

Updated: August 4, 2020

# **Marlex<sup>®</sup> Polyethylene Appendix to PROs:**

## Absence of Substances and Chemicals in Marlex® Polyethylene

To the best of our knowledge, none of the following substances are intentionally used as additives or raw materials in the manufacture of Marlex<sup>®</sup> Polyethylene.

- Abietic acid
- Acrolein
- Acrylamide (CAS<sup>®</sup> Number 79-06-1) or n-methylolacrylamide (CAS<sup>®</sup> Number 924-42-5)
- Acrylonitrile, acrylonitrile co-polymers, or Polyacrylonitrile (PAN)
- Aflatoxin and Mycotoxin; or derivates of these substances
- Alkylphenol Ethoxylates, including nonylphenol ethoxylate and octylphenol ethoxylate
- Allergens, including but not limited to those listed in EU Regulation 1169/2011, Directives 2000/13/EC, 2003/89/EC, and Section B.01.010.1 (1) of Canadian Regulation C.R.C., c. 870, and US FDA Food Allergen Labeling and Consumer Protection Act of 2004 (FALCPA) such as: peanuts, tree nuts, milk, eggs, wheat gluten, soybeans, fish and shellfish
- 1-Amino-2-propanol (CAS® No. 78-96-6)
- Ammonium fluoride ((NH4)F; CAS<sup>®</sup> No. 12125-01-8)
- Antimony or related compounds
- Aromatic amines
- Arsenic (CAS® Number 7440-38-2) or arsenic related compounds
- Asbestos
- Azo and azoxyalkyl compounds (e.g. Azodicarbonamide)
- Barium
- Benzophenone (CAS<sup>®</sup> Number 119-61-9)
- Benzoyl chloride (CAS<sup>®</sup> No. 98-88-4)
- 2,2-Bis(4-hydroxyphenyl)propane bis(2,3-epoxypropyl) ether; synonym: Bisphenol A diglycidyl ether (BADGE) CAS<sup>®</sup> Number 1675-54-3, Bis (hydroxyphenyl)methane bis(2,3-epoxypropyl) ether (BFDGE), and/or Novolac glycidyl ethers (NOGE)
- Biocides (e.g. as defined by Biocidal Products Regulation (BPR) 528/2012 and 334/2014).
- Bisphenol compounds, including but not limited to: BPA, BPAF, BPB, BPC, BPE, BPF, BPH, BPS, and BPZ
- Brominated or halogenated flame retardants
- Butylated Hydroxyanisole (BHA), and Tertiary butylhydroquinone (TBHQ)
- Cadmium
- Chlorofluorocarbons (CFC), hydrochlorofluorocarbons (HCFC), hydrofluorocarbons (HFC)
- Chlorinated paraffins
- Cobalt oxide (CoO; CAS<sup>®</sup> No.1307-96-6)
- Colophony (e.g. wood rosin, gum rosin, tree rosin or yellow rosin CAS<sup>®</sup> Number 8050-09-7)
- Colorants or pigments: e.g. Green 7, Green 36, Yellow 138, Violet 23; AP(89)1 not contained
- Cyanuric acid



