450, 558.515, Injection - 522.1660; For use in drinking water of chickens in combination with Carbomycin -520.1660a; For use in tabs in cattle - 520.1660c; Use: As soluble powder - 520.1660d

Ozone - STERL, REG, GMP (< 0.4 mg/1l bottled water), Sterilizing bottled water - 184.1563 For use as an antimicrobial agent in the treatment, storage, and processing of foods, including meat and poultry - 173.368.

P

P-4000 (5-nitro-2-n-propoxyaniline) - NNS, ILL - Not legal in food - 189.175

Palmarosa - ESO, GRAS - 182.20

Palmitic acid - MISC, REG, GMP - In foods as a lubricant, binder, & defoaming agent & as comp in mfr of other "food grade" additives - 172.860; CTG, GMP, fresh citrus fruit, 172.210; AF, GMP, in the processing of foods - 173.340

Pansy - FL/ADJ, REG, GMP, In alcoholic beverages only -172.510

D-Pantothenamide - NUTR, REG, GMP, In foods for sp diet use - 172.335

D-Panthothenyl alcohol - NUTR/DS, GRAS, GMP - 82.5580

Papain - MISC, GRAS/FS, GMP - 184.1585; 137.305 Enriched Farina; Part 136 - Enriched Bread; Part 582.1585 - Animal feeds

Paprika - SP/ESO, GRAS - 182.10; color additive, GMP -73.340

Paprika oleoresin - ESO, GRAS - 182.20; color additive, GMP -73.345

Paraffin wax (X-ref: Wax) - MISC, REG, Comp of chewing gum base - 172.615

Parsley - SP/ESO, GRAS - 182.20

Passion flower - FL/ADJ, REG, GMP - In conjunction w/flavors - 172.510

Patchouly - FL/ADJ, REG, GMP, In conjunction w/flavors -172.510

Peach kernel (persic oil) - NAT, SP/FL/ADJ, GRAS -182.40

Peach leaves - FL/ADJ, REG, GMP, In alcoholic beverages only, < 25 ppm prussic acid in the flavor - 172.510

Peanut oil - GRAS, GMP, substance migrating from cotton in dried food pkg - 182.70

Peanut stearine - NAT, SP/FL/ADJ, GRAS - 182.40

Pectins (including pectin modified) - EMUL, STAB, GRAS, GMP - 184.1588; sodium methyl sulfate may be present in pectins < 0.1%, 173.385; Part 145, Cnd Fruit; Part 150, Fruit Butters, Jellies & Preserves

Pelargonic acid - MISC, REG, < 1.0% aliphatic acids - In peeling solution for fruits & vegs - 173.315

Penicillin - FEED/VET, REG, 0.05 ppm neg res - Res in uncooked edible tissue of cattle - 556.510; ZERO - Res in uncooked edible tissues of chickens, pheasants, quail, sheep & swine; In eggs & in milk or in processed food in which milk has been used - 556.510; 0.01 ppm - Res in uncooked edible tissues of turkeys - do; For feed uses, see: 558.55, 558.58, 558.62, 558.76, 558.78, 558.105, 558.274, 558.505; Other - 520.1660, 522.1662

Penicillium roquefortii - MISC, FS, Part 133 - Cheeses

Pennyroyal (American) - FL/ADJ, REG, GMP, In conjunction w/flavors - 172.510

Pennyroyal (European) - FL/ADJ, REG, GMP, In conjunction w/flavors - 172.510

Pentaerythritol ester of maleic anhydride modified wood rosin - CTG, REG, GMP, Coating on fresh citrus fruit - 172.210

Pentaerythritol ester of rosin - X-ref - Rosin

Pepper, black, white - SP/ESO, GRAS - 182.10, 182.20

Pepper, cayenne, red - SP, GRAS - 182.10

Peppermint - SP/ESO, GRAS - 182.10, 182.20

Pepsin - ENZ, < 0.1% by wt in Enriched Farina - 137.305

Peptones - NUTR/SUPPL, GRAS, GMP, Processing aid & surface acting agent - 184.1553

Peracetic acid - MISC, REG, Modifier for food starch, < 0.45% of active oxygen - 172.892; SANI, < 200 ppm -178.1010

Perfluorohexane - MISC, REG, GMP, Mixture containing 1% perfluorohexane used to cool or freeze chickens -173.342

Periodic acid - MISC, GMP, Fixing agent for the immobilization of enzyme preparations - 173.357

Peroxyacetic acid - MISC, REG, For washing fruits and vegetables that are not raw agricultural commodities at levels < 80 ppm in wash water - 173.315

Peroxyacids -REG, Antimicrobial agent on red meat carcasses, parts, trim, and organs with maximum concentration of 220 ppm as peroxyacetic acid and maximum concentration of

hydrogen peroxide of 75 ppm. - 173.370

Persic oil (see apricot/peach kernel oil) - NAT, SP/FL/ADJ, GRAS - 182.40

Peruvian balsam - ESO, GRAS - 182.20

Petigrain (citrus aurantium) lemon, mandarin, or tangerine - ESO, GRAS - 182.20

Petrolatum NF & USP - FEED, REG, 3.0% in mineral suppls or 0.06% in total ration - In animal feeds & mineral suppls to reduce dustiness & lubricant in pelleting, cubing or blocking feeds alone or comb/w white mineral oil - 573.720; CTG, REG, GMP, Coating for raw fruits & vegs - 172.880; AF, REG, in yeast & beet sugar - Comp of defoaming agent - 173.340;MISC, REG, < 0.2% - Release agent in confectionery - 172.880; < 0.15% - In bakery pdt as a release agent & lubricant, alone or comb/w white mineral oil - do; < 0.1% - In egg white solids from use as a release agent in drying pans - do; < 0.02% - In dr fruits & vegs from use as a release agent in drying pans - do

Petroleum hydrocarbons (Synthetic isoparaffinic) MISC, REG, GMP, As ctg on shell eggs - 172.882; In froth-flotation cleaning of vegs - do; As a float on fermentation fluid as in mfr of vinegar, wine & pickle brine - do; As a comp of ctg of fruits & vegs - 172.882; AF, REG, Comp of defoaming agent in yeast & beet sugar - 173.340; SOLV, REG, GMP (< 0.47 ppm of citric acid) comp solv for extraction of citric acid from Aspergillus niger fermentation;

Petroleum hydrocarbons, odorless, light - AF, REG, GMP, As defoamer in processing beet sugar & yeast -172.884, 173.340; MISC, REG, < 1.0 ppm - In modified hop extract of beer - 172.560; MISC, REG, GMP, As a float on fermentation fluids in mfr of vinegar & wine; In froth-floatation cleaning of vegs; As ctg on shell eggs - 172.884; In pest formulations - 172.884, 573.740

Petroleum naphtha - SOLV, REG, GMP, Ctg on fresh citrus -172.210, 172.250

Petroleum wax - AF, REG, in beet sugar & yeast, 173.340; MISC, REG, GMP, In chewing gum base & in other foods -172.615, 172.886; CTG, REG, GMP, Coating on cheese & fruits & vegs, 172.886; MISC, REG, < 50% of total wt of capsule & flavor - Comp of microcapsule for spice flavor for frozen pizza - 172.230, 172.886

Petroleum wax, synthetic - CTG, REG, GMP, On cheese & raw fruits & vegs - 172.888; MISC, REG, GMP, In chewing gum base - 172.615, 172.888; AF, REG, in beet sugar & yeast - Comp of defoaming agent - 173.340

Phenol-formaldehyde, cross-linked, tetraethylenepentamine activated - Ion exchange resin for treatment of food or potable water - 173.25

Phenol-formaldehyde, cross-linked, triethylenetetramine activated - Ion exchange resin for treatment of food or potable water - 173.25

Phenol-formaldehyde, cross-linked, triethylenetetramine and tetraethylenepentamine activated - Ion exchange resin for treatment of food or potable water

-173.25

Phenol-formaldehyde, sulfite-modified, cross-linked Ion exchange resin for treatment of food or potable water -173.25

Phenylalanine, (L-form only) - NUTR/DS, REG, Food Additive Reg - 172.320

Phosphoric acid - MISC, GRAS/FS, GMP - 182.1073; 131.144, Acidified Skim Milk; Part 133 (133.123, 133.124, 133.125, 133.129, 133.147, 133.169, 133.170, 133.171, 133.173, 133.174, 133.178, 133.179, 133.180) Cheese; SANI, REG, 178.1010; Part 582.1073 - In animal feed practices

Phosphorus oxychloride - MISC, REG, < 0.1% w/ < 10% propylene oxide - In modifying food starch. Residual propylene chlorohydrin < 5 ppm - 172.892; < 0.1% or < 0.1% followed by either < 8% acetic anhydride or < 7.5% vinyl acetate - In modifying food starch, < 2.5% acetyl groups -172.892

Pichia pastoris yeast - 573.750

Pimenta oil, pimenta leaf - ESO, GRAS - 182.20

Pine, dwarf, needles & twigs - FL/ADJ, REG, GMP, In conjunction w/flavors - 172.510

Pine, scotch, needles & twigs - FL/ADJ, REG, GMP, In conjunction w/flavors - 172.510

Pine, white, bark - FL/ADJ, REG, GMP, In alcoholic beverages only - 172.510

Pine, white oil - FL/ADJ, REG, GMP, In conjunction w/flavors - 172.510

Pipsissewa leaves - ESO, GRAS - 182.20

Poloxalene - FEED, REG, GMP, In molasses block & as feed additive in dry premixes to be fed to cattle for control of legume (alfalfa, clover) bloat - 558.464 & 520.1840; GMP, As liquified feed suppl - 558.465; < 0.32 oz/ton of feed - As a surfactant in flaking of feed grains - 573.760

Poly(acrylic acid-co-hypophosphite) sodium salt -BC, REG, < 1.5 ppm - As a boiler water additive - 173.310

Polyacrylamide - MISC, REG, GMP, As a film former ctg < 0.2% acrylamide monomer in the imprinting of soft-shell gelatin capsules - 172.255; < 10 ppm & < 0.2% acrylamide monomer in wash water for fruits & vegs - 173.315

Polyacrylamide resin, modified - MISC, REG, < 5 ppm by wt of juice - Used as flocculent in the clarification of beet or cane sugar juice - 173.10

Poly(alkyl methacrylate) - MISC, REG, GMP, Adjuvant in production of petroleum wax - 172.886

Polydextrose - MISC, REG, GMP, As bulking agent, formulation aid, humectant, & texturizer in baked goods & baking mixes (fruit, custard, & pudding filled pies, cakes, cookies, & similar baked pdt only), chewing gums, confections, frostings & salad dressings, frozen dairy desserts & mixes,

gelatins, puddings, fillings, hard & soft candy, film coating on single and multiple vitamin and mineral supplement tablets, where standards permit, pdts w/single serving ctg < 15 g polydextrose should have warning label for sensitive individuals to laxation effect - 172.841

Polyethylene - FEED, REG, 0.5 lb per head per day for 6 days - As roughage replacement in feedlot rations for cattle -573.780

Polyethylene, mol. wt. 2,000 - 21,000 - MISC, REG, As constituent of chewing gum base - 172.615; Ion exchange resin material in mfr of grapefruit juice - 173.20

Polyethylene, oxidized - CTG, REG, GMP, On fresh citrus fruits, vegs & nuts - 172.260

Polyethylenimine reaction product with 1,2-dichloroethane - MISC, GRAS, GMP, Fixing agent in the mfr of fructose corn syrup. Fixing agent for the immobilization of glucoamylase enzyme preparations from Aspergillus niger for use in the manufacture of beer - 173.357.

