901:3-31-07 Approval of substances for use in the preparation of product.

(A) No chemical substance may be used in the preparation of any product unless it is approved in this part or by regulation 901:3-31-06 and 901:3-31-11 *or by the director in specific cases.*

(1) No product shall bear or contain any substance which would render it adulterated or which is not approved in regula-tion 901:3-31-06, 901:3-31-11 *or by the director in specific cases.*

(2) The substance specified in the following charts are acceptable for use in the preparation of products, provided they are used for the purposes indicated, within the limits of the amounts stated and under other conditions specified in this regulation and regulations 901:3-31-02 through 901:3-31-04. In addition to the substances listed in the following chart, regulations 901:3-31-06 and 901:3-31-11 specify other substances that are acceptable in preparing specified products.

Class of substance	Substance	Purpose	Products	Amount
Anticoagulants	Citric acid Sodium citrate	To prevent clotting	Fresh beef blood	0.2 percent--with or without water. When water is used to make a solution of citric acid or sodium citrate added to beef blood not more than 2 parts of water to 1 part of citric acid or sodium citrate shall be used.
Antifoaming Agent	Methyl polysili-cone	To retard foaming	Soups	10 parts per million
			Rendered fats	do.
			Curing pickle	50 parts per million.
Antioxidants and oxygen interceptors	BHA (butylated hydroxyanisole)	To retard rancidity	Dry sausage, 0.003 per cent based on total weight	]]0.006 percent]in nation [*sic*].
	BHT (butylated hydroxytoluene)	do	do, do	]]
	Propyl gallate	do	do, do	]
	BHA (butylated hydroxyanisole).	do	Rendered animal fat or a combination of such fat and vegetable fat.	0.01 percent))))))
	BHT (butylated	do	do, do	)

hydroxytoluene)				)0.02 percent in)combination.
Glycine.	do	do	do	)
Propyl gallate.	do	do	do	)
Resin fuaiac.	do	do	do	)

Tocopherols.	do	do		0.03 percent. A 30 percent concentration of tocopherols in vegetable oils shall be used when added as an antioxidant to products designated as “lard” or “rendered pork fat.”
BHA (butylated	do	Fresh pork	0.01 percent]	]0.02 percent

	hydroxyanisole)		sausage, brown and serve sausage, pre-grilled beef patties, and fresh sausage made from beef or beef and pork	based on fat] content	]combination]based on]fat content]]
	BHT (butylated hydroxytoluene)	do	do	do	]]
	Propyl gallate	do	do	do	]
	BHA (butylated hydroxytoluene	do	Dried meats	0.01 per cent based on total weight	]]0.01 percent in]combination
	BHT (butylated hydroxytoluene)	do	do	do	]]
	Propyl gallate	do	do	do	]
Binders	Algin	To extend and stabi-lize product	Breading mix; sauces		Sufficient for purpose
	Carrageonan	do	do		do
	Carboxymethyl cullulose (cellulose gum)	do	Baked pies		do
	Gums, vegetable	do	Egg roll		do
	Methyl cellulose	To extend and to stabilize product (also carrier)	Meat and vegeta-ble patties		0.15 per cent
	Isolated soy pro-tein	To bind and extend product	Sausage, as pro-vided for in Part 319 of this sub-chapter.		2. per cent
			Imitation sausage; nonspecific loaves; soups; stews.		Sufficient for purpose
	Sodium caseinate	do	do		do
	Whey (dried)	do	do		do