- Dibutan-1-yl(dichloro)stannane (CAS<sup>®</sup> No. 683-18-1)
- 1,2-Dichlorobenzene
- 2,4-Dichlorophenol (CAS<sup>®</sup> No. 120-83-2)
- Di(ethylhexyl) adipate (DEHA), diethyl hydroxyl amine (DEHA), or di(ethylhexyl)maleate (DEHM)
- Dimethylfumarate (DMF) or methyl fumarate
- 1,4-Dioxane (Diethylene dioxide CAS<sup>®</sup> No. 123-91-1)
- 3,4-Dimethylbenzonitrile (CAS<sup>®</sup> No. 22884-95-3)
- Dimethyl phenyl carbinol/ α,α-Dimethylbenzyl alcohol/ 2-phenyl-2propanol (CAS<sup>®</sup> No. 617-94-7)
- Dioxins or furans; or derivatives of these substances
- Endocrine disruptors e.g. Alkylphenol ethoxylate (APE), Nonylphenol ethoxylate (NPE), Octylphenol ethoxylate (OPE); EPA Tier 1 Screening List, EU Medical Directive Restrictions (MDR), EU ECHA ED Screening List
- Epoxy derivatives listed in EU Directives 2002/16/EC and 1895/2005
- Epoxidized Soybean Oil
- 2-Ethoxyethanol (CAS<sup>®</sup> Number 110-80-5) or 2-Methoxyethanol (CAS<sup>®</sup> Number 109-86-4)
- 4-Ethylocta-3-enenitrile (CAS® No. 29127-85-3)
- FDA Banned Food Additives: benzophenone, ethyl acrylate, eugenyl methyl ether, myrcene, pulegone, pyridine, styrene
- Fungicides, preservatives (for the purpose of preserving food in packaging), or fumigants
- Genetically-modified organisms (GMO)
- Glycidyl Fatty acid esters
- Human materials, derivatives of human materials, blood or blood products
- 2-isobutoxyethanol (CAS<sup>®</sup> No. 4439-24-1)
- Isocyanates
- Isophorone
- Lithium hydroxide monohydrate (CAS<sup>®</sup> No. 1310-66-3)
- Melamine
- Mercury
- Methanesulfonic acid (CAS<sup>®</sup> No. 75-75-2)
- Methyl bromide
- Methyl ethyl ketone (MEK); Methyl isobutyl ketone (MIBK)
- Microorganisms, yeast, or bacteria not intentionally contained
- Naphthalene
- Natural rubber latex, dry natural rubber, or synthetic latex
- Nitrites, Nitrates, Nitrosamines, Nitrosamines impurities: see section below
- Nitrocellulose (CAS<sup>®</sup> Number 9004-70-0)
- p-Nitrochlorobenzene (CAS® No. 100-00-5)
- N-methyl-2-pyrrolidone (CAS<sup>®</sup> Number 872-50-4)
- Nonyl phenol (NP; CAS<sup>®</sup> No. 25154-52-3)
- N-vinyl-2-pyrrolidone (CAS<sup>®</sup> No. 88-12-0)
- Optical brighteners
- Organotin compounds
- Oxiran-2-ylmethyl methacrylate (CAS® No. 106-91-2)



- Ozone-depleting chemicals
- Parabens (e.g. ethyl paraben, propyl paraben, butyl paraben)
- Perchlorates
- Perchloroethylene
- Poly- and perfluoroalkyl substances (PFAS), as perfluoroctanoic acid (PFOA), perfluoroctane sulfonate (PFOS), or perfluorohexanoic acid related compounds (PFHxAs) (Undecafluorohexanoic acid) CAS<sup>®</sup> Number: 307-24-4 and as listed by the National Defense Authorization Act for Fiscal Year 2020 (NDAA) for TRI reporting to EPA or per EU 2019/1021 & 2020/784
- Pesticides and fungicides
- Photoinitiators, including: benzophenone, hydroxybenzophenone, and 4-methylbenzophenone, and Isopropylthioxanthone (ITX)
- Pthalates, orthopthalates (see Pthalates section in PRO document and below)
- Plasticizers
- Polycyclic aromatic hydrocarbons (PAH), also called polyaromatic hydrocarbons
- Polybrominated Diphenyl Ethers (PBDEs) included: decaBDE, octaBDE, and pentaBDE
- Polycarbonates
- Polychlorinated and Polybrominated Biphenyls (PCBs and PBBs)
- Polychlorinated and Polybrominated Terphenyls (PCTs and PBTs)
- Polydimethylsiloxane (PDMS)
- Polyhydroxyalkanoates (PHAs) polyesters produced by microorganisms/bacterial fermentation
- Polylactic Acid, Polylactic Acid as a rigid structure (CAS® Number 26100-51-6)
- Polystyrene or expanded Polystyrene (CAS<sup>®</sup> Number 9003-53-6) or other polymeric foam materials as shock absorbers (e.g. Expanded Polypropylene, Expanded Polyethylene, or Expanded Vinyl Acetate)
- Polyvinyl Chloride (CAS<sup>®</sup> Number 9002-86-2; PVC), Polyvinylidene Dichloride (PVDC) or copolymers
- Radioactive Substances
- Recycled materials (i.e. No post-consumer recycled materials utilized)
- Regenerated cellulose
- Selenium
- Silicone or Silicone Oil (CAS<sup>®</sup> Number 63148-62-9), Polysilicon (also called polycrystalline silicon or silicone CAS<sup>®</sup> Number 7440-21-3) or Siloxanes
- Sodium fluoride (CAS<sup>®</sup> No. 7681-49-4)
- Sodium hydrosulfide (CAS<sup>®</sup> No. 16721-80-5)
- Sodium sulfide (CAS<sup>®</sup> No. 1313-82-2)
- Styrene (CAS<sup>®</sup> Number 100-42-5)
- Sulfonamides
- Terephthaloyl dichloride (CAS<sup>®</sup> No. 100-20-9)
- Tin
- 1,1,1-Trichloroethane
- Triclosan (2,4,4'-trichloro-2'-hydroxydiphenylether), Triclocarban
- Trimellitate (e.g. Trimethyl trimellitate CAS<sup>®</sup> No. 2459-10-1, Tris-2-ethylhexyl trimellitate CAS<sup>®</sup> No. 3319-31-1)
- Tris-Nonylphenol Phosphite (TNPP)



