DURASYN ® 164 POLYALPHAOLEFINS

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Identification of the substance or preparation

- **Product name**: DURASYN ® 164 POLYALPHAOLEFINS
- **REACH Product name**: 1-decene, homopolymer, hydrogenated
- **Chemical name**: 1-Decene, homopolymer, hydrogenated
- **Product type**: Liquid.
- **Product description**: Not available.
- **CAS number**: 68037-01-4
- **REACH Registration number**: TO BE DETERMINED
- **Company/undertaking identification**
  - **Manufacturer**: INEOS Europe Limited
    - Zone Industrielle, Zone C
    - Feluy B-7181
    - Belgium
  - **Emergency telephone number**: +44 (0) 208 762 8322 (CARECHEM24)
  - **Phone**: +32 (0)67 875 980
  - **email**: OLIGOMERSMSDS@ineos.com

2. HAZARDS IDENTIFICATION

The product is not classified as dangerous according to Directive 1999/45/EC and its amendments.

- **Classification**: Not classified.
- **Physical/chemical hazards**: Not classified as dangerous
- **Human health hazards**: Not classified as dangerous Based on tests conducted on similar substances.
- **Environmental hazards**: Not classified as dangerous Based on tests conducted on similar substances.

See section 11 for more detailed information on health effects and symptoms.

3. COMPOSITION/INFORMATION ON INGREDIENTS

- **Substance/preparation**: Mono-constituent substance

<table>
<thead>
<tr>
<th>Substance name</th>
<th>CAS number</th>
<th>%</th>
<th>EINECS number</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-decene, homopolymer, hydrogenated</td>
<td>68037-01-4</td>
<td>&gt;99</td>
<td>500-183-1</td>
<td>Not classified.</td>
</tr>
</tbody>
</table>

[1] Substance classified with a health or environmental hazard
[2] Substance with a workplace exposure limit
[3] PBT-substance
[4] vPvB-substance

Occupational exposure limits, if available, are listed in section 8.

4. FIRST AID MEASURES

**First-aid measures**

- **Inhalation**: Move exposed person to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Obtain medical attention if symptoms occur.

- **Ingestion**: Wash out mouth with water. Move exposed person to fresh air. Keep person warm and at rest. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Obtain medical attention if symptoms occur.
4. FIRST AID MEASURES

Skin contact: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Obtain medical attention if symptoms occur.

Eye contact: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention if irritation occurs.

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

Notes to physician: No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

See section 11 for more detailed information on health effects and symptoms.

5. FIRE-FIGHTING MEASURES

Extinguishing media
- Suitable: In case of fire, use water fog, foam, dry chemical or carbon dioxide extinguisher or spray.
- Not suitable: Do not use water jet.

Special exposure hazards: In a fire or if heated, a pressure increase will occur and the container may burst. 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 spilt material. Put on appropriate personal protective equipment (see section 8).

Environmental precautions: Avoid dispersal of spilt 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.
- 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 unlabelled containers. Use appropriate containment to avoid environmental contamination.
### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Exposure control limit values**

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>Occupational exposure limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>No exposure limit value known.</td>
<td></td>
</tr>
</tbody>
</table>

**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. Reference should be made to European Standard EN 689 for methods for the assessment of exposure by inhalation to chemical agents and national guidance documents for methods for the determination of hazardous substances.

**Exposure controls**

**Occupational exposure controls**

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.

**Respiratory protection**

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.

**Hand protection**

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.

**Eye protection**

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 protection**

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.

**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

**General information**

**Appearance**

- **Physical state**: Liquid.
- **Colour**: Colourless.
- **Odour**: Odourless.

**Important health, safety and environmental information**

- **Boiling point**: 346°C (654.8°F)
- **Flash point**: Closed cup: 224°C (435.2°F) [Pensky-Martens.]
- **Vapour pressure**: <0.13 kPa (<1 mm Hg)
- **Relative density**: 0.82
- **Solubility**: Insoluble in the following materials: cold water.
- **Viscosity**: Kinematic: 17 cSt (at 40°C)
- **Density**: Not available.