Bleaching agent	Hydrogen peroxide	To remove color	Tripe (substance must be removed from product by rinsing with clear water).	do
Catalysts (substances must be eliminated during process)	Nickel	To accelerate chemi-cal reaction	Rendered animal fats or a combina-tion of such fats and vegetable fats	do
	sodium amide	Rearrangement of fatty acid radicals	do	do
	Sodium methoxide	do	do	do
Coloring agents (natural)	Alkanet, annatto, carotene, cochi-neal, green chloro-phyl, saffron and tumeric [*sic*]	To color casings or rendered fats; mark-ing and branding product.	Sausage casings, oleomargarine shortening, mark-ing or branding ink on product.	Sufficient for purpose (may be mixed with approved artificial dyes or harm-less inert material such as common salt and sugar).
Coloring agents (arti-ficial)	Coal tar dyes ap-proved under the Federal Food, Drug, and Cos-metic Act (Opera-tor must furnish evidence to officer in charge that dye has been certified for use in connec-tion with foods by the Food and Drug Administration).	do	do	Sufficient for purpose (may be mixed with approved natural coloring matters or harmless inert material such as common salt or sugar).
	Titanium dioxide	do	Canned ham salad spread and creamed type canned products.	0.5 percent
Cooling and retort water treatment agents	Calcium	To prevent staining on exterior of canned goods	Any.	Sufficient for purpose
	Citric acid	do	do	do
	Dioctyl sodium sulfosuccinate	do	do	0.05 percent
	Disodium calcium ethylenediamine-tetraacetate	do	do	Sufficient for purpose

Disodium ethyl-enediamine-tetraacetate	do	do	do

Disodium phos-phate	do	do	do

Ethylenediamine-tetraacetic acid	do	do	do
Isopropanol	do	do	0.002 percent
Potassium pyro-phosphate	do	do	Sufficient for purpose
Propylene glycol	do	do	do
Sodium bicarbon-ate	do	do	do
Sodium carbonate	do	do	do
Sodium dodecyl-benzene sulfonate	do	do	0.05 percent
Sodium gluconate	do	do	Sufficient for purpose
Sodium hexameta-phosphate	do	do	do
Sodium lauryl-sulfate	do	do	0.05 percent
Sodium metasili-cate	do	do	Sufficient for purpose
Sodium n-alkylbenzene sul-fonate (alkyl group predominantly C12 and C13 and not less than 95 per-cent C10 to C16).	do	do	0.05 percent
Sodium bisulfate	To inhibit corrosion on exterior of canned goods	do	0.001 percent
Sodium nitrite (The dry nitrite must be decharac-terized with 0.05 percent powdered charcoal or 0.03 percent nigrosine. Bulk decharacter-ized sodium nitrite when in cook room shall be held in a locked container conspicuously la-beled “Decharac-terized Sodium Nitrite--to be used by authorized per-sonnel only.”)	do	do	600 parts per million

	Sodium pyrophos-phate	To prevent staining on canned goods.	do	0.05 percent
	Sodium tripoly-phosphate	do	do	do
	Zinc oxide	do	do	0.01 percent
	Zinc sulfate	do	do	do
Curing accelerators; must be used only in combination with curing agents	Sodium acid pyro-phosphate.	To accelerate color fixing	Frankfurters, wie-ners, vienna, bolo-gna, garlic bolo-gna, knockwurst, and similar prod-ucts.	Not to exceed, alone or in combination with other curing accelerators, the fol-lowing: 3 ozs. in 100 lbs. of the meat or meat and meat byproducts, content of the formula; nor 0.5 percent in the fin-ished product.
Curing agents	Ascorbic acid	To accelerate color fixing or preserve color during storage.	Cured pork and beef cuts, cured comminuted meat food product.	75 ozs to 100 gals. pickle at 10 percent pump level; 3/4 oz to 100 lbs. meat or meat byproduct; 10 percent solution to surfaces of cured cuts prior to packag-ing (the use of such solution shall not result in the addition of a signigicant [*sic*] amount of moisture to the prod-uct).
	Erythorbic acid	do	do	do
	Glucono delta lac-tone	To accelerate color fixing	Cured, commin-uted meat or meat food product.	8 ozs. to each 100 lbs. of meat or meat byproduct
			Genoa salami	16 ozs. to 100 lbs. of meat (1.0 per-cent).
	Sodium ascorbate	To accelerate color fixing or preserve color during storage.	Cured pork and beef cuts, cured comminuted meat food product.	87.5 ozs. to 100 gals. pickle at 10 per-cent pump level; 7/8 ozs. to 100 lbs. meat or meat byproduct; 10 percent solution to surfaces of cured cuts prior to packaging (the use of such solution shall not result in the addition of a sig-nificant amount of

			moisture to the product).
Sodium erythor-bate	do	do	do
Citric acid or so-dium citrate	do	do	May be used in cured products or in 10 percent solution used to spray surfaces of cured cuts prior to packaging to re-place up to 50 percent of the ascorbic acid, erythorbic acid, sodium ascorbate or sodium erythorbate that is used.
Sodium or potas-sium nitrate.	Source of nitrate	Cured products	7 lbs. to 100 gals. pickle; 3 1/2 ozs. to 100 lbs. meat (dry cure); 2 3/4 ozs. to 100 lbs. chopped meat.