Polyoxyethylene (600) dioleate - AF, REG, Defoamer agent comp in beet sugar & yeast - 173.340

Polyoxyethylene (600) monoricinoleate - AF, REG, Defoamer agent comp in beet sugar & yeast - 173.340

Polyoxyethylene (23) lauryl ether - Feed (Block), REG, Use: For bloat in cattle in block - 520.1846;

Polyethylene glycol - BC, REG, GMP, In boiler water -173.310; AF, REG, GMP, Comp of defoaming agent -173.340; CTG, REG, GMP, Ctg on fresh citrus fruits -172.210

Polyethylene glycol (mean molecular weight 200 -9,500) - MISC, REG, GMP, Ctg, binder, plasticizing agent, and/or lubricant in tabs used for food; Adjuvant in nonnutritive sweeteners, vitamin & mineral prepns; Ctg for sodium nitrite to inhibit hygroscopic properties - 172.820; ZERO - In milk - 172.820, 526.820

Polyethylene glycol (400) dioleate - EMUL, REG, < 10% by wt. of defoamer formulation - Processing beet sugar & yeast - 173.340

Polyethylene glycol (400) mono- & di- oleate - Feed, REG, 250 ppm in molasses - Used as a processing aid in the production of animal feeds when present as a result if its addition to molasses - 573.800

Polyglycerol esters of fatty acids - EMUL, REG, GMP, Used as emulsifiers in food or as cloud inhibitors in veg & salad oils where not precluded by standards - 172.854; 166.110 - Margarine, Part 169 (169.115, 169.140, 169.150) - Food Dressings

Polyisobutylene (minimum molecular weight 1,200-2,500) - MISC, REG, GMP, In chewing gum base - 172.615

Polyglyceryl phthalate ester of coconut oil fatty acids PEST, REG, GMP, Adjuvant for

pesticide use - 172.710

Polymaleic acid and/or its sodium salts - BC, REG, < 1 ppm in boiler feed water - Boiler water additive - 173.310; Specific uses: Boiler water additives, use individually or together at not greater than 4 ppm in processing of beet or cane sugar juice or liquor process steam - 173.310, 173.45

Polyoxyethylene glycol (400) mono- & di- oleates -EMUL, REG, In milk replacer formulations for calves -573.820

Polyoxyethylene (23) lauryl ether - FEED, REG, Use: In feed blocks for cattle - 520.1846

Polyoxyethylene (40) monostearate -AF, REG, Defoaming agent comp - 173.340

Polyoxyethylene-polyoxypropylene block polymers (avg molecular weight l900) - SANI, REG, GMP, Adequate drainage - 178.1010

Polyoxyethylene-polyoxypropylene block polymers (avg molecular weight 2000) - SANI, REG, GMP, Adequate drainage; May be used on glass containers for holding milk - 178.1010

Polyoxyethylene-polyoxypropylene block polymers (avg molecular weight 2800) - SANI, REG, < 80 ppm in soln - Adequate drainage - 178.1010

Polyoxyethylene (20) sorbitan monooleate - See Polysorbate 80 - 172.840

Polyoxyethylene (20) sorbitan monostearate - See Polysorbate 60 - 172.836

Polyoxyethylene (20) sorbitan tristearate -See Polysorbate 65 - 172.838

Polyoxypropylene glycol (Minimum molecular weight 1000) - BC, REG, GMP, In boiler water - 173.310

Polypropylene glycol (Molecular weight 1200-3000) AF, REG, Defoaming agent comp used in beet sugar & yeast - 173.340

Polysorbate 60 (Polyoxyethylene (20) sorbitan monostearate) - EMUL, REG, < 0.40% alone or w/one or comb of sorbitan monostearate, Polysorbate 80, Polysorbate 65 In whipped veg oil topping. Total amount any comb < 0.77% - 172.836;REG, < 0.46% alone or any w/sorbitan mono-stearate Polysorbate 65 - In cake mixes & cakes (dry wt basis). Total amt any comb < 0.66% - do; REG, < 0.5% of wt of finished pdts alone or in comb w/sorbitan mono-stearate - Part 163 (163.123, 163.130, 163.135, 163.140, 163.145, 163.150, 163.153, 163.155), Cocoa Pdts - do; REG, < 0.46% alone or any comb w/Sorbitan monostearate &/or Polysorbate 65 - In cake icing &/or cake filling containing shortening - do, Total amt any comb < 1.0% of finished wt; MISC, REG, <0.2% - To impart greater opacity to sugar-type confectionery coatings - do; EMUL, REG, < 0.3% - In non-standardized dressings - do; REG, < 1.0% alone or comb Polysorbate 80 - In shortening & edible oils intended for use in foods where standards permit - do; REG, < 0.40% alone or/w sorbitan monostearate or/w polysorbate 65 - In veg oil/water emulsion used as milk or cream substitute in

beverage coffee - do; REG, < 4.5% by wt of nonalcoholic mix - As foaming agent in nonalcoholic beverages used in mixing - do; REG/FS, 0.5% by wt of flour alone or w/other emul - As a dough conditioner in yeast-leavened bakery pdts, 136.3 - do; EMUL, REG, GMP, Alone or w/sorbitan monostearate in formulations of white mineral oil &/or petroleum wax for ctgs on raw fruits & vegs - do; REG, 0.5% dry wt. basis - As dispersing agent in art sw gelatin desserts & mixes - do; REG, Total amt comb < 1.0%; < 0.05% in finished pdt - As emulsifier in chocolate flavored syrups - do; REG, As surfactant & wetting agent for natural & artificial colors in food; < 4.5% by wt of mix - In powdered soft drink mixes; < 0.5% by wt of mix - In sugar base gelatin dessert mixes; < 3.6% by wt. of mix - In art sw gelatin dessert mixes; < 0.5% by wt. of mix - In sugar based pudding mixes; < 0.5% by wt. of mix - In art sw pudding mixes - do; < 0.1% alone or w/one or comb of polysorbate 65 and/or polysorbate 80 - In ice cream, frozen sherbet and non-standardized frozen desserts; REG, < 0.1% followed by either < 8% acetic anhydride or < 7.5% vinyl acetate - In modifying food starch < 2.5% acetyl groups - 172.892; AF, REG, GMP, Defoaming agent comp - 173.340; REG, diluent for color additive mixtures for drug use exempt from certification -73.1001; FEED, REG, GMP alone or comb/ Sorbitan monostearate - In mineral premixes or diet suppl for animal feeds - 573.840

Polysorbate 65 (Polyoxyethylene (20) sorbitan tristearate) - EMUL, REG/FS, < 1.0% alone or w/Polysorbate 80 - Part 135, Frozen Desserts; Non-standardized Frozen Desserts - 172.838; REG, < 0.32% alone or any comb w/Polysorbate 60 &/or Sorbitan monostearate - In cake or cake mix on a dry wt basis - total amt any comb < 0.66% -do; REG, < 0.40% alone or w/one or comb of Sorbitan monostearate, Polysorbate 60, or Polysorbate 80 - In whipped edible oil topping - do; Total comb < 0.40%; REG, < 0.32% alone or any comb w/Polysorbate 60, Sorbitan monostearate - In cake icing or cake filling - do; Total amt any comb < 1.0% of finished wt; REG, 0.40% alone or w/sorbitan monostearate or w/Polysorbate 60 - In veg fat-water emulsion used as milk or cream substitute in beverage coffee - do; AF, REG, GMP, Defoaming agent compound - 173.340; REG, diluent for color additive mixtures for drug use exempt from certification - 73.1001

Polysorbate 80 (Polyoxyethylene (20) sorbitan monooleate) - EMUL, REG/FS, < 0.1% alone or with Polysorbate 65 - Part 135, Frozen Desserts - 172.840; AF, REG, < 4 ppm, Used as yeast defoaming agent - do; SDA, REG, < 500 ppm (0.05%) - In pickles & pickle products - do; SDA, REG, < 175 mg/day based on recommended daily dose - In vitamin-mineral prepns containing calcium caseinate w/o fat-soluble vitamins - do; < 300 mg/day - In fat-soluble vitamins in vitamin & vitamin-mineral prepns w/o calcium caseinate; < 475 mg/day - In vitamin-mineral prepns containing both calcium caseinate & fat-soluble vitamins; MISC, REG, < 10 ppm in finished sodium chloride - As a surfactant in pdtn of coarse crystal sodium chloride - do; EMUL, REG, < 360 mg/day - In sp diet foods - do; SDA, REG, < 30 ppm - For dill oil in cnd spiced green beans, Part 155, Cnd Vegs - do; EMUL, REG, < 1.0% alone or comb/ Polysorbate 60 - In shortening & edible oils - do; EMUL, REG, < 0.40% alone or comb/Sorbitan monostearate, Polysorbate 60, or Polysorbate 65 - In whipped veg oil topping - do; REG, < 0.0175% - In scald water for poultry defeathering followed by potable water rinse - do; SDA, REG, < 0.082% on dry wt basis - As

dispersing agent in gelatin desserts & gelatin dessert mixes - do; REG, As an adjuvant added to herbicide or plant-growth regulator dilutions prior to their application - do; AF, REG, < 0.008% by wt of finished pdt - In creaming mixture for cottage cheese & low fat cottage cheese as identified in 133.128 & 133.131 - do;REG, < 0.005% by wt of sauce - As surfactant & wetting agent for natural & art colors in barbecue sauce - do; REG, In milk replacer formula for calves - 573.860

Polysorbate 80 w/ carrageenan or carrageenan salts -MISC, REG, < 5% Polysorbate 80 - In carrageenan or its salts - 172.623; < 500 ppm Polysorbate 80 - In finished food containing additive - 172.623

Polyvinyl Acetate (molecular weight 2000 minimum) -MISC, REG, Comp of chewing gum base - 172.615; REG, diluent for color additive mixtures for drug use exempt from certification - 73.1

Polyvinylpolypyrrolidone - MISC, REG, Clarifying agent in beverages & vinegar to be removed with filtration -173.50

Polyvinylpyrrolidone (avg molecular weight 40,000, except in beer) - MISC, REG, < 10 ppm (average molecular weight 360,000) - In beer from use as a clarifying agent 173.55;< 40 ppm - In vinegar - do; REG, < 60 ppm - In wine from use as a clarifying agent - do; REG, GMP, As tableting adj in NNS & flavor, vitamin & mineral concentrates in tab form - do; MISC, REG, GMP, Stab, lodging agent & dispersant in NNS in conc liquid form or in vitamin & mineral concentrates in liquid form - do; ADJ, REG, GMP, As an adj w/ vinyl chloride, vinylidene chloride copolymer for ctg on fresh citrus fruit - 172.210; REG, diluent for color additive mixtures for drug use exempt from certification -73.1, 73.1001

Poly(2-vinylpyridine-co-styrene) - FEED, CTG - Coating agent for nutrients for cattle - 573.870

Pomegranate - ESO, GRAS - 182.20

Poplar buds - FL/ADJ, REG, GMP, In alcoholic beverages only - 172.510

Poppy seed - SP, GRAS - 182.10

Pot marigold - SP, GRAS - 182.10

Pot marjoram - SP, GRAS - 182.10

Potassium acetate - B&N, FS - Unlisted GRAS

Potassium acid tartrate - B&N/MISC, GRAS, GMP -184.1077; Part 150 (150.141, 150.161), Art Sw Jelly & Preserves; Part 582.1077 - In animal feeds

Potassium alginate - STAB, GRAS - Stabilizer & thickener, < 0.1% in confections & frostings, < 0.7% in gelatins & puddings, < 0.25% in processed fruits & fruit juices, < 0.01 % in all other food categories - 184.1610

Potassium alum - MISC, FS, Part 137, Flour; REG, used as comp of bleaching agent for dairy pdts in cheese prepn in Part 133 (133.102, 133.103, 133.104, 133.106, 133.111, 133.141, 133.165, 133.181, 133.195)

Potassium bicarbonate - B&N/MISC, GRAS/FS, GMP -184.1613, Part 163 (163.110, 163.111, 163.112, 163.114, 163.117), Cacao Pdts; Part 582.1613 - In animal feeds

Potassium bisulfite -PRES, GRAS/FS, GMP, Restrictions: Not in meats, foods recognized as source of Vitamin B1 , raw fruit & veg (incl fresh potatoes, i.e., not frozen, cnd or dehydrated) - served fresh - 182.3616

Potassium bromate - BL, FS, < 75 ppm added to whole wheat flour; 50 ppm in white flour - Part 137 (137.155, 137.205), Cereal Flours; Part 136 (136.110, 136.115, 136.130, 136.160, 136.180), Bakery Pdts; MISC, REG, < 75 ppm calc as bromine - In malt for pdtn of fermented malt beverages or distilled spirits - 172.730

Potassium bromide - SANI, REG, < 200 ppm available halogen - Adequate drainage - 178.1010; MISC, REG, For washing fruits & vegs - 173.315

Potassium caprate - MISC, REG, GMP - 172.863

Potassium caprylate - MISC, REG, GMP - 172.863

Potassium carbonate - B&N/MISC, GRAS/FS, GMP -184.1619; Part 163, Cocoa Pdts; Used in treatment of modified hop extract - 172.560; BC, REG - 173.310; Part 582.1619 - In animal feeds - 184.1619

