

INEOS Oligomers

April 2010

Durasyn[®] Polyalphaolefin Regulatory Bulletin

FOREWORD

This bulletin summarizes regulatory information for Durasyn[®] Polyalphaolefins including chemical inventory status and clearances for applications such as cosmetics/personal care use, food contact use, agricultural use, and others.

Lubricants with Incidental Food Contact

U.S. Department of Agriculture and National Sanitation Foundation (USDA/NSF) Registrations

The U.S. Department of Agriculture administered an authorization program for Proprietary Substances and Nonfood Compounds until February 1998. In January 2000, the National Sanitation Foundation revived the USDA program as a voluntary registration program, incorporating previous USDA authorizations and new NSF registrations. Further information and a listing of authorized substances can be found at NSF's website: www.nsf.org/usda/.

Table 2 - Summary of Durasyn[®] Polyalphaolefins Authorized by USDA and/or registered by NSF as H1-Lubricants with Incidental Food Contact

Durasyn 125	Durasyn 162	Durasyn 174I
Durasyn 126	Durasyn 164	Durasyn 174R
Durasyn 127	Durasyn 164X	Durasyn 180I
Durasyn 128	Durasyn 166	Durasyn 180R
Durasyn 145	Durasyn 168	
Durasyn 147	Durasyn 170	
Durasyn 148	Durasyn 174	
Durasyn 156	Durasyn 180	

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CHEMICAL INVENTORY INFORMATION

Many countries have chemical control legislation in place including a comprehensive list of existing chemicals which may be marketed, manufactured or imported. These lists are known as chemical inventories. Durasyn[®] Polyalphaolefins have been evaluated to determine compliance with these chemical inventories, information regarding the compliance to countries chemical inventories may be found in section 15 of the products MSDS.

US FDA

Durasyn[®] Polyalphaolefin Grades 125, 126, 127, 128, 145, 146, 147, 148, 156, 157, 162, 164, 164X, 166, 168, 170, 174, 174I, 174R, 180, 180I, and 180R are authorized for use as components of non-food articles intended for contact with food as specified in 21 CFR §178.3620(b), Technical Grade White Mineral Oil, for the following applications:

- § 175.105 for use in Adhesives.
- § 176.200 for use as Defoaming agents used in coatings.
- § 176.210 for use as Defoaming agents used in the manufacture of paper and paperboard.
- § 177.2260 in Resin-bonded filters; substances employed in fiber finishes.
- § 177.2600 as plasticizers in rubber articles intended for repeated use subject to limitations specified.
- § 177.2800 in Textiles and Textile Fibers for use at levels not to exceed 0.15 wt.% of finished fibers.
- § 178.3570 in Lubricants with incidental food contact subject to the limitations specified.
- § 178.3910 in Surface lubricants used in the manufacture of metallic articles.

It is, however, the responsibility of the customer to determine that all conditions and specifications outlined within these regulations are met, and that the products fabricated from these materials are acceptable to the FDA for use in their intended food-contact applications.

MANUFACTURING ORIGIN AND PURITY

Durasyn[®] Polyalphaolefins are additive and solvent free products.

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“N” SUBSTANCES

None of the raw materials used in the manufacture of Durasyn[®] Polyalphaolefins are classified as dangerous to the environment with the symbol “N” in Annex 1 of the Directive 67/548/EEC (adapted to technical progress for the 28th time by Directive 2001/59/EC).

CALIFORNIA PROPOSITION 65

Durasyn[®] Polyalphaolefins do not contain any substances listed under California Proposition 65.

HEAVY METALS, WEEE, WASTE PACKAGING, CONEG

Durasyn[®] Polyalphaolefins meet the relevant requirements of the following Directives or Regulations:

- 2003/11/EC
- 2002/96/EC (WEEE)

Cadmium, lead, mercury, and hexavalent chromium or compounds of these metals are not used raw materials in the manufacture of Durasyn[®] Polyalphaolefins. Therefore, the incidental total level of these metals in these products is far below the limit of 100 ppm as set up in the two following legislations.

