

ANNEX 2

**Substances proposed for inclusion in the Codex List of Acceptable Previous Cargoes
(Recommended International Code of Practice for the Storage and Transport of Edible Fats and Oils in Bulk - Appendix 2)**

Substance (synonyms)	CAS Number	NIOP ¹	NIOP Int. ²	FOSFA Int. ³	FOSFA ⁴	SCF ⁵
Acetic acid (ethanoic acid; vinegar acid; methane carboxylic acid)	64-19-7	√	√	√	√	√
Acetic anhydride (ethanoic anhydride)	108-24-7	√	√	√	√	√
Acetone (dimethylketone; 2-propanone)	67-64-1	√	√	√	√	√
Acid oils and fatty acid distillates - from animal, marine and vegetable fats and oils		X	X	√	√	√
Alcohol (C14-C16)	68333-80-2	X	√	X	X	X
Almond oil	8007-69-0	√	√	G	G	G
Ammonium hydroxide (ammonium hydrate; ammonia solution; aqua ammonia)	1336-21-6	√	√	√	√	√
Ammonium polyphosphate	68333-79-9	√	√	√	√	√
Anchovy oil		√	√	G	G	G
Animal, marine and vegetable oils and fats (including hydrogenated oils and fats) - other than cashew shell nut oil and tall oil		X	X	√	√	√
Apple juice concentrate		√	√	G	G	X
Apricot kernel oil		√	√	G	G	G
Avocado oil		√	√	G	G	G
Babassu oil		√	√	G	G	G
Beechnut oil		√	√	G	G	G
Beeswax – white	8006-40-4	√	√	√	√	√
Beeswax - yellow	8012-89-3	√	√	√	√	√
Benzyl alcohol (pharmaceutical and reagent grades)	100-51-6	√	√	√	√	√
Beverages - alcoholic		√	√	√	√	X
Beverages - non-alcoholic		X	X	√	√	X
1,3-Butanediol (1,3-butylene glycol)	107-88-0	√	√	√	√	√

¹ NIOP Acceptable Prior Cargo Lists 1 and 2 (√ = included, X = not included, G = included as group entry)

² NIOP version of the Joint FOSFA/NIOP International List of Acceptable Previous Cargoes (√ = included, X = not included, G = included as group)

³ FOSFA version of the Joint FOSFA/NIOP International List of Acceptable Previous Cargoes (√ = included, X = not included, G = included as group entry)

⁴ FOSFA International List of Acceptable Previous Cargoes (giving synonyms and alternative chemical names) – effective 1 July 1999 (√ = included, X = not included, G = included as group entry)

⁵ European Commission's Scientific Committee for Food List of acceptable previous cargoes (√ = included, X = not included, G = included as group entry)

Substance (synonyms)	CAS Number	NIOP ¹	NIOP Int. ²	FOSFA Int. ³	FOSFA ⁴	SCF ⁵
1,4-Butanediol (1,4-butylene glycol)	110-63-4	√	√	√	√	√
2,3-Butanediol (2,3-butylene glycol)	513-85-9	√	√	√	√	X
Butyl acetate, n-	123-86-4	√	√	√	√	√
Butyl acetate, sec-	105-46-4	√	√	√	√	√
Butyl acetate, tert-	540-88-5	√	√	√	√	√
Calcium ammonium nitrate solution	6484-52-2	√	√	√	√	X
Calcium chloride solution	10043-52-4	√	√	√	√	√
Calcium lignosulphonate liquid (lignin liquor; sulphite lye)	8061-52-7	√	√	√	√	√
Calcium nitrate (CN-9) solution	35054-52-5	√	√	√	√	X
Candelilla wax	8006-44-8	√	√	√	√	√
Canola oil (LEAR) ("Double zero")	120962-03-0	√	√	G	G	G
Carnauba wax (Brazil wax)	8015-86-9	√	√	√	√	√
Castor oil	8001-79-4	√	√	G	G	G
Cocoa butter	8002-31-1	√	√	G	G	G
Coconut acid oil		√	√	G	G	G
Coconut oil	8001-31-8	√	√	G	G	G
Coconut oil fatty acid methyl esters		√	√	G	X	X
Coconut oil fatty acids		√	√	G	G	G
Cod liver oil	68153-03-7	√	√	G	G	G
Cod oil	8001-69-2	√	√	G	G	G
Cohune oil		√	√	G	G	G
Corn oil (maize oil)	8001-30-7	√	√	G	G	G
Corn syrup	8029-43-4	√	√	X	X	X
Cottonseed acid oil		√	√	G	G	G
Cottonseed oil	8001-29-4	√	√	G	G	G
Cottonseed oil, fatty acids		√	√	G	G	G
Cyclohexane (hexamethylene; hexanaphthene; hexahydrobenzene)	110-82-7	√	√	√	√	√
Cyclohexanol (hexahydrophenol)	108-93-0	√	√	√	√	X
Cyclohexanone (pimelic ketone; ketoexamethylene)	108-94-1	√	√	√	√	X
Dairy products		√	√	√	√	X
Dextrose solution	50-99-7	√	√	X	√	X
Ethanol (ethyl alcohol; spirits)	64-17-5	√	√	√	√	√