Potassium caseinate - MISC, FS, Part 135 (135.110, 135.140), Frozen Desserts

Potassium chloride - MISC, GRAS/FS - 184.1622; Part 150 (150.141, 150.161), Art Sw Jelly & Preserves, Added to margarine - 166.110; DS/NUTR, GRAS, GMP - 182.5622

Potassium citrate - MISC, GRAS/FS, GMP - 182.1625; SEQ, GRAS, GMP - 182.1625; Part 133 (133.169, 133.173, 133.179), Cheese; Part 150 (150.141, 150.161), Art Sw Jelly & Preserves; Part 582.1625 - In animal feeds

Potassium cyclamate - NNS, ILL, Removed from GRAS list 10-21-69 - 189.135

Potassium dichloroisocyanurate - SANI, REG, < 100 ppm available halogen - Adequate drainage - 178.1010

Potassium fumarate - REG, GMP, sp diet - 172.350

Potassium gibberellate - REG, < 2 ppm as gibberellic acid in malting barley - 172.725

Potassium gluconate - MISC, FS, GMP

Potassium glycerophosphate - DS, GRAS, GMP -182.5628; NUTR, GRAS, GMP - 182.8628

Potassium hydroxide -B&N/MISC, GRAS/FS -184.1631; Part 163, Cacao Products; Part

582.1631 - In animal feeds

Potassium hypochlorite - SANI, REG, < 200 ppm available halogen as chlorine - Adequate drainage - 178.1010

Potassium iodate - BL/DS, GRAS/FS - 184.1635; < 0.0075% by wt flour - Part 136 (136.110, 136.115, 136.130, 136.160, 136.180), Bakery Pdts; Animal feed; Trace mineral in animal feeds - 582.80

Potassium iodide - NUTR, GRAS, < 0.01% - In table salt as source of dietary iodine - 184.1634; DS, REG, < 225 micrograms daily ingestion - For foods labeled w/o reference to age or physiological state - 172.375; < 45 micrograms daily ingestion for infants - For food when age or the cond of pregnancy or lactation are specified - 172.375; < 105 micrograms daily ingestion for < 4 yrs old; < 225 micrograms daily ingestion for adults & children 4+ yrs old; < 300 micrograms daily ingestion for pregnant or lactating women; Trace mineral in animal feeds - 582.80; SANI, REG, < 25 ppm iodine in soln - Adequate drainage -178.1010

Potassium lactate - MISC, GRAS, GMP, used as flavor enhancer or adjuvant, humectant & pH control agent -184.1639

Potassium laurate - MISC, REG, GMP - 172.863

Potassium metabisulfite - PRES, GRAS/FS, GMP, Restrictions: Not in meats, foods recognized as source of Vitamin B1, raw fruit & veg (incl fresh potatoes, i.e., not frozen, cnd or dehydrated) - served fresh - 182.3617

Potassium N-methyldithiocarbamate - REG, 3.5 ppm in terms of wt of sugar cane being processed - Comp of bacteriostat in controlling microorganisms in cane sugar mills; 4.1 ppm in terms of wt of raw cane or beets - Comp of bacteriostat in controlling microorganisms in cane sugar & beet sugar mills - 173.320

Potassium myristate - MISC, REG, GMP - 172.863

Potassium nitrate - MISC, REG, < 200 ppm of finished roe Used as a curing agent in the processing of cod roe -172.160; PRES, PS, source of nitrite used in pdtn of cured red meat & poultry pdts - 181.33

Potassium nitrite - PRES, PS, source of nitrite used in pdtn of cured red meat & poultry pdts - 181.34

Potassium oleate - MISC, REG, GMP - 172.863

Potassium palmitate - MISC, REG, GMP - 172.863

Potassium permanganate - BL, REG, < 50 ppm calc as manganese - used as bleaching agent in modified food starch - 172.892

Potassium persulfate - REG, GMP, Adj for coatings of fresh citrus - 172.210

Potassium phosphate (dipotassium phosphate) (dibasic) - SEQ, GRAS/FS, GMP - 182.6285; Part 133 (133.169, 133.173, 133.179), Process Cheeses

Potassium phosphate (monobasic) - REG, <0.5% by wt of frozen eggs as a color preservative - 160.110

Potassium salts of fatty acids - MISC, REG, GMP, In foods as binder, emulsifier, & anti-caking agent - 172.863

Potassium sorbate - PRES, GRAS/FS - 182.3640; < 0.3% as sorbic acid - Part 133 (133.123, 133.173, 133.179, 133.180, 133.188) Cheeses; FS, < 0.1% by wt - Part 150 (150.141, 150.161), Fruit Butter & Art Sw Jelly & Preserves; < 0.1% or 0.2% total in combination w/other pres, Margarine & Oleomargarine - 166.110; GRAS, substance migrating to food from paper & paperboard pdts - 182.90

Potassium stearate - MISC, REG, GMP, Specifications -172.863; AF for beet sugar & yeast - 173.340; Comp of chewing gum - 172.615

Potassium sulfate - FL/ADJ, GRAS, GMP - 184.163

Potassium trichloroisocyanurate - SANI, REG, < 100 ppm avail halogen as chlorine - Adequate drainage - 178.1010

Potassium triphosphate - BC, REG, GMP - 173.310

Prednisolone - VET, REG, ZERO - In milk from dairy animals treated with mastitis formulations - 556.520

Prednisone - VET, REG, ZERO - In milk from dairy animals treated with mastitis formulations - 556.530

Prickly ash bark - ESO, GRAS - 182.20

Procaine penicillin - VET, REG, Used as injection in animals - 574.274b et al; 0.05 ppm - Res in uncooked edible tissues of cattle - 556.510; 0.01 ppm - Res in uncooked edible tissues of turkey - 556.510; ZERO - Res in uncooked edible tissues of chicken, pheasants, quail, swine, sheep, in eggs, in milk or any food processed with milk - 556.510

Progesterone - VET, REG, ZERO - No res above stated tolerances in uncooked edible tissues & by-products of lambs & steers - 556.540; Use as implant in combination with estradiol valerate - 522.1940 ***(NOT TO BE USED IN VEAL CALVES)***

Proline (L form only) - NUTR/DS, REG, Food Additive Reg - 172.320

Propane - MISC, GRAS, GMP - 184.1655; Combustion product gas - 173.350

Propanoic acid -SANI, REG - 178.1010

Propionic acid - PRES, GRAS/FS, GMP - 184.1081; Part 133 (133.149, 133.195), Propionic acid

produced by bacteria, Swiss & Gruyere Cheese

Propyl alcohol, normal - FEED, REG, Used in feeds as a source of metabolizable energy - 573.880

Propylene glycol - MISC, GRAS/FS - 184.1666; Part 169 (169.175, 169.176, 169.177, 169.178, 169.180, 169.181), Vanilla Extract; Carrier for enzyme modified soy protein; Part 582.1666 - In animal feeds

Propylene glycol alginate (Propylene glycol ester of alginic acid) - MISC, REG, stab < 0.5% by wt in frozen dairy desserts, emul/stab/or thickener < 0.5% by wt in baked goods, emul/stab/thickener <0.9% by wt in cheeses, in - Part 135, Frozen Desserts; Part 166 Marg; REG, GMP, In processing foods - 172.858; FS, Part 133, Cheeses; Part 169, Dressings; MISC, REG, GMP, Adj for ctg fresh citrus fruit - 172.210

Propylene glycol mono- & di- esters of fats & fatty acids - EMUL, REG/FS, GMP - 172.856; Part 136 (136.110, 136.115, 136.130, 136.160, 136.180), Bakery Pdts; AF, REG, GMP, Defoamer agent compound - 173.340

Propylene oxide - MISC, REG, < 25% for treatment - In modifying food starch. Residual propylene chlorohydrin < 5 ppm - 172.892

Propyl gallate - AOX, GRAS, AOX content <0.02% of fat or oil content incl essential oil content of food - 184.1660; Margarine - 166.110; REG, 0.1% alone or/BHA/BHT - Comp of chewing gum base - 172.615; Pressure-sensitive adhesives used as the food contact surface of labels &/or tapes applied to food - 175.125

Propylparaben (propyl-p-hydroxybenzoate) - PRES, GRAS/FS, GMP - 184.1670; < 0.1%, Part 150, 150.141, 150.161), Art Sw Jelly & Preserves; REG, 0.025%, In mastitis formulations - 526.820; REG, ZERO - In milk from dairy animals - 556.550

Protein concentrate, whole fish - DS, REG, GMP -172.385

Protein, hydrolyzed - MISC, FS, Part 161.190(a), Cnd Tuna

Protein, vegetable, hydrolyzed - Cnd Vegs, Part 150 (155.120, 155.130, 155.170, 155.200)

Prussiate of soda, yellow (Na ferrocyanide decahydrate) - AC, REG, < 13 ppm calc as anhydrous Na ferrocyanide - Anticaking agent in salt - 172.490; AC/FEED, REG, 13 ppm -do; In salt for animal consumption -573.1020

Psyllium seed husk - STAB, FS, 0.5% by wt - Part 135, Frozen Desserts

Pteroylglutamic acid (aka folic acid) - X-ref Folic acid, DS, REG, < 0.40 mg w/o ref to age or physiological state As comp of dietary suppls, provided directions for use, when followed < tolerance - l72.345

Pyrantel tartrate - FEED/VET, REG, 10 ppm - In swine liver & kidney as res - 556.560; 1 ppm -

In swine muscle as res - 556.560; Uses: In swine feeds - 558.485; Powder & Tabs - 520.2045

Pyridoxine hydrochloride - NUTR/DS, GRAS, GMP -182.5676, 184.1676

Pyrophyllite (aluminum silicate monohydrate) -AC/MISC, REG, < 2.0% in complete animal feed - As sole anticaking aid, blending agent, pelleting aid, or carrier in animal feed - 573.900

Q

Quassia - FL/ADJ, REG, GMP, In conjunction w/flavors -172.510

Quaternary ammonium chloride combination - PRES, REG, See Reg, In proc of sugar cane juice and in cane sugar mills - 172.165, 173.320

Quebracho bark - FL/ADJ, REG, GMP, In conjunction w/flavors - 172.510

Quillaia (soapbark) - FL/ADJ, REG, GMP, In conjunction w/flavors - 172.510

Quince seed - NAT, GRAS - 182.40

Quinine hydrochloride or sulfate - FLAV, REG, < 83 ppm as quinine - Flavoring agent in carbonated bevs - 172.575

R

Radiation and Radiation sources - Ionizing radiation for the treatment of food - REG gamma rays of the radionuclides cobalt-60 or cesium-137; electrons generated from machine sources at energies not to exceed 10 million electron volts; and x-rays generated from machine sources at energies not to exceed 5 million electron volts (MeV) or 7.5 MeV if the x-ray target material is tantalum or gold- 179.26; radiofrequency radiation including microwave - 179.30; ultraviolet radiation from low pressure mercury lamps at a wavelength of 253.7 nanometers (2,537 Angstroms). -179.39; pulsed light when source is xenon flashlamps to emit broadband radiation ranging from 200-1,100 nanometers(nm) with pulse duration no longer than 2 milliseconds (msec). - 179.41 ; ionizing radiation for control of food-borne pathogens, and extension of shelf-life, in fresh iceberg lettuce and fresh spinach at a dose up to 4.0 kiloGray (kGy). 21 CFR 179.26

Rapeseed oil, fully hydrogenated - STAB, GRAS, GMP, See REG, Use in peanut butter - 184.1555(a)

Rapeseed oil, fully hydrogenated, superglycerinated -EMUL, GRAS, GMP, See REG, Use in shortenings for cake mixes - 184.1555(b)

Rapeseed oil, low erucic acid - MISC, GRAS, GMP, See REG, Except in infant formula - 184.1555(c); May be declared on label as "Canola Oil"

Rapeseed oil, low erucic acid, partially hydrogenated MISC, GRAS, GMP, See Reg, Except

in infant formula -184.1555(c)(2)

Red saunders (red sandalwood) - FL/ADJ, REG, GMP In alc bevs only - 172.510

Regenerated cellulose - MISC, REG, See REG, As an ion-exchange resin - 173.25(a)(20)

Rennet (Rennin) - MISC, GRAS, Milk - Part 131; Cheese and Rel Cheese Prods - Part 133; In animal feeds -582.1685; GRAS, GMP, See REG - 184.1685