Sodium or potas-sium nitrite (sup-plies of sodium nitrite and potas-sium nitrite and mixtures contain-ing them must be kept securely un-der the care of a responsible em-ployee of the es-tablishment. The specific nitrite content of such supplies must be known and clearly marked accord-ingly).	To fix color	do	2 lbs. to 100 gals. pickle at 10 percent pump level; 1 oz. to 100 lbs. meat (dry cure); 1/4 oz. to 100 lbs. chopped meat and/or meat byproduct. The use of nitrites, nitrates, or combination shall not result in more than 200 parts per million calculated as sodium nitrite, in finished product.

Denuding agents; may be used in com-bination Must be removed from tripe by rinsing with safe water.	Lime (calcium oxide, calcium hydroxide).	To denude mucous membrane	Tripe.	Sufficient for purpose.
	Sodium carbonate	do	do	do
	Sodium gluconate	do	do	do
	Sodium hydroxide	do	do	do
	Sodium metasili-cate	do	do	do
	Sodium persulfate	do	do	do
	Trisodium phos-phate	do	do	do
Emulsifying agents	Acetylated mono-glycerides	To emulsify product	Shortening	do
	Diacetyl tartaric acid esters of mono and digyl-cerides [*sic.*]	do	Rendered animal fat or a combina-tion of such fat with vegetable fat.	do
	Glycerol-lacto stearate, oleate, or palmitate	do	do	do
	Lecithin	To emulsify product (also as antioxidant).	Oleomargrine, shortening.	do
	Mono and diglyc-erides (glycerol palmitate, etc.)	To emulsify product	Rendered animal fat or a combina-tion of such fat with vegetable fat.	Sufficient for purpose in lard and shortening; 0.5 percent in oleomarga-rine

Polyglycerol esters of fatty acids (po-lyglycerol esters of fatty acids are re-stricted to those up to and including the decaglycerol esters and other-wise meeting the requirements of §121.1120(a) of the Food Additive Regulations).	do	Rendered animal fat or a combina-tion of such fat with vegetable fat when used is not precluded by stan-dards of identity or composition	Sufficient for purpose

	Polysorbate 80 (polyoxyethylene (20) sorbitan monooleate.)	do	Shortening for use in nonstandardized baked goods bak-ing mixes. icings, filings, and top-pings and in the frying of foods.	1 percent when used alone. If used with polysorbate 60 the combined total shall not exceed 1 percent.
	Propylene glycol mono and diesters of fats and fatty acids	do	Rendered animal fat or a combina-tion of such fat with vegetable fat.	Sufficient for purpose.
	Polysorbate 60 (polyoxyethylene (20) sorbitan monostearate).	do	Shortening for use in nonstandardized baked goods, bak-ing mixes, icings, fillings, and top-pings and in the frying of foods.	1 percent when used alone If used with polysorbate 80 the combined total shall not exceed 1 percent.
	Stearyl-2-lactylic acid.	do	Shortening to be used for cake ic-ings and fillings.	3.0 percent
	Stearyl monoglyc-eridyl citrate	do	Shortening	Sufficient for purpose
Flavoring agents; protectors and devel-opers	Program approved artificial smoke flavoring.	To flavor product.	Various.	do
	Program approved smoke flavoring.	do	do	do
	Autolyzed yeast extract.	do	do	do
	Harmless bacteria starters of the aci-dophilus type, lac-tic acid starter or culture of Pedic-coccus cere visiae.	To develop flavor,	Dry sausage, pork roll, thuringer, lebanon bologna, cervelat, and sa-lami.	0.5 percent.
	Benzoic acid, so-dium benzoate	To retard flavor re-version	Oleomargarine.	0.1 percent
	Citric acid	To protect flavor.	do	Sufficient for purpose.
		Flavoring.	Chili con carne.	Sufficient for purpose.
	Corn syrup solids, corn syrup, glu-cose syrup.	To flavor	Chili con carne, sausage, ham-burger, meat loaf, luncheon meat, chopped or pressed ham.	2.0 percent individually or collectively, calculated on a dry basis.

