

1. Chemical Product & Company Identification

Product Identifier / Product Name:

HydroSpan 400

Intended Use of the Product/Substance/mixture: Synthetic Urethane Polymer

Name, Address & Telephone of Manufacturer:

Industrial Polymers, Inc.

3250 South Sam Houston Parkway East

Houston, Texas 77047

Phone: 800-766-3832

Fax: 713-943-1525

www.IndustrialPolymers.Com

Emergency Contact:

Chemtrec: 800-424-9300 (Inside the USA)

703-527-3887 (International)

2. Hazards Identification

Classification of the Substance or Mixture (GHS-US)

Resp. Sens. 1	H334
Skin Sens. 1	H317

Labeling Elements GHS-US

Hazard Pictograms:



Signal Word: Danger

Hazard Statements:

H317 - May cause an allergic skin reaction.

H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Precautionary Statements:

P201 - Obtain special instructions before use

P202 - Do not handle until all safety precautions have been read & understood

P210 - Keep away from heat, hot surfaces, open flames, sparks. - No smoking

P235 - Keep cool

P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present & easy to do. Continue rinsing

P308+P313 - If exposed or concerned: Get medical advice/attention

P314 - Get medical advice & attention if you feel unwell

P332+P313 - If skin irritation occurs: Get medical advice/attention

P403+P233 - Store in a well-ventilated place. Keep container tightly closed

P273 - Avoid release to the environment.

P280 - Wear protective gloves, protective clothing, and eye protection.

P284 - [In case of inadequate ventilation] wear respiratory protection.

P301+P310 - IF SWALLOWED: Immediately call a poison center or doctor.

P302+P352 - IF ON SKIN: Wash with plenty of water.

P304+P340 - IF INHALED: Remove person to fresh air and keep at rest in a position comfortable for breathing.

P331 - Do NOT induce vomiting.

P342+P311 - If experiencing respiratory symptoms: Call a poison center or doctor.

P362+P364 - Take off contaminated clothing and wash it before reuse.

P405 - Store locked up.

P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations.

Other Hazards Not Contributing to the Classification: Exposure may aggravate those with pre-existing eye, skin, or respiratory conditions.

Unknown Acute Toxicity (GHS-US): No data available



3. Composition/Information on Ingredients

Substance: Not Applicable

Mixture

Name	Product Identifier	Concentration	Classification
Oxirane, methyl-, polymer with oxirane, ether with 1,2,3-propanetriol (3:1), polymer with 1,1'-methylenebis[4-isocyanatobenzene]	(CAS #) 59675-67-1	90% -95%	Resp. Sens. 1, H334 Skin Sens. 1, H317
Dipropylene glycol dibenzoate	(CAS) 27138-31-4 (EINECS) 248-258-5	5% - 10%	Acute Aquatic Tox 3, H402
2-(2-ethoxyethoxy) ethyle acetate	(CAS) 112-15-12	5% - 10%	Skin Irrit. 3; H316 Eye Irrit 2A, H319

Full text of H-phrases: see Section 16

4. First Aid Measures

Description of First Aid measures

First-aid Measures General: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

First-aid Measures After Inhalation: When symptoms occur: go into open air and ventilate suspected area. Remove to fresh air and keep at rest in a position comfortable for breathing. Obtain medical attention if breathing difficulty persists.

First-aid Measures After Skin Contact: Remove contaminated clothing. Gently wash with plenty of soap and water followed by rinsing with water for at least 15 minutes. Call a Poison Center or doctor/physician if you feel unwell. Wash contaminated clothing before reuse.

First-aid Measures After Eye Contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention.

First-aid Measures After Ingestion: Rinse mouth. Do not induce vomiting. Immediately call a Poison Center or doctor/physician.

Most Important Symptoms and Effects, Both Acute and Delayed

Symptoms/Injuries: Causes skin irritation. May be fatal if swallowed and enters airways. May cause an allergic skin reaction. May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Symptoms/Injuries After Inhalation: May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Symptoms/Injuries After Skin Contact: Causes skin irritation. Redness, pain, swelling, itching, burning, dryness, and dermatitis.

Symptoms/Injuries After Eye Contact: Direct contact with the eyes is likely irritating.

Symptoms/Injuries After Ingestion: May be fatal if swallowed and enters airways. Aspiration into the lungs can cause severe pulmonary edema/hemorrhage.