Resin, from formaldehyde, acetone, or tetraethylenepentamine - MISC, REG, See REG, As an ion-exchange resin - 173.25(a)(8)

Rhatany root - FL/ADJ, REG, GMP, In conjunction w/flavors - 172.510

Rhizopus oryzae - MISC, REG, Source of carbohydrase for prod of dextrose from starch - 173.130

Rhubarb, garden root (*Rheum rhaponticum L*) - FL/ADJ, REG, GMP, In alc bevs only - 172.510

Rhubarb root - FL/ADJ, REG, GMP, In conjunction w/flavors - 172.510

Riboflavin - NUTR/DS, GRAS/FS, Cereal Flours - Part 137; Alimentary Pastes - Part 139; Bakery Prods - Part 136; GRAS, GMP - 182.5695, 184.1695

Riboflavin-5-phosphate - NUTR/DS, GRAS, GMP -182.5697, 184.1697

Rice bran wax - CTG/MISC, REG, < 50 m - Ctg for candy - 172.890;< 50 ppm - Ctg for fresh fruits & vegs -72.890; < 2.5% - In chewing gum as plasticizing material - 172.890, 172.615

Robenidine HCl - FEED, REG, 0.2 ppm - As residue in chicken fat & skin - 556.580; 0.1 ppm neg residue - In other edible tissue of chickens - 556.580; Use & other info -558.515

Rose absolute (otto of roses, attar of roses) - ESO, GRAS - 182.20

Rose buds, flowers, fruit (hips), leaves - ESO, GRAS

Rose geranium - ESO, GRAS - 182.20

Roselle - FL/ADJ, REG, GMP, In alc bevs only - 172.510

Rosemary - SP/ESO, GRAS - 182.10, 182.20

Rosidinha (rosadinha) - MISC, REG - 172.615

Rosin (colophony) - FL/ADJ, REG, GMP, In alc bevs only -172.510

Rosin, gum, glycerol ester - MISC, REG, GMP, Softener for chewing gum - 172.615

Rosin, gum or wood, pentaerythritol ester, partially hydrogenated pentaerythritol ester, or partially hydrogenated glycerol ester - MISC, REG, GMP, Softener for chewing gum - 172.615

Rosin, methyl ester, partially hydrogenated - MISC, REG, GMP, Softener for chewing gum - 172.615; SY/FL -172.515

Rosi, partial dimerized, calcium salt or partially (catalytically) hydrogenated - CTG, REG, GMP, Ctg on fresh citrus fruit - 172.210

Rosin, polymerized glycerol ester, partially hydrogenated glycerol ester, or partially dimerized glycerol ester -MISC, REG, Softener for chewing gum - 172.615

Rosin, tall oil, glycerol ester-MISC, REG, GMP, Softener for chewing gum - 172.615

Rosin, wood - CTG, REG, GMP, Ctg on fresh citrus fruit -172.210

Rosin, wood, glycerol ester - MISC, REG, GMP, Softener for chewing gum - 172.615; MISC, REG - 172.735

Rosin, wood, pentaerythritol ester of maleic anhydride - CTG, REG, GMP, Ctg on fresh citrus fruit - 172.210

Roxarsone - FEED/VET, REG, See 3-nitro 4-hydroxy phenyl arsenic acid (Arsenic) for tolerances - 556.60; Use: In chicken & swine feeds - 558.530; In Drinking Water of chickens, turkeys, & swine - 520.2087, 520.2088

Rubber, butadiene-styrene - MISC, REG, Comp of chewing gum base - 172.615

Rubber (natural) smoked sheet and latex solids -MISC, REG, Comp of chewing gum base - 172.615

Rue - SP/ESO, GRAS, < 2 ppm - 184.1698

Rue, oil - FL/ADJ, GRAS, See REG - 184.1699

Rum - FLAV, FS, Cnd Fruits - Part 145

S

Saccharin (ammonicalcium, or sodium) -NNS, REG/ITEM, < 12 mg /fl oz - In bevs and fruit juice drinks & bases or mixes - 180.37; < 20 mg/teaspoonful of sugar sweetening equivalency - In sugar substitutes for cooking or table use - 180.37; < 30 mg/serving - In processed foods -180.37; Part 145 - Cnd Fruits; Part 150 - Fruit Butters, Jellies, Pres, and Rel Prods

Saffron - SP/ESO, GRAS - 182.10, 182.20 - Not permitted in standardized mayonnaise (169.140) or salad dressing (169.150); Color additive - 73.500

Safrole & any oil containing safrole - ILL, No legal use in food 189.180

Safrole-free extract of sassafras - FLAV, REG, Flavoring in food - 172.580

Sage, Greek - ESO/SP, GRAS - 182.10, 182.20

Sage, Spanish - SP, GRAS - 182.20

St. John's bread - ESO, GRAS - 182.20

St. Johnswort leaves, flowers and caulis - FL/ADJ, REG, GMP - In alc bevs only, Hypericin-free alcohol distillate form only - 172.510

Salicylic acid - MISC, REG, Zero Tolerance - Residue in milk from dairy animals - 556.590; Use - Comp of mastitis formulations - 526.820

Salinomycin - FEED, REG, Use - In chicken feeds -558.550

Salts of fatty acids - MISC, REG, GMP - 172.863

Sandalwood, white (yellow or East Indian), red -FL/ADJ, REG, GMP - In conjunction w/flavors - 172.510

Sandarac - FL/ADJ, REG, GMP, In alc bevs only - 172.510

Sanitizing solutions - SANI, REG, For use on food proc equipment followed by adequate draining. See individual compounds for limitations on uses and concentrations -178.1010

Sarsaparilla - FL/ADJ, REG, GMP, Natural flavor -172.510

Sassafras extract, safrole free - FLAV, REG, GMP -172.580

Sassafras leaves - FLAV/ADJ, REG, GMP, Must be safrole free - 172.510

Savory, winter or summer - SP/ESO, GRAS - 182.10,

Schinus molle - ESO, GRAS - 182.20

Selenium as Sodium Selenite or Selenate - FEED, REG, < 0.1 ppm in complete feed - Uses: In complete feeds for chickens, swine, turkeys, sheep, beef cattle, dairy cattle & ducks - 573.920; < 0.3 ppm - In prestarter & starter rations for swine - 573.920

Senna, Alexandria - FL/ADJ, REG, GMP, In conjunction w/flavors - 172.510

Serine (L-form only) - NUTS/DS, REG - 172.320

Serpentaria (Virginia snakeroot) - FL/ADJ, REG, GMP, In alc bevs only - 172.510

Sesame - SP, GRAS - 182.10

Silica aerogel - AF, GRAS - 182.1711

Silicon dioxide - AC, REG, < 2.0% by wt of food - Used only in those foods where anticaking effect is demonstrated 172.480;REG, < 2% by wt of feed - In feed & feed components as anticaking or grinding agent - 573.940 for use limit; FS, < 1.0% by wt of finished food - In dried egg prods wi moisture < 5% by wt - 160.105, 160.185; STAB, REG, Stab for use in prod. of beer to be removed by filtration prior to final proc - 172.480; MISC, REG, GMP, As an absorbent for dl-tocopheryl acetate and pantothenyl alcohol in tablet-ed foods for special dietary use - 172.480; REG, GMP, Comp of

microcapsules for flavoring oils - 172.230; REG, GMP, Comp of defoaming agents - 173.340; GRAS, Migr to food from paper and paperboard prods - 182.90

Silver nitrate -- REG, Used as an antimicrobial agent, in an aqueous solution with hydrogen peroxide, in bottled water. Silver nitrate NTE 17 ug/kg in the treated bottled water, and hydrogen peroxide NTE 23 mg/kg. - 172.167

Simaruba bark - FL/ADJ, REG, In alc bevs only - 172.510

Sloe berries (blackthorn berries) - ESO, GRAS - 182.20

Smoke prepared by condensing or precipitating wood smoke - FLAV, FS, Past Proc Cheese - Part 133; Cnd Tuna -161.190

Snakeroot, Canadian (wild ginger) - FL/ADJ, REG, GMP, In conjunction w/flavors - 172.510

Sodium acetate - B&N, GRAS/FS, Art Sw Fruit Jelly -150.141, Art Sw Fruit Pres and Jams - 150.161; BC, REG, Comp of boiler water additive - 173.310; GRAS, GMP -184.1721; GRAS, Migr from cotton and cotton fabrics used in dry food pkg - 182.70; In animal feeds - 582.121

Sodium acid phosphate - SEQ, GRAS, Cheeses and Rel Cheese Prods - Part 133; Froz Desserts - Part 135; GRAS, GMP - 182.6085

Sodium acid pyrophosphate - B&N, GRAS/FS, Cereal Flours - Part 137; EMUL, FS, Cheeses and Rel Cheese Prods - Part 133; INH, FS, < 0.5% finished food - Prevent struvite crystal formation in cnd tuna - 161.190(a); In animal feeds - 582.1087

Sodium alginate - STAB, GRAS/FS, Cheeses and Rel Prods - Part 133; Froz Desserts - Part 135; Art Sw Fruit Jelly - 150.141; Art Sw Fruit Pres and Jams - 150.161; GRAS - 184.1724; BC, REG, Comp of boiler water additive -173.310

Sodium n-alkylbenzene sulfonate (alkyl group predominately C12 and C13 and not less than 95% C10 to C16) - MISC, REG, < 0.2% in wash water - Used in washing or to assist in lye peeling of fruits & vegs - 173.315

Sodium aluminate - BC, REG, Comp of boiler water additive - 173.310; GRAS, Migr to food from paper and paperboard prods - 182.90

Sodium aluminosilicate (sodium silicoaluminate) - AC, GRAS/FS, < 2%, Dried whole eggs and egg yolks -160.105, 160.185; Grated Cheeses - 133.146; GRAS, < 2% -182.2727

Sodium aluminum phosphate - MISC, GRAS/FS, Self-rising Flours & Meals - Part 137; EMUL, GRAS/FS, Cheeses, Various - Part 133; GRAS, GMP - 182.1781; In animal feeds - 582.1781

Sodium aluminum sulfate - MISC, GRAS/FS, Cereal Flours - Part 137

Sodium arsanilate - FEED, REG, See Arsenic

Sodium ascorbate - PRES, GRAS, GMP - 182.3731

Sodium benzoate GRAS/FS, < 0.1%, Fruit Pres & Art Sw Fruit Jelly & Pres - 150.141, 150.161; < 0.1%, Margarine -166.110; Conc. Orange Juice - 146.152, 146.154; GRAS, GMP - 184.1733

Sodium bicarbonate - MISC, GRAS/FS, Cnd Peas - Part 155; Cnd Tomato Paste - 155.191; Cacao Prods - Part 163; Cereal Flours - Part 137; GRAS, GMP - 184.1736; MISC, REG, Used to treat sodium methyl sulfate - 173.385; SANI, REG - 178.1010(b)(41); In animal feeds - 582.1736

Sodium bisulfite - PRES, GRAS, Not in meats or foods recognized as source of Vit B1, etc., See REG - 182.3739; GRAS, FS, Cnd Shrimp - 161.173

Sodium borohydride - MISC, REG, < 310 ppm boron Used as modifier for hop extract - 172.560

Sodium bromide - SANI, REG, < 200 ppm avail halogen -Adequate drainage - 178.1010

Sodium calcium aluminosilicate hydrated (sodium calcium silicoaluminate) - AC, GRAS, GMP, < 2% - 182.2729

Sodium carbonate - BC, REG, Boiler water additive -173.310; B&N, GRAS/FS, Cacao Prods - Part 163; Cnd Vegs Part 155; In animal feeds - 582.1742; GRAS, GMP -184.1742

Sodium carbonate w/sodium mono- & dimethyl naphthalene sulfonates - MISC, REG, For use in potable water systems - 172.824; MISC, < 0.2% in wash water - Used in washing or to assist in lye peeling of fruits and vegs -173.315

Sodium carboxymethylcellulose (cellulose gum) - The sodium salt of carboxymethylcellulose, not less than 99.5% on a dry weight basis - MISC, GRAS, GMP, With one or any mixture of two or more gums permitted - 182.1745; STAB, As optional ingredient in following standardized foods: Cheeses, Various - Part 133; Food Dress - Part 169; Art Sw Jelly & Fruit Jams - Part 150; Froz Desserts - Part 135