Substance (synonyms)	CAS Number	NIOP ¹	NIOP Int. ²	FOSFA Int. ³	FOSFA ⁴	SCF ⁵
Ethyl acetate (acetic ether; acetic ester; vinegar naphtha)	141-78-6	√	√	√	√	√
2-Ethylhexanol (2-ethylhexy alcohol)	104-76-7	√	√	√	√	√
Fatty acids						
Arachidic acid (eicosanoic acid)	506-30-9	√	√	√	√	√
Behenic acid (docosanoic acid)	112-85-6	√	√	√	√	√
Butyric acid (n-butyric acid; butanoic acid; ethyl acetic acid; propyl forinic acid)	107-92-6	√	√	√	√	√
Capric acid (n-decanoic acid)	334-48-5	√	√	√	√	√
Caproic acid (n-hexanoic acid)	142-62-1	√	√	√	√	√
Caprylic acid (n-octanoic acid)	124-07-2	√	√	√	√	√
Erucic acid (cis-13-docosenoic acid)	112-86-7	√	√	√	√	√
Heptoic acid (n-heptanoic acid)	111-14-8	√	√	√	√	√
Lauric acid (n-dodecanoic acid)	143-07-7	√	√	√	√	√
Lauroleic acid (dodecenoic acid)	4998-71-4	√	√	√	√	√
Linoleic acid (9,12-octadecadienoic acid)	60-33-3	√	√	√	√	√
Linolenic acid (9,12,15-octadecatrienoic acid)	463-40-1	√	√	√	√	√
Myristic acid (n-tetradecanoic acid)	544-63-8	√	√	√	√	√
Myristoleic acid (n-tetradecenoic acid)	544-64-9	√	√	√	√	√
Oleic acid (n-octadecenoic acid)	112-80-1	√	√	√	√	√
Palmitic acid (n-hexadecanoic acid)	57-10-3	√	√	√	√	√
Palmitoleic acid (cis-9-hexadecenoic acid)	373-49-9	√	√	√	√	√
Pelargonic acid (n-nonanoic acid)	112-05-0	√	√	√	√	√
Ricinoleic acid (cis-12-hydroxy octadec-9-enoic acid; castor oil acid)	141-22-0	√	√	√	√	√
Stearic acid (n-octadecanoic acid)	57-11-4	√	√	√	√	√
Valeric acid (n-pentanoic acid; valerianic acid)	109-52-4	√	√	√	√	√
Fatty alcohols						
Butyl alcohol (1-butanol; butyric alcohol)	71-36-3	√	√	√	√	√
Iso butyl alcohol (isobutanol; isopropylcarbinol; 2-methyl-1-propanol)	78-83-1	√	√	√	√	X
Caproyl alcohol (1-hexanol; hexyl alcohol)	111-27-3	√	√	√	√	√
Capryl alcohol (1-n-octanol; heptyl carbinol)	111-87-5	√	√	√	√	√
Cetyl alcohol (alcohol C-16; 1-hexadecanol; cetylic alcohol; palmityl alcohol; n-prirnary hexadecyl alcohol)	36653-82-4	√	√	√	√	√