Chronic Symptoms: May cause an allergic skin reaction

Indication of Any Immediate Medical Attention and Special Treatment Needed: If you feel unwell, seek medical advice (show the label where possible).

5. Firefighting Measures

Extinguishing Media

Suitable Extinguishing Media: Water spray, fog, alcohol-resistant foam, carbon dioxide (CO₂), dry chemical powder.

Unsuitable Extinguishing Media: Do not use a heavy water stream. A heavy water stream may spread burning liquid.

Special Hazards Arising From Substance or Mixture

Fire Hazard: Not flammable but will support combustion.

Explosion Hazard: Product is not explosive.

Reactivity: Hazardous reactions will not occur under normal conditions.

Advice For Firefighters

Precautionary Measures Fire: Exercise caution when fighting any chemical fire.

Firefighting Instructions: Use water spray or fog for cooling exposed containers. In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

Other Information: Do not allow run-off from fire fighting to enter drains or water courses. Do not allow the product to be released into the environment.

6. Accidental Release Measures

Personal Precautions, Protective Equipment & Emergency Procedures

General Measures: Avoid all contact with skin, eyes, or clothing. Avoid breathing (vapor, mist, spray).

For Non-emergency Personnel

Protective Equipment: Use appropriate personal protection equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel.

6. Accidental Release Measures (Cont.)

For Emergency Responders

Protective Equipment: Equip cleanup crew with proper protection.

Emergency Procedures: Stop leak if safe to do so. Eliminate ignition sources. Ventilate area.

Environmental Precautions: Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

Methods & Material for Containment & Cleaning Up

For Containment: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

Methods for Cleaning Up: Clear up spills immediately and dispose of waste safely. Spills should be contained with mechanical barriers. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill.

Reference to Other Sections: See Heading 8. Exposure controls and personal protection.

7. Handling & Storage

Additional Hazards When Processed: Any proposed use of this product in elevated-temperature processes should be thoroughly evaluated to assure that safe operating conditions are established and maintained. Avoid contact with skin and eyes.

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Comply with applicable regulations.

Storage Conditions: Store in a dry, cool and well-ventilated place. Keep container closed when not in use. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials.

Incompatible Products: Water, amines, strong bases, and alcohols will cause some corrosion to copper alloys and aluminum.

Incompatible Materials: Sources of ignition. Direct sunlight. Heat sources.

Maximum Storage Period: 6 months

8. Exposure Controls/Personal Protection

Control Parameters

For substances listed in section 3 that are not listed here, there are no established exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), NIOSH (REL), or OSHA (PEL).

Exposure Controls

Appropriate Engineering Controls: Ensure adequate ventilation, especially in confined areas. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure all national/local regulations are observed.

Personal Protective Equipment: Protective goggles. Gloves. Protective clothing. Insufficient ventilation: wear respiratory protection.



Materials for Protective Clothing: Chemically resistant materials and fabrics.

Hand Protection: Wear chemically resistant protective gloves.

Eye Protection: Chemical goggles or safety glasses.

Skin and Body Protection: Wear suitable protective clothing.

Respiratory Protection: Use a NIOSH-approved respirator or self-contained breathing apparatus whenever exposure may exceed established Occupational Exposure Limits.

Environmental Exposure Controls: Do not allow the product to be released into the environment.

Consumer Exposure Controls: Do not eat, drink or smoke during use.

9. Physical & Chemical Properties

Information on Basic Physical & Chemical Properties

Physical State:	Liquid
Appearance:	Viscous liquid
Odor:	Slight Odor
Odor Threshold:	No data available
pH:	No data available
Evaporation Rate:	No data available
Melting Point:	No data available
Freezing Point:	No data available
Boiling Point:	No data available
Decomposition Temperature:	No data available
Flammability (solid, gas):	No data available



9. Physical & Chemical Properties (Cont.)

Vapor Pressure:	No data available
Relative Vapor Density at 20°C:	No data available
Relative Density:	1.07
Partial Coefficient: N-Octanol/Water:	No data available
Solubility:	reacts in water, soluble in THF, DMF, or methylene chloride
Specific Gravity:	1.07 (water = 1)
Viscosity:	No data available
Flash Point:	>400° F (204° C) CC
Auto-Ignition Temperature:	No data available

10. Stability & Reactivity

Reactivity: Hazardous reactions will not occur under normal conditions.