Sodium chloride - GRAS/FS, Milk and Cream - Part 131; Cheeses and Rel Cheese Prods - Part 133; Cnd Fruits -Part 145; Cnd Vegs - Part 155; Veg Juices - Part 156; Froz Vegs - Part 158; Fish and Shellfish - Part 161; Cacao Prods - Part 163; Margarine - Part 166; Food Dress and Flavorings - Part 169; GRAS, GMP - 182.1; GRAS Migr from cotton and cotton fabrics used in dry food pckg -182.70; GRAS, Migr to food from paper and paperboard prods - 182.90

Sodium chlorite - MISC, REG, GMP, Modifier for food starch - 172.892

Sodium citrate - B&N/SEQ, GRAS/FS, Milk and Cream Part 131; Cheeses and Rel Cheese Prods - Part 133; Art Sw Fruit Jelly, Jam, and Pres - 150.141, 150.161; GRAS, GMP - 182.1751, 182.6751; In animal feeds - 582.1751

Sodium cloxacillin - VET, REG, 0.01 ppm - As residues in milk - 556.165;

Sodium cyclamate - NNS, ILL - Removed from GRAS list 10-21-69 - 189.135

Sodium N-cyclohexyl-N-palmitoyl taurate - SANI, REG, Followed by adequate drainage - 178.1010(b)(40)

Sodium decylbenzenesulfonate - MISC, REG, GMP -Adjuvant for ctg on fresh citrus fruits - 172.210

Sodium diacetate - MISC, GRAS, GMP - 184.1754

Sodium dichloroisocyanurate - SANI, REG, < 100 ppm available halogen - Followed by adequate drainage -178.1010

Sodium dimethyldithiocarbamate - PRES, REG, 3.0 ppm in raw cane - Comb w/ Disodium ethylenebisdithiocarbamate for control of microorganisms in cane sugar mills -173.320; 3.0 ppm in raw cane or sugar beets - Comb w/Disodium ethylene bisdithiocarbamate & ethylenediamine for control of microorganisms in cane sugar and beet sugar mills - 173.320

Sodium dioctylsulfosuccinate - SANI, REG, GMP, Followed by adequate drainage - 178.1010

Sodium dodecylbenzenesulfonate - MISC, REG, < 0.2% in wash water - Surface active agent in commercial detergents used in washing fruits & vegs, or to assist in lye peeling these prods - 173.315

Sodium 2-ethylhexylsulfate - MISC, REG, < 0.2% in wash water - Used in washing or to assist in lye peeling of fruits & vegs - 173.315

Sodium ferrocyanide decahydrate - See Prussiate of soda

Sodium fluoride - NUTR, PD/ILL, GMP, X-ref - Fluorine containing compounds

Sodium glucoheptonate - BC, REG, < 1 ppm cyanide in compound - Boiler water additive - 173.310

Sodium gluconate - MISC, GRAS/FS, GMP - 182.6757

Sodium hexametaphosphate - BC, REG, GMP, Boiler water additive - 173.310; SEQ, GRAS/FS, Fruit Jellies - Part 150; Cheese - Part 133; Froz Desserts - Part 135; Food Dress - Part 169; GRAS, GMP - 182.6760; GRAS, Migr to food from paper and paperboard prods - 182.90

Sodium humate - BC, REG, GMP, Boiler water additive -173.310

Sodium hydroxide - B&N, GRAS/FS, Cocoa Prods - Part 163; MISC, GRAS - 184.1763; BC, REG, GMP, Boiler water additive - 173.310; In animal feeds - 582.1763; MISC, REG, < 1% - In modifying food starch - 172.892; MISC - Used in manufacture of modified hop extract - 172.560; MISC -Used in manufacture of hydroxylated lecithin - 172.814

Sodium hypochlorite - MISC, REG, < 0.055 lb Cl per lb drystarch; 0.45% active O2 from H2O2; and < 25% propyleneoxide, or not to exceed 0.0082 lb Cl per lb of dry starch - In modifying food starch, residual propylene- chlorohydrin < 5 ppm - 172.892; REG, GMP, Used in washing or to assist in the lye peeling of fruits & vegs - 173.315; SANI, See REG, < 200 ppm available Cl - Followed by adequate drainage - 178.1010

Sodium hypophosphite - EMUL/STAB, GRAS, GMP -184.1764

Sodium iodate - DS, GRAS, Animal feed; Source of Iodine -Trace Mineral - 582.80

Sodium iodide - DS, GRAS, Animal feed; Source of Iodine - Trace Mineral - 582.80; SANI, REG, < 25 ppm I in sln -Followed by adequate drainage - 178.1010

Sodium lactate - MISC, GRAS, GMP - 184.1768

Sodium laurate - MISC, REG, X-ref wi fatty acids, salts of -172.863

Sodium lauryl sulfate - EMUL, REG, < 125 ppm (0.0125%) - In liquid & froz egg whites - 172.822; < 1,000 ppm (0.1%) - In egg white solids - 172.822; < 5,000 ppm (0.5%) wt of gelatin - Whipping agent in gelatin used in preparing marshmallows - 172.822; AF, REG, < 25 ppm in finished product - As a surfactant in fumaric acid-acidulated dry bev base & fruit juice drinks unless precluded by a food standard - 172.822; SDA, REG < 10 ppm - In the partition of high and low melting fractions of crude veg oils and animal fats provided partitioning is followed by a conventional refining process that includes alkali neutralization and deodorization of the fats and oils - 172.822; CTG, REG, GMP - For ctg on fresh citrus fruit - 172.210; SANI, REG, GMP - Followed by adequate drainage - 178.1010

Sodium lignosulfonate - BC, REG, GMP, Boiler water additive - 173.310

Sodium lignum sulfonate - FEED, REG, < 4% of finished pellets - As sole pelleting aid in animal feeds - 576.600

Sodium metabisulfite - PRES, GRAS, GMP, Not in meats or foods recognized as a source of Vit B1, etc., See REG -182.3766; GRAS/FS, Fruit Jellies - Part 150; BC, REG, GMP, Boiler water additive - 173.310

Sodium metaphosphate - EMUL, GRAS/FS, Cheeses -Part 133; GRAS, GMP - 182.6769

Sodium metasilicate - BC, REG, GMP, Boiler water additive - 173.310; MISC, GRAS, GMP - 184.1769a

Sodium methyl sulfate - EMUL, REG, < 0.1% in pectin -As a proc residue in pectin - 173.385

Sodium mono- & dimethylnaphthalenesulfonates -MISC, REG, < 0.2% in wash water - Used in washing or to assist in lye peeling of fruits & vegs - 173.315; REG, < 250 ppm - In sodium carbonate for use in potable water systems - 172.824;AC, REG, < 0.1% - In sodium nitrite used in cured fish and meat - 172.824

Sodium myristate - MISC, REG, X-ref wi fatty acids, salts of - 172.863

Sodium nicotinate - ILL, Request for extension of statute and for filing of petition denied. Deceptive use in ground meat for color retention.

Sodium nitrate - PRES, REG, < 500 ppm - Alone or w/ sodium nitrite as a preservative and color fixative in smoked, cured salmon, shad, & sablefish, or in meat-curing preparations for home curing of meat & meat prods (including poultry & wild game) - 172.170; BC, REG, GMP, Boiler

water additive -173.310; PS (by USDA) - As a source of nitrite, w/ or w/o sodium or potassium nitrite, in the prod of cured red meats and poultry - 181.33

Sodium nitrite - PRES, REG, < 200 ppm - Alone or with sodium nitrate as a preservative and color fixative in smoked, cured salmon, shad & sablefish; or in meat curing preparations for home curing of meat & meat prods -172.175; REG, > 100 ppm to < 200 ppm - In loin muscle of smoked chub - 172.177; REG, < 10 ppm (0.001% sodium nitrite) - Alone as color fixative in smoked, cured tuna -172.175; REG, < 20 ppm - In cnd pet food containing meat & fish and their by-prods - 573.700; PS (by USDA) - As a color fixative and preservative, wi or without sodium or potassium nitrate, in the curing of red meat and poultry - 181.34

Sodium 1-octanesulfonate - SANI, REG - Comp of sanitizing sln - > 156 to < 312 ppm, isopropyl alcohol may be added as an optional ingredient - Followed by adequate draining - 178.1010(b)(27); Comp of sanitizing sln - Sulfuric acid may be added as an optional ingredient - Followed by adequate draining - 178.1010

Sodium oleate - MISC, REG, X-ref wi fatty acids, salts of -172.863

Sodium palmitate - MISC, REG, X-ref wi fatty acids, salts of - 172.863

Sodium pantothenate - MISC, GRAS, GMP - 182.5772

Sodium pectinate - MISC, GRAS - In animal feeds -582.1775; EMUL/STAB, GRAS, GMP - 184.1588

Sodium phosphate (mono-, di-, and tribasic) - MISC, GRAS, GMP - 182.1778; SEQ, GRAS, GMP - 182.6778; DS/NUTR, GRAS, GMP - 182.5778, 182.8778; BC, REG, GMP, Boiler water additive - 173.310; GRAS/FS - Cheeses and Rel Cheese Prods - Part 133; Art Sw Fruit Jellies, Pres, and Jams - 150.141, 150.161

Sodium phosphate (monobasic) (monosodium phosphate) - PRES, GRAS/FS, < 0.5% - Froz Eggs - 160.110; Cacao Prods - Part 163

Sodium phosphate (dibasic) (disodium phosphate) - GRAS, GMP - 182.6290; GRAS/FS- Froz Deserts - Part 135; Enriched Farina - 137.305; Macaroni and Noodle Prods - Part 139;

Sodium polyacrylate-acrylamide resin - MISC, REG, < 2.5% wt of juice or liquor - In beet sugar or cane sugar juice to control organic and mineral scale - 173.5

Sodium polyacrylate - BC, REG, GMP, Boiler water additive - 173.310; MISC, REG, < 3.6 ppm of raw juice weight -Mineral scale inhibition in beet and cane sugar prod

Sodium polymethacrylate - BC, REG, GMP, Boiler water additive - 173.310

Sodium potassium tartrate - MISC, GRAS/FS, Cheeses - Part 150; Art Sw Fruit Jellies, Pres, and Jams - 150.141, 150.161; MISC, GRAS, GMP - 184.1804; In animal feeds -582.1804

Sodium propionate - PRES, GRAS/FS, GMP, Cheeses and Rel Cheese Prods - Part 133; Art Sw

Fruit Jellies, Pres, and Jams -150.141, 150.161; Bakery Prods - Part 136; MISC, GRAS, GMP - 184.1784

Sodium pyrophosphate - SEQ, GRAS, GMP - 182.6787

Sodium saccharin -NNS, GRAS/INTERIM, See Saccharin - 180.37

Sodium salts of fatty acids - MISC, REG, GMP, Binder, emulsifier, and anticaking agent in food - 172.860, 172.863

Sodium sesquicarbonate - MISC, GRAS, GMP -184.1792

Sodium silicate - BC, REG, GMP, Boiler water additive -173.310;

Sodium silicoaluminate - AC, GRAS/FS, X-ref - Sodium aluminosilicate - Dried whole eggs and egg yolks - 160.105, 160.185

Sodium sorbate - PRES, GRAS/FS, < 0.3% by wt as sorbic acid - Cheeses and Rel Cheese Prods, alone or comb wi potassium sorbate or sorbic acid - Part 133; 0.1% by wt -Fruit Butter, Art Sw Fruit Jelly, Pres, and Jams - 150.110, 150.141, 150.161; < 0.2% in comb or < .1% - Margarine -160.110; GRAS - Migr to food from paper and paperboard prods - 182.90

Sodium stearate - MISC, REG, Comp of chewing gum base - 172.615; X-ref wi 172.863; STAB, PS, Migr from food pckg material - 181.29

Sodium stearoyl lactylate - REG, As follows unless precluded by Food Standards - 172.846; < 0.5% by weight of flour - As dough strengthener, emulsifier, or proc aid in baked prods, pancakes, waffles and prepared mixes of these; < 0.2% by weight of finished food - As surface active agent, emulsifier, or stabilizer in icings, fillings, puddings, toppings and prepared mixes of these; < 0.3% by weight of finished emulsion - As emulsifier or stabilizer in liquid and solid edible fat-water emulsion used as substitutes for milk and cream in coffee; < 0.5% of dry weight - As formulation aid, proc aid, or surface active agent in dehydrated potatoes; < 0.2% by weight - As emulsifier, stabilizer, or texturizer in snack dips and cheese and cheese product substitutes and imitations; < 0.25% by weight of finished food - As an emulsifier, stabilizer, or texturizer in sauces or gravies, prods containing same, and prepared mixes of same