Substance (synonyms)	CAS Number	NIOP ¹	NIOP Int. ²	FOSFA Int. ³	FOSFA ⁴	SCF ⁵
Coconut oil fatty alcohols		√	√	√	X	X
Decyl alcohol (1-decanol)	112-30-1	√	√	√	√	√
Iso decyl alcohol (isodecanol)	25339-17-7	√	√	√	√	√
Enanthyl alcohol (1-heptanol; heptyl alcohol)	111-70-6	√	√	√	√	√
Lauryl alcohol (n-dodecanol; dodecyl alcohol)	112-53-8	√	√	√	√	√
Myristyl alcohol (1-tetradecanol; tetradecanol)	112-72-1	√	√	√	√	√
Nonyl alcohol (1-nonanol; pelargonic alcohol; octyl carbinol)	143-08-8	√	√	√	√	√
Iso nonyl alcohol (isononanol)	27458-94-2	√	√	√	√	√
Iso nonyl alcohol (C8-C10)	68526-84-1	X	√	X	X	X
Oleyl alcohol (octadecenol)	143-28-2	√	√	√	√	√
Palm oil fatty alcohols		√	√	√	X	X
Palm kernel fatty alcohols		√	√	√	X	X
Stearyl alcohol (1-octadecanol)	112-92-5	√	√	√	√	√
Tallow fatty alcohols		√	√	√	X	X
Tridecyl alcohol (I-tridecanol)	27458-92-0	√	√	√	√	√
<u>Fatty acid esters</u> – combination of above fatty acids and fatty alcohols		√		√	√	√
e.g. Butyl myristate	110-36-1	√	√	√	√	√
Cetyl stearate	110-63-2	√	√	√	√	√
Oleyl palmitate	2906-55-0	√	√	√	√	√
<u>Fatty acid methyl esters</u>		√		√	√	
e.g. Methyl laurate (methyl dodecanoate)	111-82-0	√	√	√	√	X
Methyl oleate (methyl octadecenoate)	112-62-9	√	√	√	√	X
Methyl palmitate (methyl hexadecanoate)	112-39-0	√	√	√	√	X
Methyl stearate (methyl octadecanoate)	112-61-8	√	√	√	√	X
<u>Fatty alcohol blends</u>						
Cetyl stearyl alcohol (C16-C18)	67762-27-0	√	√	√	√	√
Hexadeconal combination	36653-82-4	√	√	√	X	X
Lauryl myristyl alcohol (C12-C14)	[to be inserted]	√	√	√	√	√
Fish liver oil	8001-69-2	√	√	G	G	G
Fish oil		√	√	G	G	G
Formic acid (methanoic acid; hydrogen carboxylic acid)	64-18-6	√	√	√	√	√
Glucose syrup (corn syrup)		√	√	X	√	X

Substance (synonyms)	CAS Number	NIOP ¹	NIOP Int. ²	FOSFA Int. ³	FOSFA ⁴	SCF ⁵
Glycerine (glycerol, glycerin)	56-81-5	√	√	√	√	√
Grape juice concentrate		√	√	G	G	X
Grapeseed oil		√	√	G	G	G
Hazelnut oil		√	√	G	G	G
Heptane	142-82-5	√	√	√	√	√
Herring oil	68153-06-0	√	√	G	G	G
n-Hexane	110-54-3	√	√	√	√	√
Hexane (technical)	64742-49-0	√	√	√	X	√
Hydrogen peroxide		√	X	X	X	X
Illipe butter		√	√	G	G	G
Iso-butyl acetate	110-19-0	√	√	√	√	√
Iso-octyl alcohol (isooctanol)	26952-21-6	√	√	√	√	√
Iso-propyl alcohol (isopropanol; dimethyl carbinol; 2-propanol)	67-63-0	√	√	√	√	√
Kaolin slurry	1332-58-7	√	√	√	√	X
Lactic acid (limited)	598-82-3	√	√	√	X	X
Lard	61789-99-9	√	√	G	G	G
Limonene (dipentene)	138-86-3	√	√	√	√	√
Linseed oil	8001-26-1	√	√	G	G	G
Lycopersicum esculentum oil		√	√	G	G	G
Magnesium chloride solution	7786-30-3	√	√	√	√	√
Menhaden oil	8002-50-4	√	√	G	G	G
Methanol (methyl alcohol)	67-56-1	√	√	√	√	√
Methyl ethyl ketone (2-butanone; MEK)	78-93-3	√	√	√	√	√
Methyl isobutyl ketone (4-methyl-2-pentanone; iso propylacetone; MIBK)	108-10-1	√	√	√	√	√
Methyl tertiary butyl ether (MBTE)	1634-04-4	√	√	√	√	√
Molasses	57-50-1	√	√	√	√	√
Montan wax	8002-53-7	√	√	√	√	√
Murumuru fat		√	√	G	G	G
Mustard seed oil	8007-40-7	√	√	G	G	G
Nitric acid		√	X	X	X	X
Nonane	111-84-2	√	√	√	√	X
Nutmeg butter	8008-45-5	√	√	G	G	G