- 94/62/EC (Packaging Waste Directive)
- USA CONEG Regulation

END-OF LIFE VEHICLES

Durasyn[®] Polyalphaolefins meet the relevant requirements of Directive 2000/53/EC.

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RESTRICTION OF THE USE OF CERTAIN HAZARDOUS SUBSTANCES IN ELECTRICAL AND ELECTRONIC EQUIPMENT (RoHS)

Lead, mercury, cadmium, hexavalent chromium, polybrominated biphenyls (PBB) or polybrominated diphenyl ethers (PBDE), listed in Directive 2002/95/EC of the European Parliament and of the Council of 27 January 2003 on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS) are not used as raw materials in the manufacture of Durasyn[®] Polyalphaolefins.

PHTHALATES

Phthalates are not used as raw materials in the manufacture of Durasyn[®] Polyalphaolefins.

DIOXINS AND FURANS

Dioxins and furans are not used as raw materials in the manufacture of Durasyn[®] Polyalphaolefins. These substances will not be generated and released during the manufacture and processing of these grades.

OZONE LAYER-DEPLETING AGENTS

Chlorofluorocarbons (CFC's) and substances related to ozone depleting substances (as defined by the MONTREAL PROTOCOL and listed as class I & II substances by the US Clean Air Act) are not used as raw materials in the manufacture of Durasyn[®] Polyalphaolefins.

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ABSENCE OF SUBSTANCES AND CHEMICALS

None of the following substances are used as raw materials in the manufacture of Durasyn[®] Polyalphaolefins:

- Allergens (as defined in Directive 2000/13/EC, as amended)
- Aromatic amines and colorants
- Azodicarbonamide or semi-carbazide compounds
- Asbestos
- Brominated flame retardants
- Bisphenol-A
- Di(ethylhexyl) adipate
- Epoxidised Soya Bean Oil (ESBO)
- Formaldehyde (formol)
- Latexes
- Nonylphenol and its derivatives
- Tert-butyl-4-hydroxyanisole (BHA) and 2,6-di-tert-butyl-p-cresol (BHT)
- Tributyl-tin (TBT), dibutyl-tin (DBT), monobutyl-tin (MBT) or any other organo-tin compounds
- Poly(aromatic hydrocarbons) according to US Environmental Protection Agency Method 610 (EPA 610)
- Vinyl chloride monomer and its polymers or copolymers

BOVINE SPONGIFORM ENCEPHALOPATHY (BSE) – TRANSMISSIBLE SPONGIFORM ENCEPHALOPATHY (TSE)

Durasyn[®] Polyalphaolefins are produced entirely by a petrochemical process, with all feedstocks coming from oil refinery streams. No vegetable material, animal fats, oils, milk products or other animal products are used as components of, or in the manufacture of these products.

GENETICALLY MODIFIED ORGANISM (GMO)

No genetically modified substances are used as raw materials in the manufacture of Durasyn[®] Polyalphaolefins.

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MATERIAL SAFETY DATA SHEETS / SAFETY DATA SHEETS

Material Safety Data Sheets (MSDS /SDS) are available for all Durasyn[®] Polyalphaolefins, and describe the health, safety and environmental characteristics of these products as well as advice on handling precautions and emergency procedures.

MSDS should be consulted and fully understood before handling, storage or use of Durasyn[®] Polyalphaolefins,. To request a copy of a specific Durasyn[®] Polyalphaolefins, grade Material Safety Data Sheet, phone 1-866-363-2454 Toll Free – (North America), +32 (0)67 875 980 (Europe), +86 21 6103 5970 (Asia), or send an e-mail to oligomersmsds@ineos.com.

INEOS CARES

This bulletin has been prepared by INEOS' Product Stewardship Department. Product Stewardship responsibly manages HSE issues and activities related to the supply and marketing of products, including HSE, R&D, marketing and manufacturing functions, thus embracing every stage of the petrochemical product lifecycle.

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