Sodium stearyl fumarate - MISC, REG, < 1% by weight -As conditioning agent in dehydrated potatoes or in processed cereals for cooking unless food standards precludes such use - 172.826; REG, < 0.2% by weight of food - As a conditioning agent in starch thickened or flour-thick-ened foods - 172.826; STAB, REG, < 1% by weight of flour used - As stabilizing agent in non-yeast leavening bakery prods - 172.826; REG, < 0.5 part/100 part by weight of flour - As dough conditioner in yeast-leavened bakery prods -172.826, Bakery Prods - Part 136

Sodium sulfachloropyrazine monohydrate - VET, REG, ZERO - Residues in edible tissues of chickens - 556.625; Use: Drinking water - 520.2184

Sodium sulfate - BC, REG, GMP, Boiler water additive -173.310; MISC, REG, GMP, Comp of

chewing gum base - 172.615

Sodium sulfide - MISC, REG, GMP, Comp of chewing gum base - 172.615

Sodium sulfite - BC, REG, GMP, Boiler water additive -173.310; PRES, GRAS, GMP, Not in meats or foods recognized as source of Vit B1, etc., See REG - 182.3798

Sodium sulfo-acetate derivatives (mono- & diglycerides) - EMUL, FS, <0.5% - Margarine - 166.110

Sodium tartrate - MISC, GRAS/FS, Cheeses and Rel Cheese Prods - Part 133; Art Sw Fruit Jellies, Pres, and Jams - 150.141, 150.161; MISC, GRAS, GMP - 184.1801

Sodium tetrapyrophosphate - SEQ, GRAS/FS, X-ref wi tetrasodium pyrophosphate - 182.6789

Sodium thiosulfate - SEQ, GRAS, GMP, < 0.1% - In table salt - 184.1807; < 0.00005% - In alc bevs - 184.1807

Sodium p-toluenesulfonchloramide - SANI, REG, GMP - Followed by adequate drainage - 178.1010(b)(3)

Sodium trichloroisocyanurate - SANI, REG, < 100 ppm available Cl - Followed by adequate drainage - 178.1010

Sodium trimetaphosphate - MISC, REG, < 0.4% as phosphorus - Food starch modifier - 172.892

Sodium tripolyphosphate - BC, REG, GMP, Boiler water additive - 172.310; MISC, REG, < 0.4% as phosphorus -Food starch modifier - 172.892; SEQ, GRAS, GMP -182.1810, 182.6810; GRAS, Migr from cotton and cotton fibers used in dry food pckg - 182.70; GRAS, Migr to food from paper and paperboard prods - 182.90; GRAS - In animal feeds - 582.1810

Sodium xylenesulfonate - SANI, REG, 31-62 ppm -Comp of sanitizing sln - 178.1010

Solvent Extraction Process for Citric Acid - MISC, REG -173.280

Sorbic acid - PRES, GRAS/FS, < 0.2% - Cheeses and Cheese Rel Prods - Part 133; PRES, GRAS/FS, < 0.3% by weight as sorbic acid, alone or comb wi potassium or sodium sorbate -Cheeses and Rel Cheese Prods - Part 133; < 0.1% - Art Sw Fruit Jellies, Pres, and Jams - 150.141, 150.161; < 0.2% by wt Concentrated Orange Juice -146.154; <0.1% alone or <0.2% in comb with other preservatives - Margarine - 166.110; GRAS, GMP - 182.3089

Sorbitan monooleate - EMUL, REG, See REG, Use: In clarification of cane and beet sugar juice or liquor - 173.75

Sorbitan monostearate - EMUL, REG, < 0.4% alone or any comb of Polysorbate 60, 65, or 80 of the weight of finished whipped edible oil topping; > 0.4% in comb if Polysorbate 60 < 0.77% and Sorbitan monostearate < 0.27% of weight of finished whipped edible oil topping - In whipped edible oil toppings - 172.842; REG, < 0.4% of weight of finished product - In veg oil/water

emulsion used as a substitute for milk or cream in bev coffee; Used alone or comb wi Polysorbate 60 and/or 65 - 172.842; REG, < 0.61% - In cakes & cake mixes alone or comb wi < 0.46% Polysorbate 60 and/or < 0.32% Polysorbate 65 - Total amount any comb < 0.66% - 172.842; REG, < 1.0% by weight of finished product - In non-standardized confectionery ctg alone or comb wi < 0.5% Polysorbate 60, Total amount any comb < 1.0% - 172.842; REG, < 0.7% - In cake icing or filling containing shortening, alone or comb wi < 0.46% Polysorbate 60 and/or < 0.32% Polysorbate 65, Total amount any comb < 1.0% - 172.842; CTG, REG, GMP, Alone or wi Polysorbate 60 in formulations of white mineral oil and/or petroleum wax for ctgs on raw fruits & vegs -172.842; AF, REG, GMP, Comp of defoaming agents -173.340; FEED, REG, GMP, In mineral premixes & dietary supplies for animal feeds, alone or comb wi Polysorbate 60 - 573.960;MISC, REG, < 1% by weight of dry yeast - Used alone for rehydration aid in prod of active dry yeast -172.842; FS, Cacao Prods - Part 163

Sorbitol - MISC, GRAS, GMP, See REG - 184.1835; GRAS, Migrate to food from paper and paperboard prods -182.90

Soybean oil, hydrogenated - GRAS, Migr from cotton and cotton fabrics used in dry food pckg - 182.70

Soybean oil fatty acids, hydroxylated - AF, REG, GMP, Defoamer agent compound - 173.340

Soybean protein, isolated - GRAS, Migr to food from paper and paperboard prods; GRAS/FS, Margarine -166.110

Spearmint - SP/ESO, GRAS - 182.10, 182.20

Spectinomycin - VET, REG, 0.1 ppm (neg res) - In edible tissues of chickens as residue - 556.600; Use: Drinking water - 520.2123b; Injection - 522.2120

Sperm oil - CTG, REG, GMP, Adjuvant in ctgs on fresh citrus fruits - 172.210

Sperm oil, hydrogenated - MISC, REG, GMP, Release agent or lubricant in bakery pans - 173.275

Spike lavender - ESO, GRAS - 182.20

Spruce needles & twigs - FL/ADJ, REG, GMP, In conjunction w/flavors only - 172.510

Stannous chloride - PRES, GRAS/FS, < 15 ppm calc as tin - Cnd Asparagus in glass - 155.200; GRAS/FS, 15-20 ppm calc as tin - Cnd Asparagus in glass wi lids lined wi inert material -155.200; MISC, REG - < 20 ppm calc as tin - For color retention in glass-packed asparagus - 172.180; GRAS, GMP (< 0.0015% calc as tin) - 184.1845

Star anise - SP, GRAS - 182.10

Starch - SANI, REG - Comp, wi or without dextrin, of sanitizing sln - 178.1010

Starch, modified food - MISC, FS, GMP, Salad Dressing - 169.150;Vanilla powder - 169.179;

Vanilla-vanillin powder -169.182; REG, GMP, See REG for types of modified starch -172.892

Starch, acid modified - GRAS, Migr to food from paper and paperboard prods - 182.90

Starch, pregelatinized - GRAS, Migr to food from paper and paperboard prods - 182.90; FEED, REG, 30 gm/twice daily - Use in water of newborn calves - 520.2155

Starch, unmodified - GRAS/FS, GMP, Cereal Flours and Rel Prods - Part 137; Salad Dressing - 169.150; Vanilla Powder -169.179; Vanilla-vanillin powder - 169.182; GRAS, Migr to food from paper and paperboard prods - 182.90

Starter Distillate - FL/ADJ, GRAS, GMP - 184.1848

Stearic acid - MISC, REG, GMP, Comp of chewing gum -172.615; REG, X-ref wi fatty acids - 172.860; GRAS, GMP, 184.1090

Stearyl alcohol, synthetic - MISC, REG, GMP, X-ref wi fatty alcohols, synthetic - 172.864

Stearyl citrate - PRES, GRAS/FS, <0.15% - Margarine -166.110; GRAS, GMP, <0.15% - 182.6851

Stearyl monoglyceridyl citrate - STAB, REG, GMP, In shortenings - 172.755

Stearoyl propylene glycol hydrogen succinate - See Succistearin

Sterculia gum (karaya gum) - MISC, GRAS - 184.1349

Storax, or styrax - FL/ADJ, REG, GMP, In conjunction w/flavors only - 172.510

Streptomycin - FEED/VET, REG, ZERO - In edible tissues of chickens, turkeys, swine and in eggs as residue -556.610; Other Dosage forms - 520.2158

Styrene - MISC, REG, See REG - Ion-exchange membrane - 173.20; Ion-exchange resin - 173.25; SY/FL -172.515

Styrene, polymeric compounds - MISC, REG, See REG - Ion-exchange resins - 173.25

Succinic acid - GRAS/FS - Acidified Skim Milk - 131.144; MISC, GRAS, GMP - 184.1091; In animal feeds - 582.1091

Succinic acid, 2,2-dimethylhydrazide - PLANT REGULATOR, REG, 135 ppm - In dried prunes resulting from application to the growing plums as residue - 193.410

Succinic anhydride - MISC, REG, GMP, Food starch modifier - 172.892

Succinylated gelatin - MISC, REG, < 15% - Comp of microcapsules for flavoring oils - 172.230

Succinylated monoglycerides - EMUL, REG, < 3.0% by weight - In liquid & plastic shortenings - 172.830; MISC, REG/FS, < 0.5% weight of flour - As a dough conditioner -alone or comb/w calcium stearyl-2-lactylate, lactylic stearate or sodium stearyl fumarate (See Part 136) -172.830

Succistearin (stearoyl propylene glycol hydrogen succinate) - EMUL, REG, GMP, In or

wi shortenings & edible oils used in cakes, cake mixes, fillings, icings, pastries, and toppings - 172.765

Sucralose - NNS, REG, GMP, Sweetening agent -172.831

Sucrose - NUTRS, GRAS, GMP - 184.1854

Sucrose acetate isobutyrate (SAIB) - STAB, REG, Used as a stabilizer of emulsions of flavoring oils used in nonalcoholic beverages not to exceed 300 milligrams/kilogram of the finished beverage - 172.833

Sucrose fatty acid esters - REG, GMP, For use as emulsifier, texturizer, and component of fruit ctgs - in chewing gum, confections, frostings, surimi-based seafood products, coffee and tea beverages - See 172.859 for specifications

Sucrose oligoesters - EMUL/STAB, REG, Used in chocolate and butter-substitute spreads at a level not to exceed 2.0% - 172.869

Strawberry aldehyde (C-16 aldehyde) - SY/FL, GRAS, X-ref wi 3-Methyl-3-phenyl glycidic acid ethyl ester - 182.60

Sugar beet extract flavor base - FLAV, REG, GMP, In foods - 172.585

Sulfabromomethazine - VET, REG, 0.1 ppm - As residue in uncooked edible tissues of cattle - 556.620; In milk - do; Uses: As bolus - 520.2170

Sulfachloropyrazine -VET, REG, ZERO - Residue in uncooked edible chicken tissue - 556.625; Use: In drinking water of chickens - 520.2184

Sulfachlorpyridazine - VET, REG, 0.1 ppm - In uncooked edible tissue of calves & swine as residue - 556.630; Uses - 520.2200, 522.2200 (Oral Dosage Forms)

Sulfadimethoxine -VET/FEED, REG, 0.1 ppm - In uncooked edible tissues & by-prods of cattle, chickens, turkeys, and ducks as residue - 556.640; 0.01 ppm - In milk as residue - 556.640; Uses & other info - Drinking water, tablets, suspension - 520.2220: As injection - 522.2220

Sulfadimethoxine + Ormetoprim - FEED, REG, Sulfa 0.1 ppm neg residue - Residues in uncooked edible tissues of chickens, turkeys, cattle, ducks, salmonids and catfish -556.640; Sulfa 0.01 ppm neg residue - Residue in milk -556.640; Ormet 0.1 ppm neg residue - Residue in edible tissues of chickens, turkeys, ducks, salmonids and catfish -556.490; Uses: Chicken, turkey, duck and fish (salmonids/catfish) feeds - 558.575