Substance (synonyms)	CAS Number	NIOP ¹	NIOP Int. ²	FOSFA Int. ³	FOSFA ⁴	SCF ⁵
Olive oil	8001-25-0	√	√	G	G	G
Orange juice slurry		√	√	X	X	X
Palm acid oil		√	√	G	G	G
Palm fatty acid distillate		√	√	G	G	G
Palm kernel fatty acid distillate		√	√	G	G	G
Palm kernel fatty acid methyl ester		√	√	G	X	X
Palm kernel fatty acids		√	√	G	G	G
Palm kernel oil	8023-79-8	√	√	G	G	G
Palm kernel olein		√	√	G	G	G
Palm kernel stearin		√	√	G	G	G
Palm oil		√	√	G	G	G
Palm oil fatty acids		√	√	G	G	G
Palm oil fatty acid methyl ester		√	√	G	X	X
Palm oil mid-fractions		√	√	G	G	G
Palm olein		√	√	G	G	G
Palm stearin		√	√	G	G	G
Peanut oil	8002-03-7	√	√	G	G	G
Pentane	109-66-0	√	√	√	√	√
Petroleum wax (parafin wax)	8002-74-2	√	√	√	√	√
Phosphoric acid (ortho phosphoric acid)	7664-38-2	√	√	√	√	√
Pilchard oil		√	√	G	G	G
Potable water – only acceptable where the immediate previous cargo is also on the list	7732-18-5	√	√	√	√	√
Polypropylene glycol	25322-69-4	√	√	√	√	√
Poppseed oil		√	√	G	G	G
Potassium hydroxide solution (caustic potash)	1310-58-3	√	√	√	√	√
Primary alcohol (C9-C11)	66455-17-2	X	√	X	X	X
Primary alcohol (C12-C13)	75782-86-4	X	√	X	X	X
Primary alcohol (C12-C15)	63393-82-8	X	√	X	X	X
Primary alcohol (C14-C15)	75782-87-5	X	√	X	X	X
Propyl acetate	109-60-4	√	√	√	√	√
Propyl alcohol (propane-1-ol; 1-propanol)	71-23-8	√	√	√	√	√

