

**1 . Product and company identification**

<b>Product name</b>	: DURASYN® 162 POLYALPHAOLEFINS
<b>Supplier</b>	: INEOS USA LLC 2600 South Shore Blvd. League City, Texas 77573
<b>Material uses</b>	: Industrial applications: Synthetic Base Material
<b>MSDS #</b>	: 0000000780 (NAP)
<b>Print date</b>	: 11/10/2008.
<b>Emergency telephone number</b>	: 1 (800) 424-9300 Outside the US: +1 703-527-3887 (CHEMTREC)
<b>Other Product Information</b>	: Phone:1-866-363-2454 email: OLIGOMERSMSDS@ineos.com
<b>Product type</b>	: Liquid.

**2 . Hazards identification**

<b>Physical state</b>	: Liquid.
<b>Odor</b>	: Odorless.
<b>OSHA/HCS status</b>	: While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this MSDS contains valuable information critical to the safe handling and proper use of the product. This MSDS should be retained and available for employees and other users of this product.
<b>Emergency overview</b>	: NOT EXPECTED TO PRODUCE SIGNIFICANT ADVERSE HEALTH EFFECTS WHEN THE RECOMMENDED INSTRUCTIONS FOR USE ARE FOLLOWED. No known significant effects or critical hazards. Avoid prolonged contact with eyes, skin and clothing.
<b>Routes of entry</b>	: Dermal contact. Eye contact. Inhalation. Ingestion.
<b><u>Potential acute health effects</u></b>	
<b>Inhalation</b>	: No known significant effects or critical hazards.
<b>Ingestion</b>	: No known significant effects or critical hazards.
<b>Skin</b>	: No known significant effects or critical hazards.
<b>Eyes</b>	: No known significant effects or critical hazards.
<b><u>Potential chronic health effects</u></b>	
<b>Chronic effects</b>	: No known significant effects or critical hazards.
<b>Carcinogenicity</b>	: No component of this product at levels greater than 0.1% is identified as a carcinogen by ACGIH or the International Agency for Research on Cancer (IARC). No component of this product present at levels greater than 0.1% is identified as a carcinogen by the U.S. National Toxicology Program (NTP) or the U.S. Occupational Safety and Health Act (OSHA).
<b>Mutagenicity</b>	: No component of this product at levels greater than 0.1% is classified by established regulatory criteria as a mutagen.
<b>Teratogenicity</b>	: No component of this product at levels greater than 0.1% is classified by established regulatory criteria as teratogenic or embryotoxic.
<b>Developmental effects</b>	: No known significant effects or critical hazards.
<b>Fertility effects</b>	: No known significant effects or critical hazards.
<b><u>Over-exposure signs/symptoms</u></b>	
<b>Inhalation</b>	: No specific data.
<b>Ingestion</b>	: No specific data.
<b>Skin</b>	: No specific data.

## 2 . Hazards identification

**Eyes** : No specific data.

**Medical conditions aggravated by over-exposure** :

See toxicological information (section 11)

## 3 . Composition/information on ingredients

<u>Name</u>	<u>CAS number</u>	<u>%</u>
Dec-1-ene, dimers, hydrogenated	68649-11-6	>80

## 4 . First aid measures

**Eye contact** : Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical attention if symptoms occur.

**Skin contact** : In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention if symptoms occur.

**Inhalation** : Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms occur.

**Ingestion** : Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention if symptoms occur.

**Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training.

## 5 . Fire-fighting measures

**Flammability of the product** : In a fire or if heated, a pressure increase will occur and the container may burst.

**Extinguishing media**

**Suitable** : Use an extinguishing agent suitable for the surrounding fire.

**Not suitable** : None known.

**Special exposure hazards** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

**Hazardous thermal decomposition products** : Decomposition products may include the following materials:  
carbon dioxide  
carbon monoxide

**Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## 6 Accidental release measures

**Personal precautions** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment (see section 8).

**Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

**Methods for cleaning up**

**Small spill** : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble or absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

## 6 Accidental release measures

- Large spill** : Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Dispose of via a licensed waste disposal contractor. Note: see section 1 for emergency contact information and section 13 for waste disposal.

## 7 . Handling and storage

- Handling** : Put on appropriate personal protective equipment (see section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking.
- Storage** : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

## 8 . Exposure controls/personal protection

Occupational exposure limits		TWA (8 hours)			STEL (15 mins)			Ceiling			
Ingredient	List name	ppm	mg/m <sup>3</sup>	Other	ppm	mg/m <sup>3</sup>	Other	ppm	mg/m <sup>3</sup>	Other	Notations
No exposure limit value known.											

**Consult local authorities for acceptable exposure limits.**

- Recommended monitoring procedures** : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.

- Engineering measures** : No special ventilation requirements. Good general ventilation should be sufficient to control worker exposure to airborne contaminants. If this product contains ingredients with exposure limits, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure below any recommended or statutory limits.

- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

### Personal protection

- Respiratory** : Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
- Hands** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.
- Eyes** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts.
- Skin** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

## 8 . Exposure controls/personal protection

**Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

## 9 . Physical and chemical properties

**Physical state** : Liquid.  
**Flash point** : Closed cup: 160 °C (320 °F) [Pensky-Martens.]  
**Color** : Colorless.  
**Odor** : Odorless.  
**Relative density** : 0.80 @15.6°C (Water = 1)  
**Vapor pressure** : <0.1 kPa (<1 mm Hg) (at 20°C)  
**Viscosity** : Kinematic: 1.55-2.10 cSt @ 100°C  
**Solubility** : Insoluble in the following materials: cold water.  
**Explosive properties** : This material is not explosive as defined by established regulatory criteria.