**Other information**

- **Auto-ignition temperature**: 685°C (1265°F)
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.
- **Conditions to avoid**: No specific data.
- **Materials to avoid**: No specific data.
- **Hazardous decomposition products**: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11. TOXICOLOGICAL INFORMATION

### Toxicokinetics

- **Absorption**: Routes of entry anticipated: Oral, Dermal, Inhalation.
- **Distribution**: Not available.
- **Metabolism**: Not available.
- **Elimination**: Not available.

#### Potential acute health effects

- **Inhalation**: Inhalation of oil mist or vapours at elevated temperatures may cause respiratory irritation.
- **Ingestion**: No known significant effects or critical hazards.
- **Skin contact**: Prolonged or repeated contact can defat the skin and lead to irritation and/or dermatitis.
- **Eye contact**: No known significant effects or critical hazards.

#### Chronic effects

- No known significant effects or critical hazards.

#### Carcinogenicity

- No component of this product at levels greater than 0.1% is identified as a carcinogen by ACGIH, the International Agency for Research on Cancer (IARC) or the European Commission (EC).

#### Mutagenicity

- No component of this product at levels greater than 0.1% is classified by established regulatory criteria as a mutagen.

#### Teratogenicity

- No component of this product at levels greater than 0.1% is classified by established regulatory criteria as teratogenic or embryotoxic.

#### Developmental effects

- No known significant effects or critical hazards.

#### Fertility effects

- No known significant effects or critical hazards.

#### Over-exposure signs/symptoms

- **Inhalation**: No specific data.
- **Ingestion**: No specific data.
- **Skin**: No specific data.
- **Eyes**: No specific data.

### Acute toxicity

- **Conclusion/Summary**: Not available.

### Potential chronic health effects

#### Chronic toxicity

- **Conclusion/Summary**: Not available.

#### Irritation/Corrosion

- **Conclusion/Summary**: Not available.

12. ECOLOGICAL INFORMATION

- **Environmental effects**: Not classified as dangerous
- **Aquatic ecotoxicity**: Not available.
- **Biodegradability**: Not available.
- **Mobility**: 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 volatilise rapidly into the air because of its low vapour pressure.
- **Other adverse effects**: No known significant effects or critical hazards.
- **PBT**: Not available.
12. ECOLOGICAL INFORMATION

P: Not available. B: Not available. T: Not available.

vPvB
Not available.
vP: Not available. vB: Not available.

13. DISPOSAL CONSIDERATIONS

Methods of disposal : The generation of waste should be avoided or minimised 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 spilt material and runoff and contact with soil, waterways, drains and sewers.

Hazardous waste : Within the present knowledge of the supplier, this product is not regarded as hazardous waste, as defined by EU Directive 91/689/EEC.

14. TRANSPORT INFORMATION

International transport regulations

Not classified as hazardous for transport (ADR/RID, ADNR, IMDG, ICAO/IATA)

15. REGULATORY INFORMATION

Chemical Safety Assessment : This product contains substances for which Chemical Safety Assessments are still required.

EU regulations

Classification and labeling have been determined according to EU Directives 67/548/EEC and 1999/45/EC (including amendments) and take into account the intended product use.

Risk phrases : This product is not classified according to EU legislation.

Product use : Industrial applications.

Europe inventory : In compliance.

Black List Chemicals : Not listed

Priority List Chemicals : Not listed

Integrated pollution prevention and control list (IPPC) - Air : Not listed

Integrated pollution prevention and control list (IPPC) - Water : Not listed

Prior Informed Consent. List of chemicals subject to the international PIC procedure (Part I, II, III) : Not listed

International regulations

Chemical Weapons Convention : List Schedule I Chemicals : Not listed

Chemical Weapons Convention : List Schedule II Chemicals : Not listed

Chemical Weapons Convention : List Schedule III Chemicals : Not listed
15. REGULATORY INFORMATION

Inventories

- AUSTRALIAN INVENTORY (AICS): Listed on inventory.
- Canada inventory status: 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.
- US INVENTORY (TSCA): Listed on inventory.

16. OTHER INFORMATION

Uses

None identified.

History

Date of issue/ Date of revision: 5/21/2009.
Version: 1.01
Prepared by: Product Stewardship

Indicates information that has changed from previously issued version.

Notice to reader

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Annex