Dextrose.	To flavor product	Sausage, ham and cured products.	Sufficient for purpose
Diacetyl	do	Oleomargarine	do
Disodium guanylate	do	Various	do
Disodium inosi-nate	do	do	do
Hydrolyzed plant protein.	do	do	do
Isopropyl citrate.	To protect flavor	Oleomargarine.	0.02 percent
Malt syrup	To flavor product	Cured products	2.5 percent
Milk protein hydrolysate.	do	Various.	Sufficient for purpose.
Monosodium glu-tamate	do	do	do
Sodium sulfoace-tate derivative of mono and diglyc-erides.	do	do	0.5 percent
Sodium Sodium [*sic*] tripoly-phosphate	To help protect flavor	"Fresh Beef" "Beef for Further Cooking." "Cooked Beef," and similar prod-ucts which are frozen after processing.	do
Mixtures of so-dium tripolyphos-phate and sodium hexameta-phosphate	do	do	do
Sorbitol	To flavor, to facilitate the removal of casings from product and to reduce caramelization and char-ring.	Cooked sausage labeled frankfurter, frank, furter, wie-ner, knockwurst	Not more than 2 percent of the weight of the formula excluding the formula weight of water or ice; not permitted in combination with corn syrup, and/or corn syrup solids.
Starter distillate	do	Oleomargarine	Sufficient for purpose.
Stearyl citrate	To protect flavor	do	0.15 percent.
Sugars (sucrose and dextrose).	To flavor product.	Various.	Sufficient for purpose

Gases	Carbon dioxide solid (dry ice).	To cool product	Chopping of meat, packaging of prod-uct.	do
	Nitrogen	To exclude oxygen	Sealed container	do
Hog scald agents; must be removed by subsequent cleaning operations.	Caustic soda	To remove hair	Hog carcasses	do
	Dioctyl sodium sulfosuccinate	do	do	do
	Lime	do	do	do
	Methyl poly-silicone	do	do	do
	Sodium carbonate	do	do	do
	Sodium dodecyl-benzene sulfonate	do	do	do
	Sodium hexameta-phosphate	do	do	do
	Sodium lauryl sul-fate.	do	do	do
	Sodium metasili-cate	do	do	do
	Sodium n-alkylbenzene sul-fonate (alkyl group predominantly C12 and C13 and not less than 95 per-cent C10 to C16).	do	do	do
	Sodium sulfate	do	do	do
	Sodium tripoly-phosphate	do	do	do
	Sucrose.	do	do	do
	Trisodium phos-phate	do	do	do
Miscellaneous	Potassium sorbate	To retard mold growth	Dry sausage	2.5 percent in water solution may be applied to casings after stuffing or cas-ings may be dipped in solution prior to stuffing.

		To preserve product and to retard mold growth.	Oleomargarine or margarine	0.1 percent by weight of the fin-ished oleomarga-rine or margarine.
	Calcium disodium, EDTA (calcium disodium ethylene-diaminetetraace-tate).	To preserve product and to protect flavor.	do	75 parts per million by weight of the finished oleomargarine or margarine.
	Propylparaben (propyl p-hydrosy bensoate).	To retard mold growth	Dry sausage	3.5 percent in water solution may be applied to casings after stuffing or cas-ings may be dipped in solution prior to stuffing.
	Sodium bicarbon-ate	To neutralize excess acidity, cleaning vegetables.	Rendered fats, soups, curing pickle.	Sufficient for purpose.
	Calcium propionate	To retard mold growth	Pizza crust.	]0.32 percent alone or in]combination based on]weight of the flour used.
	Sodium propionate	do	do	]
	Sodium hydroxide	To decrease amount of cooked out juices.	Cured hams, pork shoulder picnics and loins, canned hams and pork shoulder picnics, and products cov-ered by §319.104(d); chopped ham and bacon.	May be used only in combination with phosphates in ratio of four parts phos-phate to one part sodium hydroxide; the combination shall not exceed 5 percent in pickle at 10 percent pump level; 0.5 percent in product.
Phosphates.	Disodium phos-phate	do	do	5 percent of phosphate in pickle at 10 percent pump level; 0.5 percent of phosphate in product (on clear solution may be injected into product).
	Monosodium phosphate	do	do	do