Substance (synonyms)	CAS Number	NIOP ¹	NIOP Int. ²	FOSFA Int. ³	FOSFA ⁴	SCF ⁵
Propylene glycol, 1,2- (1,2-propylene glycol; propan-1,2-diol; 1,2-dihydroxypropane; monopropylene glycol (MPG); methyl glycol)	57-55-6	√	√	√	√	√
Propylene glycol, 1,3-	504-63-2	√	√	√	√	X
Propylene tetramer ((tetrapropylene; dodecene)	6842-15-5	√	√	√	√	√
Rapeseed oil (HEAR)		√	√	G	G	G
Rapeseed oil (LEAR) ("double zero")		√	√	G	G	G
Rapeseed oil (LEAR) ("single zero")		√	√	G	G	G
Rapeseed oil (hydrogenated)		√	√	G	G	G
Rice bran acid oil		√	√	G	G	G
Rice bran oil		√	√	G	G	G
Safflower oil		√	√	G	G	G
Sal fat		√	√	G	G	G
Sardine oil		√	√	G	G	G
Sesame oil		√	√	G	G	G
Shark oil		√	√	G	G	G
Shea butter		√	√	G	G	G
Silicon dioxide (microsilica)	7631-86-9	√	√	√	√	√
Sodium hydroxide solution (caustic soda, lye; sodium hydrate; white caustic)	1310-73-2	√	√	√	√	√
Sodium silicate (water glass)	1344-09-8	√	√	√	√	√
Sorbitol (D-sorbitol; hexahydric alcohol; D-sorbite)	50-70-4	√	√	√	√	√
Soybean acid oil		√	√	G	G	G
Soybean oil		√	√	G	G	G
Soybean oil epoxidized		√	√	√	√	√
Soybean oil fatty acids		√	√	G	G	G
Sulphuric acid	7664-93-9	√	√	√	√	√
Sunflower oil		√	√	G	G	G
Tall oil fatty acids, ASTM I and II	61780-12-3	√	√	√	X	X
Tallow (edible)		√	√	G	G	G
Tallow (inedible)		√	√	G	G	G
Tallow fatty acids		√	√	G	G	G
Teaseed oil		√	√	G	G	G
Tucum oil		√	√	G	G	G

Substance (synonyms)	CAS Number	NIOP ¹	NIOP Int. ²	FOSFA Int. ³	FOSFA ⁴	SCF ⁵
Tung oil		√	√	G	G	G
Unedecanol, 1-(C-11)	112-42-5	X	√	X	X	X
Urea ammonia nitrate solution (UAN)	[to be inserted]	√	√	√	√	√
Vegetable ghee		√	√	X	X	X
Walnut oil		√	√	G	G	G
White mineral oils	8042-47-5	√	√	√	√	√
Wine lees	868-14-4	X	√	√	√	√

ANNEX 3

**Substances proposed for inclusion in the Codex List of Banned Immediate Previous Cargoes
(Recommended International Code of Practice for the Storage and Transport of Edible Oils and Fats in Bulk - Appendix 3)**

Substance (synonyms in brackets)	CAS number	FOSFA List ¹	NIOP List ²
Acetone cyanohydrin (ACH; α -hydroxyisobutyronitrile; 2-methylactonitrile)	75-86-5	√	√
Acrylic acid (acroleic acid; propenoic acid)	79-10-7	√	X
Acrylonitrile (ACN; 2-propenenitrile; vinyl cyanide)	107-13-1	√	√
Adiponitrile (1,4-dicyanobutane)	111-69-3	√	X
Aniline (phenylamine; aminobenzene)	62-53-3	√	X
Benzene		X	√
1,3-Butadiene (vinylethylene)		X	√
n-Butylacrylate	141-32-2	√	√
tert-Butylacrylate	1663-39-4	√	√
Carbon tetrachloride (CTC; tetrachloromethane; perchloromethane)	56-23-5	√	√
Cardura E (tradename for glycidyl esters of versatic 911 acid)	11120-34-6	√	X
Cashew nut shell oil (CNSL; cashew nut shell liquid)	8007-24-7	√	√
Chloroform (TCM)		X	√
Cresol - ortho, meta, para (cresylic acid)		X	√
Dibutylamine	111-92-2	√	X
Diethanolamine (DEA; di-2-hydroxyethylamine)	111-42-2	√	√
Diethylenetriamine	111-40-2	√	X
Diglycidylether of bisphenol A		X	√
Di-isopropylamine	110-97-4	√	X
Dipropylamine	108-18-9	√	X
m-Divinylbenzene (DVB; vinyl styrene)	1324-74-0	√	X
Epichlorohydrin (chloropropylene oxide; EPI)	106-89-8	√	√
Epoxy resins (uncured)		√	X
Ethyl acrylate	140-88-5	√	√
Ethylene dibromide (EDB; 1,2-dibromoethane; ethylene bromide)		X	√
Ethylene dichloride (EDC; 1,2-dichloroethane; ethylene chloride)	107-06-2	√ (Note 1)	√