Sulfaethoxypyridazine - FEED/VET, REG, 0.1 ppm -Residue in edible tissues of cattle - 556.650; ZERO -Residues in milk and uncooked edible tissue of swine -556.650; Use: Drinking water of cattle & swine & as tablets - 522.2240;Injection - 522.2240; Use: Feeds - 558.579

Sulfamerazine (N-[4-methyl-2-pyrimidinyl]sulfanilamide) - FEED, REG, ZERO - In edible tissues of trout as residue - 556.660; Use if fish feed - 558.582

Sulfamethazine -VET, REG, Use: As tablet or bolus in cattle - 520.2260a; 0.1 ppm - As residue in uncooked edible tissues of cattle, swine, turkeys, chickens - 556.670

Sulfamethazine a) (w/chlortetracycline & penicillin) b) (w/tylosin) - VET/FEED, REG, 0.1 ppm - In uncooked edible tissues of chickens, turkeys, cattle & swine - 556.670; Use in swine feeds - 558.145 (CTC & Pen) and 558.630 (Tylosin); Use in dosage forms - 520.2260

Sulfamethazine sodium -VET, REG, 0.1 ppm - In uncooked edible tissue of chickens, turkeys, cattle & swine - 556.670;Use: In drinking water - 520.2661

Sulfanitran (Acetyl[p-nitrophenyl]sulfanilamide) (w/alk-lomide) - FEED/VET, REG, ZERO - Residue in edible tissues & by-prods of chickens - 556.680; Feed uses; 558.376; 558.530; 558.376; Other: Drinking water -520.2320

Sulfaquinoxaline - FEED, REG, Use: Feed for chickens, turkeys, & rabbits - 558.586; Dosage forms: In drinking water for chickens, turkeys, & cattle - 520.2325a; In drench for cattle - 520.2325b

Sulfated butyl oleate - MISC, REG, < 2% by weight in aqueous emulsion - To dehydrate grapes to raisins -172.270

Sulfathiazole (Combined w/Chlortetracycline and Penicillin) - FEED, REG, 0.1 ppm neg residue - In uncooked edible tissues of swine - 556.690; Uses in swine feeds - 558.155

Sulfiting agents - PRES, GRAS, GMP, X-ref wi individual sulfiting agents - 182.3616, 182.3637, 182.3739, 182.3766, 182.3798, 182.3862

Sulfomyxin (N-sulfomethylpolymyxin B-Sodium salt) -VET, REG, ZERO - In edible tissues of chickens & turkeys - 556.700;Use - 522.2340

Sulfonated lignin, primarily as calcium & sodium salts - SP/ADJ, REG, GMP, X-ref - Calcium lignosulfonate -573.600; < 4% of finished pellets, of flake grain or fin feed Pelleting aid, binding aid, of flake grain, source of metabolizable energy in finished feed; < 11% molasses - Surfactant in molasses used in feeds

Sulfonated 9-octadecanoic acid - SANI, REG, 156-312 ppm - Comp of sanitizing sln - Followed by adequate draining - 178.1010

Sulfonated oleic acid, Na salt - SANI, REG, GMP, Comp of sanitizing sln - Followed by adequate draining - 178.1010

Sulfur dioxide - PRES, GRAS/FS, Not in meats or in foods recognized as a source of Vitamin B1, etc. (See REG) - 182.3862; BL, REG, < 0.05% - Food starch modifier -172.892

Sulfuric acid - MISC, GRAS, GMP - 184.1095; In animal feeds -582.1095; REG, GMP, Food starch modifier -172.892; REG, Manufacture of modified hop extract -172.560; REG, Manufacture of sodium methyl sulfate -173.385; SANI, REG, GMP, Comp of sanitizing sln -Followed by

adequate drainage - 178.1010

Synthetic fatty alcohols - MISC, REG, GMP, See Fatty Alcohols, synthetic - 172.864

Synthetic flavoring substances - SY/FL, REG, GMP, See 172.515 for listing and adjuvants

Synthetic glycerin - MISC, REG, GMP, In food - 172.866 for specs

Synthetic isoparaffinic petroleum hydrocarbons -MISC, REG, GMP - 172.882

Synthetic paraffin & succinic derivatives - CTG, REG, GMP, Ctg on fresh citrus, muskmelons, and sweet potatoes -172.275

T

Tagetes (marigold) oil - FL/ADJ, REG, GMP, As oil only -172.510

Tall oil rosin, glycerol ester of - MISC, REG, GMP, Softener for chewing gum - 172.615

Tallow alcohol, hydrogenated - AF, REG, GMP, Comp of defoaming agent - 173.340

Tallow, fatty acids - MISC, REG, GMP, In foods - 172.860

Tallow, hydrogenated, oxidized or sulfated - AF, REG, GMP, X-ref - Comp of defoaming agent - 173.340

Tamarind - ESO, GRAS - 182.20

Tangerine - ESO, GRAS - 182.20

Tannic acid - ESO, GRAS; NAT/FL/ADJ, GRAS, See REG, < .01% Baked Goods & Baking Mixes; < .015% - Alc bevs.; < .005% - Nonalc bevs.; < .04% - Froz dairy desserts & soft candy; 0.013% - Hard Candy; < 0.001% - Meat prods -184.1097; REG, In rendered animal fat - See 9 CFR 318.7

Tannin (incl quebracho extract) - BC, REG, GMP, Boiler water additive - 173.310

Tansy - FL/ADJ, REG, GMP, In alc bevs only; Finished bev thujone free - 172.510

Tarragon - SP/ESO, GRAS - 182.10, 182.20

Tartaric acid - MISC, GRAS/FS; Art Sw Fruit Jellies, Pres, and Jams - 150.141, 150.161; Acidified Skim Milk -131.144; GRAS, GMP - 184.1099; In animal feeds -582.1099

Taurine - FEED, REG, <0.054% of the feed - Nutritional supplement in feed of growing chickens - 573.980

Tea - ESO, GRAS - 182.20

Technical white mineral oil - MISC, REG, < 3.0% - In mineral supplements for animals; < 0.06% - In total ration of feed or feed concentrates - 573.680. Specs - 172.878; 178.3620

Terpene resin (Beta-pinene polymer) - MISC, REG, < 0.07% of weight of capsule - Moisture

barrier on soft gelatin capsules; < 7.0% of weight of powder - Moisture barrier on powders of ascorbic acid or its salts - 172.280

Terpene resin (synthetic polymers of alpha-pinene, beta-pinene, and/or dipentene & natural polymers of alpha-pinene) - MISC, REG, GMP, Comp of chewing gum bases - 172.615

Testosterone propionate -VET, REG, 1.3 ppb - As residues in liver of cattle (heifers) - 556.710; 1.9 ppb - As residues in kidney of cattle (heifers) - do; 2.6 ppb - As residues in fat of cattle (heifers) ; 0.64 ppb - As residues in muscle of cattle (heifers) - do

Tetracycline - VET, REG, 0.25 ppm - In uncooked tissues of calves, sheep, swine, chicken & turkeys - 556.720;

Tetraethylenepentamine crosslinked with epichlorohydrin - REG, Comp of ion-exchange resins - 173.25

alpha-[p-(1,1,3,3-Tetramethylbutyl)phenyl]-omega-hydroxypoly(oxyethylene) - PEST, REG, GMP - Adjuvant for pesticide use - 172.710

Tetrasodium pyrophosphate - SEQ, GRAS/FS, Cheeses and Rel Cheese Prods - Part 133; Ice Cream - Part 135; BC, REG, Comp of boiler water additive - 173.310; MISC, REG, < 0.3 ppm in flume water - Used in flume water for washing sugar beets prior to slicing operation - 173.315

Tetrasodium ethylenediaminetetracetate - MISC, REG, < 0.1 ppm in flume water - Used in flume water for washing sugar beets prior to slicing operation - 173.315

TBHQ (tertiary butylhydroquinone) - AOX, REG, < 0.02% of fat or oil - Used alone or in comb wi BHA and/or BHT -Total antioxidants in food except standardized foods which do not list for such use - 172.185

THBP (2,4,5-trihydroxybutyrophenone) - AOX, REG, < 0.02% of fat or oil - Used alone or in comb wi other permitted antioxidants - Total antioxidants, in foods except standardized foods which do not list for such use - 172.190

Thiamine hydrochloride or mononitrate - NUTR/DS, GRAS/FS, Cereal Flours - Part 137; Macaroni/Noodle Prods - Part 139; Bakery Prods - Part 136; 184.1875/1878, 182.5875/5878

Thiabendazole - FEED/VET, REG, 0.1 ppm neg residue -Residue in edible tissues of cattle, goats, sheep and swine - 556.730; 0.05 ppm neg residue - Residue in milk -556.730; Use: As dosage forms/block - 520.2380; As feed for cattle, goats, sheep, swine & pheasants - 558.615

Thiodipropionic acid - AOX, GRAS, GMP, < 0.02% of fat or oil - Total antioxidants in food - 182.3109; PS, AOX, Migr from food-pkg material (addition of < 0.005% to food) -181.24

Thiourea - AOX, BAN, BANNED PRIOR TO FAA - USE ILLEGAL - 189.190

Thistle, blessed (holy thistle) - FL/ADJ, REG, GMP, In alc bevs only - 172.510

Threonine (L form only) - NUTR/DS, REG - 172.320

Thyme, White Thyme - SP/ESO, GRAS - 182.10, 182.20

Thyme, wild or creeping - SP/FLAV/ESO, GRAS - 182.10, 182.20

Thymol iodide - DS, GRAS, In animal feed as source of trace mineral - 582.80

Thymus capitatus (Spanish origanum) - FL/ADJ, REG, GMP, In conjunction w/flavors - 172.510

Tiamulin - FEED, REG, 0.4 ppm - Residue in swine liver -556.738; Use: Drinking Water - 520.2455; Use: Medicated Feed - 558.600

Tocopherols - PRES, GRAS, GMP - 182.3890, 184.1890; DS/NUTR, GRAS, GMP - 182.8890

Tocopherol acetate - DS/NUTR, GRAS, GMP - 182.5892, 182.8892

Tolu, Balsam, extract ands gum - FL/ADJ, REG, GMP, In conjunction w/flavors - 172.510

Tonka extract - SY/FL, BAN - See "Coumarin" - 189.130

Torula yeast, dried (Candida utilis) - FLAV, REG, folic acid <0.04 mg/g yeast (approx 0.008 mg/g pteroyglutamic acid/g yeast) - In food, X-ref - Dried Yeasts - 172.896

Tragacanth (gum tragacanth) - STAB, GRAS/FS, Cheeses and Rel Cheese Prods - Part 133; Froz Desserts - Part 135; Food Dress and Flavorings - Part 169; Art Sw Fruit Jellies, Pres, and Jams - 150.141, 150.161; GRAS -184.1351

Trenbolone Acetate - VET, REG, 100 ppb - As residues in uncooked liver tissues of cattle - 556.739; 300 ppb - As residues in uncooked kidney tissues of cattle - do; 400 ppb - As residues in uncooked fat tissues of cattle - do; 500 ppb - As residues in uncooked muscle tissues of cattle - do; Use: As implant in cattle - 522.2476

Trenbolone Acetate & Estradiol - VET, REG, Use: As an implant in feedlot cattle (steers) - 522.2477; As residues in cattle - See 556.739 (Trenbolone Acetate) and 556.240 (Estradiol)

Triacetin (glyceryl triacetate or 1,2,3-propanetriol triacetate) - MISC, GRAS, GMP - 184.1901

Tricalcium phosphate - MISC/DS, GRAS/FS, < 2% by wt -Vanilla Powder 169.179; Cereal Prods - Part 137

Tricalcium silicate - AC, GRAS, GMP, 2% - In table salt -182.2906

Trichloroethylene - SOLV, REG, 25 ppm (0.0025%) -Decaffeinated ground coffee - 173.290; 10 ppm (0.001%) -Decaffeinated soluble (instant) coffee extract - 173.290; 30 ppm (0.003%) provided that if residues of other chlorinated solvents are also present, total residues in spice oleoresins < 30 ppm (0.003%) - Spice oleoresins - 173.290

Trichloroisocyanuric acid - SANI, REG, < 100 ppm avail halogen - Followed by adequate drainage - 178.1010

Trichloromelamine - SANI, REG, GMP, See REG -Followed adequate drainage - 178.1010

Triethanolamine - MISC, REG, < 2 ppm in flume water -Used in flume water for washing sugar beets prior to slicing operation - 173.315

