

Identification of the Substance/Preparation and the Company/Undertaking

Product name	:	Hybrane® DEO750 8500
Supplier	:	Polymer Factory Sweden AB Teknikringen 48 SE-114 28 Stockholm, Sweden http://www.polymerfactory.com
Further information obtainable from	:	Polymer Factory Sweden AB (as above)
Information in case of emergency	:	(Int.) +46 8 337043 (Emergency Response Center, Sweden)

Composition/Information on Ingredients

Chemical Family	:	Hyperbranched Polyesteramide based on proprietary knowledge
------------------------	---	---

Hazards Identification

Physical /Chemical hazards	:	Expected to be Non-toxic, Non-irritant and Non-sensibilising and Non-mutagenic based on studies with analogous compounds
Environmental Hazards	:	None Expected
Effects of Over-Exposure	:	None Expected

First Aid Measures

After Inhalation	:	In case of irritation, get medical attention
After Skin Contact	:	In case of irritation, get medical attention
After Eye Contact	:	In case of irritation, get medical attention
After Swallowing	:	In case of irritation, get medical attention

Fire Fighting Measures

Suitable Extinguishing Agents	:	Powder B, Powder A, Water, Foam, Carbon Dioxide (CO ₂)
Specific Hazards	:	Hazardous thermal decomposition and combustion products include Nitrogen Oxides (NO ₂), Ammonia (NH ₃), Carbon Monoxide (CO), Carbon Dioxide (CO ₂)
Fire Fighting Instructions	:	Use self-contained breathing apparatus and skin protection

All data and information contained in this document are believed to be realised at the date of issue mentioned on this document. However, since Polymer Factory has no influence on the use, processing and application of the product, Polymer Factory can accept no responsibility whatsoever on this respect and the buyer can derive no rights there from. The buyer shall check the quality and all other properties of the product and assumes all responsibilities arising from the use of the products and the information related thereto. Polymer Factory accepts no liability arising from any infringement of intellectual property rights of third parties that is the result of manufacturing application or sale of products by the buyer.

Accidental Release Measures

- Person-Related Safety Precautions** : Use appropriate protection,
*see section on "Exposure Control and Personal Protection" below
- Environmental Protection** : No hazards expected.
*see section on "Ecological Information" below
- Cleaning and Collecting** : Collect spill material in sealable, labeled containers for later disposal

Handling and Storage

- Safe Handling** : Normal standard practices of hygiene are applicable
- Storage** : 1. Store in closed containers
2. Do not store portable containers in direct sunlight.
3. Keep containers closed when not in use.
- Recommended Packaging** : Stainless Steel, Metal, Aluminium, Nickel, PP and Glass

Exposure Control & Personal Protection

Personal Protective Equipment

- i) **Respiratory Protection** : Use gas mask or filter respiratory as necessary
- ii) **Skin & Body Protection** : Not applicable, but handle in accordance with good industrial hygiene and safety practices. These practices include avoiding unnecessary exposure and removal of the material from eyes, skin and clothing.
- iii) **Eye protection** : Face shield or safety goggles as necessary
- iv) **Other Protection** : Eye wash facility and emergency shower
- Occupational Exposure Limits** : Not determined
- *Engineering Controls** : Use ventilation as necessary

Physical and Chemical Properties

General information

- Molecular Formula** : Polymer
- Building Block** : Dodecanyl Succinic Anhydride
- Branching unit** : Diisopropanol Amine
- End groups** : Methoxy-terminated polyethylene glycol with about 17 EO units
- Theoretical Molecular Weight** : 8500 g/mol
- Form (aggregation form)** : Viscous Liquid
- Color** : Brown
- Odor** : Slight

All data and information contained in this document are believed to be realised at the date of issue mentioned on this document. However, since Polymer Factory has no influence on the use, processing and application of the product, Polymer Factory can accept no responsibility whatsoever on this respect and the buyer can derive no rights there from. The buyer shall check the quality and all other properties of the product and assumes all responsibilities arising from the use of the products and the information related thereto. Polymer Factory accepts no liability arising from any infringement of intellectual property rights of third parties that is the result of manufacturing application or sale of products by the buyer.