	Sodium hexameta-phosphate	do	do	do
	Sodium tripoly-phosphate	do	do	do
	Sodium pyro-phosphate	do	do	do
	Sodium acid pyro-phosphate	do	do	do
Proteolytic enzymes	Aspergillus oryzae	To soften tissue	Beef cuts	Solutions consisting of water, salt, monosodium glutamate, and approved proteolytic enzymes applied or injected into cuts of beef shall not result in a gain of more than 3 percent above the weight of the untreated product.

Aspergillus flavus oryzae group	do	do	do
Bromelin	do	do	do

	Ficin	do	do	do
	Papain	do	do	do
Refining agents (must be eliminated during process of manufacturing).	Acetic acid	To separate fatty acids and glycerol	Rendered fats	Sufficient for purpose
	Bicarbonate of soda	do	do	do
	Carbon (purified charcoal).	To aid in refining of animal fats	do	do
	Caustic soda (so-dium hydroxide).	To refine fats	do	do
	Diatomaceous earth; Fuller's earth.	do	do	do
	Sodium carbonate	do	do	do
	Tannic acid	do	do	do
Rendering agents	Tricalcium phos-phate	To aid rendering	Animal fats	do
	Trisodium phos-phate	do	do	do
Artificial sweeteners	Saccharin	To sweeten product.	Bacon	0.01 per cent
Synergists (used in combination with anti-oxidants).	Citric acid	To increase effec-tiveness of antioxi-dants	Lard and shorten-ing	0.01 percent alone or in combination with anti-oxidants in lard or shortening.
			Dry sausage.	0.003 percent in dry sausage in combi-nation with antioxidants.
			Fresh pork sausage	0.01 percent on basis of fat content, in combination with antioxidants.
			Dried meats.	0.01 percent on basis of total weight in combination with antioxidants.
	Malic acid	do	Lard and shorten-ing	do
	Monoisopropyl citrate	To increase effec-tiveness of antioxi-dants	Lard, shortening, oleomargarine, fresh pork sausage, dried meats.	0.02 percent
	Phosphoric acid	do	Lard and shorten-ing.	0.01 percent

Monoglyceride citrate	do	Lard, shortening, fresh pork sausage, dried meats.	0.02 percent

(B) No substance may be used in or on any product if it conceals damage or inferiority or makes the product appear to be better or of greater value than it is. Therefore:

(1) Paprika or oleoresin paprika may not be used in or on fresh meat, such as steaks, or comminuted fresh meat food products, such as chopped and formed steaks or patties; or in any other meat food products consisting of fresh meat (with or without seasoning), except chorizo sausage and Italian brand sausage, and except other meat food products in which paprika or oleoresin paprika is permitted as an ingredient in a standard of identity or composition in regulation no. 901:3-31-11

(2) Sorbic acid, calcium sorbate, sodium sorbate, and other sorbate salts or sorbic acid may not be used in cooked sau-sage or any other product; sulfurous acid and salts of sulfurous acid may not be used in or on any product and niacin or nicotinamide may not be used in or on fresh product, except that potassium sorbate, propylparaben (propyl p-hydroxy-benzoate), calcium propionate, sodium propionate, benzoic acid, and sodium benzoate may be used in or on any product only as provided in the chart in Part (A)(2) of this regulation *or as approved by the director in specific cases.*

(C) Samples of products, water, dyes, chemicals, etc., to be taken for examination:

Samples of products, water, dyes, chemicals, preservatives, spices, or other articles in establishment shall be taken, without cost to the department, for examination, as often as may be deemed necessary for the efficient conduct of the inspection.

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CERTIFIED ELECTRONICALLY

Certification

06/11/2010

Date

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