Triethyl citrate - MISC, GRAS, 0.25% - In dried egg whites -182.1911

Triethylenetetramine cross-linked with epichlorohydrin - REG, Comp of ion-exchange resins - 173.25

Triflouromethane sulfonic acid - CATALYST, REG, < 0.2% of the reaction mixture to catalyze the directed esterification, <0.2 ppm fluoride as residue in product - In prod of cocoa butter substitute - 173.395

Trifluoromethane sulfonic acid -MISC, REG -173.395

2,4,5-Trihydroxybutyrophenone (THBP) - AOX, REG, < 0.02% of fat or oil - Total antioxidants, in foods except standardized foods which do not list for such use - 172.190

Trimethylamine - MISC, REG - 173.20

Trisodium nitrilotriacetate - BC, REG, < 5 ppm in boiler feedwater - Not for steam contacting milk or milk prods -173.310

Trisodium phosphate - EMUL, GRAS/FS, < 3% by weight of cheese - Cheese - Part 133; MISC, FS, Art Sw Fruit Jellies, Pres, and Jams - 150.141, 150.161

Triticum (see dog grass) - ESO, GRAS - 182.20

Tryptophan (L-form only) - NUTR/DS, REG - l72.320

Tuberose - ESO, GRAS - 182.20

Turmeric - SP/ESO, GRAS, Not permitted in standardized mayonnaise (169.140) & salad dressing (169.150) - 182.20

Tunu - MISC, REG, Comp of chewing gum base - 172.615

Turpentine - FL/ADJ, REG, GMP, In conjunction w/flavors -172.510

Tylosin - FEED/VET, REG, 0.05 ppm - Residue in milk -556.740; 0.2 ppm - Residue in edible tissues of poultry, cattle & swine - do; Residues in eggs - do; Use: Drinking water - 520.2640;As Injection - 522.2640; For cattle, chicken, & swine feed uses see: 558.55; 558.58; 558.274; 558.625; 558.630; 558.680

Tylosin & Sulfamethazine - FEED, REG, 0.2 ppm - Use in swine feeds - 558.630; Residues (Tylosin) in edible tissue of swine - 556.740; 0.1 ppm - Residues (Sulfamethazine) in edible tissues of swine - 556.740

Tyrosine (L-form only) - NUTR/DS, REG - 172.320

U

Urea - GRAS, GMP, As formulation/fermentation aid in yeast -raised bakery prods, alc bevs, and gelatin prods -184.1923

Urease enzyme from Lactobacillius fermentum - MISC, GRAS, To inhibit urethane formation in wine - 184.1924

V

Valerian rhizome & roots - FL/ADJ, REG, GMP, In conjunction w/flavors - 172.510

Valeric acid - MISC, REG, < 1% aliphatic acids - In lye peeling soln for fruits & vegs - 173.315

Valine (L-form only) - NUTR/DS, REG - 172.320

Vanilla - FLAV, GRAS/FS Cacao Prods - Part 163; Food Flavorings - Part 169; SP/ESO, GRAS - 182. 10, 182.20

Vanillin - SYN/FL, GRAS/FS - Cacao Prods - Part 163; Food Flavorings - Part 169; GRAS - 182.60; Migr to food from paper and paperboard prods - 182.90

Vegetable oils, brominated - FL/ADJ, INTERIM/REG, < 15 ppm - In fruit flavored bevs where not prohibited by Standards - 180.30

Veronica - FL/ADJ, REG, GMP, In alc bevs only - 172.510

Vervain, European - FL/ADJ, REG, GMP, In alc bevs only -172.510

Verxite flakes - FEED, REG, < 1% - Anticaking or blending agent in ruminant feeds - 573.1000

Verxite granules (Exfoliated hydrobiotite) - FEED, REG, < 5% - Nonnutritive bulking agent in poultry feed -573.1000; Anticaking, blending agent, pelleting aid, or non-nutritive carrier of nutrients in poultry, swine, & ruminant feed - do; < 1.5% - Anticaking, blending agent, etc. in dog food - 573.1000

Verxite grits - FEED, REG, < 1% - Partial roughage replacement in ruminant feeds - 573.1000

Vetiver - FL/ADJ, REG, GMP, In alc bevs only - 172.510

Vinyl acetate - MISC, REG, Modifier for food starch -172.892

Vinyl chloride-vinylidene chloride copolymer - CTG, REG, GMP, Comp of ctg on fresh citrus fruits - 172.210

Violet flowers & leaves - ESO, GRAS - 182.20

Violet leaves absolute - ESO, GRAS - 182.20

Violet, Swiss - FL/ADJ, REG, GMP, In conjunction w/flavors - 172.510

Virginiamycin - FEED, REG, 0.4 ppm - Residue in edible tissues, kidney, skin, & fat of swine - 556.750; 0.3 ppm -Residue in swine liver - 556.750; 0.1ppm - Residue in swine muscle - 556.750; Use in swin & chicken feeds - 558.635

Vitamin A - NUTR/DS, GRAS, GMP - 182.5930, 184.1930; GRAS/FS, Milk and Cream - Part 131; Cheeses and Rel Cheese Prods - Part 133; Mellorine - 135.130; Margarine

Vitamin A acetate - NUTR/DS, GRAS, GMP - 182.5933, 184.1930

Vitamin A palmitate - NUTR/DS, GRAS, GMP - 182.5936, 184.1930

Vitamin B - NUTR/DS, GRAS

Vitamin B12 - NUTR/DS, GRAS, GMP - 182.5945, 184.1945

Vitamin C - See Ascorbic Acid

Vitamin D - NUTR/DS, GRAS, Nutrient supplement -182.5950, 182.5953, 184.1950; > 350 IU/100 g, Cereal Prods - Part 137; 90 IU/100g, Macaroni and Noodle Prods -Part 139; 42 IU/100g, Milk - Part 131; 89 IU/100g - Milk prods

Vitamin D2 - NUTR, REG, Crystalline vitamin D2 as a nutrient supplement at levels not to exceed 50 International Units (IU) per 100 grams (g) of soy beverages, 89 IU per 100 g of soy beverage products, 330 IU per 100 g of soy-based butter substitute spreads, and 270 IU per 100 g of soy-based cheese substitutes and soy-based cheese substitute products.-172.379

Vitamin D3 - NUTR, REG, Nutrient supplement in calcium-fortified fruit juices and fruit juice drinks at levels not to exceed 100 IU per 240 mL, special dietary soy-protein based meal replacement beverages at = 140 IU per 240mL, special dietary meal replacement bars or other type bars at = 100 IU per 40g, cheese and cheese products at = 81 IU per 30g, excluding cottage cheese, ricotta cheese, and hard grating cheeses . - 172.380

Volatile Fatty Acids: Isobutyric Acid, Isovaleric Acid, methylbutyric Acid, m-Valeric Acid (As calcium or ammonium salts) - ADD, REG, 48-54% as ammonia salts - Use in dairy cattle feeds as source of energy - 573.914; 58-72% as calcium salts

W

Walnut husks, leaves & green nuts - FL/ADJ, REG, GMP, In conjunction w/flavors - 172.510

Wax, paraffin (Fischer-Tropsch) - MISC, REG, GMP, Comp of chewing gum base - 172.615

Wax, paraffin - CTG, FS, Surface ctg for certain cheeses -Part 133

Wheat Starch - GRAS, Migr from cotton and cotton fabrics used in dry food pkg - 182.70

Wheat gluten, vital - GRAS, GMP - 184.1322

Whey, fermented, ammoniated, condensed - FA, REG, > 30% of dietary crude protein -

Source of protein & non-protein nitrogen for cattle - 573.450

Whey, reduced lactose whey, reduced minerals whey, whey protein concentrate -GRAS -184.1979, 184.1979a-c; GRAS/FS, Froz Desserts - Part 135

White Mineral Oil - See Mineral Oil, White - 172.878

Whole fish protein concentrate - DS, REG, See REG, < 20 g/ day when consumed regularly by children up to 8 yrs of age - For household use only - package size < 1 lb net wt - 172.385; < 8 ppm total fluoride content of finished food - When used in manufactured food - 172.385

Wild Cherry bark - ESO, GRAS - 182.20

Wood rosin - CTG, REG, GMP, X-ref wi Rosin, wood, For fresh citrus fruits - 172.210

Woodruff, sweet - FL/ADJ, REG, GMP, In alc bevs only -172.510

X

Xanthan gum - EMUL, REG, GMP, In foods which standards do not preclude use - 172.695; FS, Food Dress - Part 169; Cheeses and Rel Cheese Prods - Part 133; 0.25% max use level liquid feeds for ruminants - In animal feeds (stabilizer, thickener, suspending agent) - 573.1010; 0.1% in calf milk replacer (as fed)

Xylitol - MISC, REG, Amt used is not > that required to produce its intended effect - May be safely used in foods for special dietary uses - 172.395

Y

Yarrow - FL/ADJ, REG, GMP, In bevs only, finished bevs Thujone free - 172.510

Yeast (Bakers, Saccharomyces cerevisiae) - FS, Egg Prods - Part 160

Yeast, dried - DS, REG - In food provided total folic acid content < 0.04 mg/g of yeast - 172.896; NUTR, GRAS/FS, < 1.5% by wt of finished food - Enriched Corn Grits, Enriched Corn Meal - 137.235, 137.260; Macaroni and Noodle Prods - Part 139

Yeast, dried, inactive - FLAV, REG/FS, < 0.25 parts for each 100 parts by weight of flour used - Bakery Prods - Part 136; Macaroni and Noodle Prods - Part 139; DS, REG - See Yeast, dried - 172.896

Yeast, dried, irradiated - NUTR, GRAS/DS, Enriched Farina as source of Vitamin D - 137.305

Yeast extract (Bakers) - FL/ADJ, GRAS, < 5% in food, See Specs - 184.1983

Yeast, malt sprout extract - FL/ADJ, REG, GMP, As a flavor enhancer - 172.590

Yeast, torula, dried - DS, REG, GMP - In food provided total folic acid content < 0.04 mg/g of yeast - 172.896; X-Ref wi Torula Yeast

Yellow prussiate of soda (sodium ferrocyanide decahydrate) - See Prussiate of Soda, Yellow

Yerba santa - FL/ADJ, REG, GMP, In conjunction w/flavors -172.510

Ylang-ylang - ESO, GRAS - 182.20

Yucca, Joshua-tree - FL/ADJ, REG, GMP, In conjunction w/flavors - 172.510

Yucca, Mohave - FL/ADJ, REG, GMP, In conjunction w/flavors - 172.510

Z

Zein, powder - GRAS, GMP - 184.1984

Zedoary - SP, GRAS - 182.10

Zedoary bark - ESO, GRAS - 182.20

Zeranol (Zearalanol) -VET, REG, ZERO - Residues in uncooked edible tissues of sheep - 556.760; 150 ppb - As residues in uncooked edible muscle tissue of cattle -556.760; 300 ppb - As residues in uncooked liver of cattle do; 450 ppb - As residues in uncooked kidney of cattle - do; 600 ppb - As residues in uncooked fat of cattle - do; Use as implant - 522.2680

Zinc (acetate, carbonate, chloride, oxide, sulfate) NUTR, GRAS, As nutritional dietary supplement in animal feed - 582.80

Zinc bacitracin - FEED, REG, See Bacitracin

Zinc chloride - NUTR/DS, GRAS, GMP - 182.5985, 182.8985

Zinc gluconate - NUTR/DS, GRAS, GMP - 182.5988, 182.8988

Zinc methionine sulfate - NUTR, REG, Tablets - See 172.399 for specs

Zinc oxide - NUTR/DS, GRAS, GMP - 182.5991, 182.8991

Zinc stearate - NUTR/DS, GRAS, GMP, Free from chick edema factor - 182.5994, 182.8994

Zinc sulfate - NUTR/DS, GRAS, GMP - 182.5997, 182.8997; GRAS, Migr to food from paper and paperboard prods - 182.90

Zoalene - FEED, REG, 2 ppm - Residues in uncooked fat of chickens - 556.770; 3 ppm - Residues in uncooked muscle meat of chickens - do; 3 ppm - Residues in uncooked muscle meat & liver of turkeys - do; 6 ppm - Residues in uncooked liver & kidneys of chickens - do; Use in chicken & turkey feeds - 558.60; 558.62; 558.78; 558.128; 558.248; 558.274; 558.450; 558.530; 558.680

Color Additive Status List