

Identification of the Substance/Preparation and the Company/Undertaking

Product name	:	Hybrane® ZW 6403
Application of the substance	:	Intermediate for organic synthesis
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
Chemical Name	:	Hyperbranched Polyesteramide based on proprietary knowledge
CAS No.	:	-

Hazards Identification

Physical /Chemical hazards	:	Non-toxic, Non-irritant and expected to be 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	:	If irritation persists (nuisance dust), get medical attention
After Skin Contact	:	If irritation persists (nuisance dust), get medical attention
After Eye Contact	:	If irritation persists (nuisance dust), get medical attention
After Swallowing	:	If irritation persists (nuisance dust), 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

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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 dust mask or filter respirator 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** : Respiratory limit : 5 mg/m³
Inhalation Limit : 10 mg/m³

- *Engineering Controls** : Use ventilation as necessary

Physical and Chemical Properties

General information

- Molecular Formula** : (C₆H₁₅NO₂.C₄H₄O₃)_x
- Building Block** : Succinic Anhydride
- Branching unit** : Diisopropanol Amine
- End groups** : Secondary OH (85%)
Soya Fatty Acid Esters (15%)
- Molecular Weight** : Mn ≈ 1000
- Form (aggregation form)** : Viscous Resin
- Color** : Light Brown

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Odor : Slight

Change in condition

Melting Point/Melting Range : Not determined

Boiling Point/Boiling Range : -

Fusion Temperature / Range : Not determined

Glass Transition Temperature, Tg : -

Solubility at 20 °C

i) **Water** : >2 g/l

ii) **Ethanol** : -

*Also soluble in aromatic and chlorinated hydrocarbons.

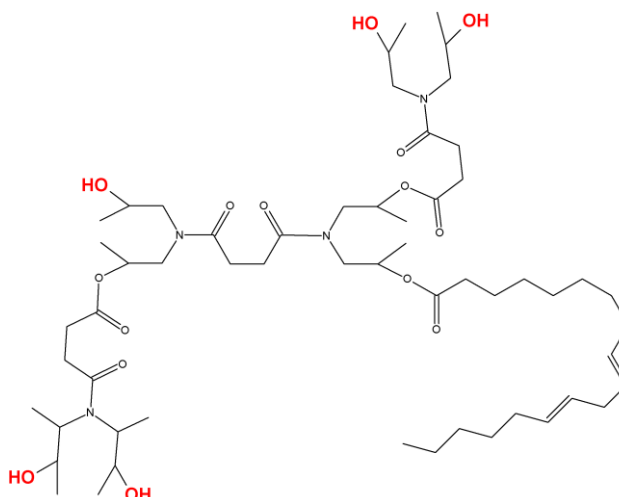
Octanol/Water Coefficient, LogPo/w : Not determined

Flash Point : Not determined

Vapour Pressure : < 1 hPA (20 °C)

Danger of Explosion : Not determined

Idealize Chemical Structure



Stability and Reactivity

Stability : Thermally stable to 200°C for at least 5 mins

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 (LD₅₀): >2000 mg/kg [rat]

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Primary irritant effect

On the skin	:	In rabbit studies, no oedema was observed
Sensitization	:	None expected based on studies with analogous compounds
Other information		
Mutagenicity	:	Not Determined. None expected based on analogous studies
Reproductive Toxicity	:	Not Determined

Ecological Information

Mobility	:	Low vapour pressure, soluble in water
Persistence and degradability	:	Unknown
Bio-accumulation	:	None expected based on studies with analogous compounds
Ecotoxicity	:	Based on studies with analogous compounds, this product is expected to be non-toxic for fish (zebra fish) and aquatic organisms (<i>Daphnia Magna</i>)

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 TSCA

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>