## 10 . Stability and reactivity

**Chemical stability** : The product is stable.  
**Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.  
**Hazardous polymerization** : Under normal conditions of storage and use, hazardous polymerization will not occur.  
**Conditions to avoid** : No specific data.  
**Materials to avoid** : carbon oxides (CO, CO<sub>2</sub>)  
**Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.  
**Conditions of reactivity** : None identified.  
This material is not explosive as defined by established regulatory criteria.  
**Incompatibility with various substances** : Strong oxidizing materials

## 11 . Toxicological information

### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Not available.				

### Chronic toxicity

Not available.

## 12 . Ecological information

<b>Environmental effects</b>	: No known significant effects or critical hazards.
<b><u>Aquatic ecotoxicity</u></b>	
<b>Conclusion/Summary</b>	: Not available.
<b><u>Biodegradability</u></b>	
<b>Conclusion/Summary</b>	: Not available.
<b>Mobility</b>	: This product is not likely to move rapidly with surface or groundwater flows because of its low water solubility. This product is not likely to volatilize rapidly into the air because of its low vapor pressure.
<b>Other adverse effects</b>	: No known significant effects or critical hazards.

## 13 . Disposal considerations

<b>Waste disposal</b>	: The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.
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Disposal should be in accordance with applicable regional, national and local laws and regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

## 14 . Transport information

Not classified as hazardous for transport (DOT, TDG, IMO/IMDG, IATA/ICAO)

## 15 . Regulatory information

### United States

<b>HCS Classification</b>	: Not regulated.
<b>U.S. Federal regulations</b>	: <b>United States inventory (TSCA 8b)</b> : Listed on inventory. <b>SARA 302/304/311/312 extremely hazardous substances</b> : No products were found. <b>SARA 302/304 emergency planning and notification</b> : No products were found. <b>SARA 302/304/311/312 hazardous chemicals</b> : No products were found. <b>SARA 311/312 MSDS distribution - chemical inventory - hazard identification</b> : DURASYN ® 162 POLYALPHAOLEFINS: Immediate (acute) health hazard <b>Clean Water Act (CWA) 307</b> : No products were found. <b>Clean Water Act (CWA) 311</b> : No products were found. <b>Clean Air Act (CAA) 112 accidental release prevention</b> : No products were found. <b>Clean Air Act (CAA) 112 regulated flammable substances</b> : No products were found. <b>Clean Air Act (CAA) 112 regulated toxic substances</b> : No products were found.
<b>Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs)</b>	: Not listed
<b>Clean Air Act Section 602 Class I Substances</b>	: Not listed

## 15 . Regulatory information

**Clean Air Act Section 602 Class II Substances** : Not listed

**DEA List I Chemicals (Precursor Chemicals)** : Not listed

**DEA List II Chemicals (Essential Chemicals)** : Not listed

**State regulations**

**United States inventory (TSCA 8b)** : Listed on inventory.

### Canada

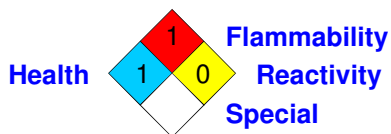
**WHMIS (Canada)** : Not controlled under WHMIS (Canada).

**Canadian lists** : **CEPA Toxic substances:** None of the components are listed.  
**Canadian ARET:** None of the components are listed.  
**Canadian NPRI:** None of the components are listed.  
**Alberta Designated Substances:** None of the components are listed.  
**Ontario Designated Substances:** None of the components are listed.  
**Quebec Designated Substances:** None of the components are listed.

**Canada inventory** : Listed on inventory.

### Mexico

**Classification** :



### EU regulations

**Hazard symbol or symbols** :



**Risk phrases** : R65- Harmful: may cause lung damage if swallowed.

**Safety phrases** : S62- If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

### International regulations

AUSTRALIAN INVENTORY (AICS): Listed on inventory.

CANADA INVENTORY (DSL): Listed on inventory.

CHINA INVENTORY (IECS): Listed on inventory.

EC INVENTORY (EINECS/ELINCS): In compliance.

JAPAN INVENTORY (ENCS): Listed on inventory.

KOREA INVENTORY (ECL): Listed on inventory.

PHILIPPINE INVENTORY (PICCS): Listed on inventory.

**Chemical Weapons Convention List Schedule I Chemicals** : Not listed

## 15 . Regulatory information

**Chemical Weapons Convention List Schedule II Chemicals** : Not listed

**Chemical Weapons Convention List Schedule III Chemicals** : Not listed

## 16 . Other information

**Label requirements** : NOT EXPECTED TO PRODUCE SIGNIFICANT ADVERSE HEALTH EFFECTS WHEN THE RECOMMENDED INSTRUCTIONS FOR USE ARE FOLLOWED.

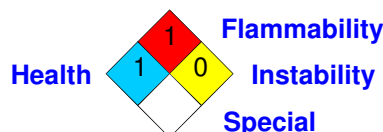
**Hazardous Material Information System (U.S.A.)** :

Health	1
Flammability	1
Physical hazards	0

**Caution:** HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on MSDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

**National Fire Protection Association (U.S.A.)** :



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**Version** : 0.01

**Prepared by** : Product Stewardship

Indicates information that has changed from previously issued version.

### Notice to reader

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