Change in condition

Melting Point/Melting Range	:	Not available
Boiling Point/Boiling Range	:	Not determined
Glass Transition Temperature, Tg	:	Not available

Specific Gravity : Not determined

Solubility at 20 °C

i) **Water** : Soluble

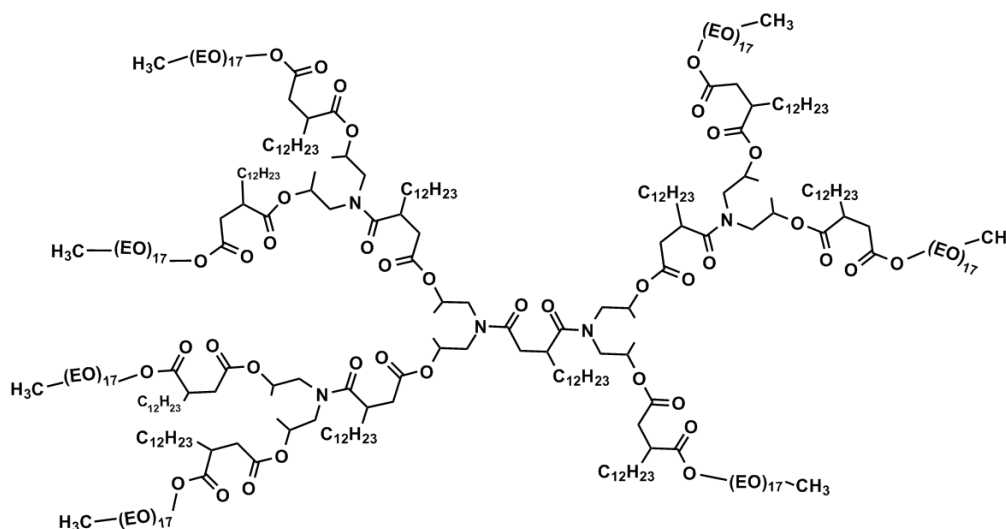
*Soluble in aromatic and chlorinated hydrocarbons

Octanol/Water Coefficient : 0.11 (for grade DEO550 1700)

Flash Point : Not determined

Vapour Pressure : < 1 hPA (20 °C)

Typical Idealized Structure



Stability and Reactivity

Stability	:	Thermally stable to 200°C for at least 5 minutes
Thermal decomposition	:	Hazardous thermal decomposition producing toxic nitrogen oxide, carbon monoxide and carbon dioxide
Conditions to be avoided	:	Unknown
Incompatibility	:	No incompatibilities known

Toxicological Information

Acute Toxicity	:	ORAL (LD ₅₀): >2000 mg/kg [rat]
Chronic Toxicity	:	None expected

All data and information contained in this document are believed to be realised at the date of issue mentioned on this document. However, since Polymer Factory has no influence on the use, processing and application of the product, Polymer Factory can accept no responsibility whatsoever on this respect and the buyer can derive no rights there from. The buyer shall check the quality and all other properties of the product and assumes all responsibilities arising from the use of the products and the information related thereto. Polymer Factory accepts no liability arising from any infringement of intellectual property rights of third parties that is the result of manufacturing application or sale of products by the buyer.

Primary irritant effect

- On the skin** : No irritation based on studies with analogous compounds
Sensitization : No sensitizing based on studies with analogous compounds.

Other information

- Mutagenicity** : None expected based on studies with analogous compounds in the *Salmonella Typhimurium* reverse mutation assay.
Reproductive Toxicity : None expected

Ecological Information

- Mobility** : Low vapour pressure, soluble in water
Marine Toxicity (*Skeletonema constatum*) : EC₅₀ (72hr) >10-50 mg/l
Persistence and degradability : OECD guideline 306, biodegradation in seawater: 24%
Bio-accumulation : None expected based on studies with analogous compounds
Ecotoxicity : This hybrane product is expected to be non-toxic for fish (zebra fish).

Disposal Consideration

- Recommendation** : Disposal must be made according to official regulations
Methods of Disposal : Dispose by combustion in an incinerator for chemical waste

Transport Information*

*Non Regulated

- UN Identification No.** : Not Applicable

Regulatory Information*

*Non-dangerous according to EC classification

- USA** : NOT listed on the Toxic Substances Control Act (TSCA) but all components of this product are both EINECS and TSCA listed

Other information

If you require any further information concerning this or any of our other products then please contact us at the address given above or visit our website at <http://www.polymerfactory.com>