• Vinylidene chloride (Dichloroethene), Vinyl Chloride Monomer (VCM), Polyvinyl Chloride (CAS<sup>®</sup> Number 9002-86-2; PVC), Polyvinylidene Dichloride (PVDC) or copolymers

### Nitrosamine related substances

To the best of our knowledge this product does not intentionally use nitrosamine or the following:

- HNO2 (Nitrous Acid), HNO3 (Nitric Acid)
- Nitrosamines, Nitrosamines impurities: N-nitrosodimethylamine (NDMA), N-Nitrosodiethylamine (NDEA), N-diisopropylnitrosoamine (NDIPA), N-ethyl-N-isopropylnitrosoamine (NEIPA); or nitrosating reagent NaNO2
- Nitrites, Nitrates (e.g. NaNO2 (Sodium Nitrite))
- NO (Nitric Oxide) e.g. as impurity in HNO3 for nitration reactions
- Nitrosyl halides (e.g. CINO, BrNO)
- Dinitrogen trioxide (N2O3), Dinitrogen tetraoxide (N2O4)
- Organic nitrites (e.g. t-BuONO)
- NH2OH (Hydroxylamine)
- Ozone
- Chloramines; Nitroso (nitrite, nitrate, chloroamine) reagents
- Trimethylamine, diethylamine, triethylamine, Hunig's base, piperidine
- Azide reagents
- N-Methyl-2-pyrrolidone (NMP)
- Tributyltin chloride CAS<sup>®</sup> Number 1461-22-9
- Nitrocellulose
- Dimethylacetamine/ N,N-dimethylacetamide (DMA) or Diethylacetamide (DEA),
- N-Nitroso-N-methyl-4-aminobutyric acid (NMBA)
- N-nitrozodiizopropyloamine (DIPNA, CAS® 601-77-4), N-nitrozoetyloizopropyloamine (EIPNA)
- Triethylamine, Diethylamine, Monoethylamine, Diethanolamine, Trimethylamine, Dimethylamine
- Tributylamine (TBA), Dibutylamine
- Diisopropylethylamine (DIPEA)
- N-Methylmorpholine (NMM)
- Tetra Butyl Ammonium Bromide (TBAB)

These substances are not used in the formulation of this product and to the best of our knowledge are not used in the production process for this product.

#### **Phthalates**

No phthalates, including di-(2-ethylhexyl) phthalate (DEHP), dibutyl phthalate (DBP), benzyl butyl phthalate (BBP), diisononyl phthalate (DINP), diisodecyl phthalate (DIDP), di-n-octyl phthalate (DNOP), diisobutyl phthalate (DIBP), dimethyl phthalate (DMP), and diethyl phthalate (DEP) are intentionally added to this product. This product therefore meets the requirements of the Consumer Product Safety Improvement Act of 2008 and EU Directive 2005/84/EC.

Other phthalates not used: ortho-phthalate, di-n-butyl phthalate.



#### Polyolefin Oligomeric Saturated Hydrocarbons (POSH)

Small amounts of oligomers are produced in the polyolefin process. Although lower molecular weight hydrocarbons are more readily removed, higher molecular weight hydrocarbons are reasonably anticipated to be present.

#### **Other information**

Country of origin (COO): Contact your sales person or Customer Account Coordinator (CAC).

Only Representative (OR) Services: Contact your sales representative.

ISO 9000/ Quality: See this link

Irradiation: This product has not been irradiated by gamma rays, electron beam, or x-rays.

**CMRs**: See EU SDS for statement on Regulation (EC) No. 1272/2008 of the European Parliament and of the Council or US SDS section 2.

US EPA SARA: See SDS

**SDS Product Finder:** Enter SDS product name or number https://www.cpchem.com/what-we-do/product-finder

California act: California Transparency in Supply Chains Act (CPSIA):