*¹ FOSFA List of Banned Immediate Previous cargoes (√ = included, X = not included)

² National Institute of Oilseed Products Unacceptable Prior Cargo List (√ = included, X = not included)

Substance (synonyms in brackets)	CAS number	FOSFA List ¹	NIOP List ²
Ethylene glycol (MEG; monoethylene glycol)		X	√
Ethylene glycol monobutyl ether (2-butoxyethanol)		X	√
Ethylene oxide (EO)		X	√
2-Ethylhexyl acrylate	103-11-7	√	X
Ethanolamine (MEA; monoethanolamine; colamine; 2-aminoethanol; 2-hydroxyethylamine)	141-43-5	√	X
Ethylenediamine (1,2-diaminoethane)	107-15-3	√	X
Formaldehyde		X	√
Furfuryl alcohol (furyl carbinol)	98-00-0	√	X
Glutaraldehyde	111-30-8	√	X
Hexamethylenediamine (1,6-diaminohexane; 1,6-hexanediamine)	124-09-4	√	X
Isocyanates (These include -			
Toluene di-isocyanate (TDI)	1321-38-6	√	√
Polyphenyl polymethylene isocyanate (PAPI, PMPPI)	9016-87-9	√	√
Di-phenyl methane di-isocyanate (MDI)	101-68-8	√	√
Methyl isocyanate	624-83-9	√	X
Methylene diisocyanate (diisocyanatomethane)		X	√
Leaded products		√ (Note 2)	√ (Note 2)
Lube oil additives		√	X
Methyl acrylate	96-33-3	√	√
Methyl methacrylate monomer	80-62-6	√	√
Methyl styrene monomer (vinyl toluene)	25013-15-4	√	X
α Methyl styrene monomer (AMS)	98-83-9	√	X
ρ Methyl styrene monomer (PMS)	622-97-9	√	X
Methylene chloride (MEC; dichloromethane; methylene dichloride)		X	√
Monoethylene glycol (MEG; ethylene glycol)		X	√
Morpholine	110-91-8	√	X
Morpholine ethanol (N-hydroxyethyl morpholine)	622-40-2	√	X
Nitric acid (aqua fortis; engravers acid; azotic acid)	7697-37-2	√	X
Nitropropane (1 - and 2- isomers and mixtures)		X	√
Perchloroethylene (PEC)		X	√

Substance (synonyms in brackets)	CAS number	FOSFA List ¹	NIOP List ²
Phthalates (These include -			
Di-allyl phthalate (DAP)	131-17-9	√	X
Di-isodecyl phthalate (DIDP)	19269-67-1	√	X
Di-isononyl phthalate (DINP)	68515-48-0	√	X
Di-isooctyl phthalate (DIOP)	27554-26-3	√	X
Di-octyl phthalate (DOP)	117-84-0	√	√
Polymethylene polyphenylisocyanate (PAPI)		X	√
n-Propylamine	622-80-0	√	X
Propylene oxide (methyl oxirane; 1,2-epoxypropane)	75-56-9	√	√
Pyridine	110-86-1	√	X
Styrene monomer (vinyl benzene; phenyl ethylene; cinnamene)	100-42-5	√ (Note 1)	√
Tall oil	8002-26-4	√	√
Tall oil fatty acid equivalent to ASTM TYPE III	61790-12-3	√	√
Telone II (1-propene, 1,3-dichloro; 1,3-dichloropropene)		X	√
Toluene		X	√
Toluidine (ortho)		X	√
Transformer oils of PCB type (e.g. trichlorobiphenyl)	25323-29-2	√	√
Trichloroethane (1,1,1- and 1,1,2-isomers)		X	√
Triethylene glycol (TEG)		X	√
Vinyl acetate monomer (VAM)	05-4	√	√
Vinyl chloride monomer	75-01-4	√	X
Xylene (ortho, meta, para)		X	√

Notes:

- (1) Banned as any one of the last two cargoes in organically coated tanks and as the last cargo in stainless steel and inorganically coated tanks.
- (2) Leaded products shall not be carried as the three previous cargoes.