Chemical Stability: Stable under recommended handling and storage conditions (see section 7).

Possibility of Hazardous Reactions: May occur, contact with moisture and other materials, which react with isocyanates, or temperatures about 204°C (400°F), may cause some polymerization.

Conditions to Avoid: Direct sunlight. Extremely high or low temperatures. Incompatible materials.

Incompatible Materials: Avoid contamination with water, solvents and any foreign matter.

Hazardous Decomposition Products: High temperatures will release cyanates and hydrocarbons. Oxides of carbon, nitrogen and small amount of HCN under burning conditions.

11. Toxicological Information

Information On Toxicological Effects

Acute Toxicity: Not Classified

Dipropylene glycol dibenzoate (27138-31-4)

LD50 oral rat	3,914 mg/kg
LD50 dermal rat	2000 mg/kg
LC50 inhalation rat (mg/l)	200 mg/l (Exposure time: 4 h)

2-(2-ethoxyethoxy) ethyle acetate

LD50 oral rat	11,000 mg/kg
LD50 dermal rabbit	15,281 mg/kg
Skin Corrosion/Irritation:	Causes skin irritation.
Serious Eye Damage/Irritation	Not classified
Respiratory or Skin Sensitization	May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction.
Germ Cell Mutagenicity	Not classified
Carcinogenicity	Not classified
Reproductive Toxicity	Not classified
Specific Target Organ Toxicity (Single Exposure)	Not classified
Specific Target Organ Toxicity (Repeated Exposure)	Not classified
Aspiration Hazard	May be fatal if swallowed and enters airways.

12. Ecological Information

Toxicity: Harmful to aquatic life with long lasting effects. Harmful to aquatic life.

Dipropylene glycol dibenzoate (27138-31-4)

LC50 fishes 1	3.7 mg/l (Exposure time: 96 h - Species: Pimephales promelas (fathead minnow) [flow-through])
EC50 Daphnia 1	19.3 mg/l (Exposure time: 48 h - Species: Daphnia magna (Water flea) [Static])
EC50 other aquatic organisms 1	3.6 mg/l (Exposure time: 72 h - Species: Pseudokirchneriella subcapitata (Selenastrum capricornutum))
EC50 bacteria	100 mg/l (Exposure time: 3 h - Species: Sludge Treatment)

Persistence and Degradability: May cause long-term adverse effects in the environment.

Bioaccumulative Potential: Not established.

Mobility in Soil: No additional information available.

Other Adverse Effects: Avoid release to the environment.

13. Disposal Consideration

Waste treatment methods

Waste Disposal Recommendations: Dispose of waste material in accordance with all local, regional, national, & international regulations

Sewage Waste Recommendations: Do not dispose of waste into sewer.

14. Transport Information

UN Number
 UN/DOT NA: None
UN/DOT Proper Shipping Name: Liquid Resin (Non-Regulated)
Freight Class: 55
DOT Hazard Classes: Non-regulated
Packing Group (DOT) None
IMO / IMDG CODE (OCEAN) HAZARD CLASS DIVISION NUMBER: Non-regulated/Not Dangerous Goods
ICAO / IATA (AIR) HAZARD CLASS DIVISION NUMBER: Non-regulated/Not Dangerous Goods

15. Regulatory Information

US Federal Regulations
SARA Section 311/312 Hazard Classes: Immediate (acute) health hazard
SARA Section 313 Components:
 2-(2-ethoxyethoxy) ethyle acetate

US State Regulations

Oxirane, methyl-, polymer with oxirane, ether with 1,2,3-propanetriol (3:1), polymer with 1,1'-methylenebis[4-isocyanatobenzene] (59675-67-1)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Dipropylene glycol dibenzoate (27138-31-4)

U.S. - Pennsylvania - RTK (Right to Know) List
 U.S. - New Jersey - RTK (Right to Know) List

2-(2-ethoxyethoxy) ethyle acetate

U.S. - Pennsylvania - RTK (Right to Know) List
 U.S. - New Jersey - RTK (Right to Know) List

16. Other Information

GHS Full Text Phrases:

Skin Sens. A H317 Skin sensitization Category 1
 Resp. Sens. 1 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

NFPA 704M ratings:	Health	Flammability	Reactivity	Other
	2	1	1	
HMIS ratings:	Health	Flammability	Physical Hazard	Personal Protection
0-Insignificant	2	1	1	B
1-Slight				
2-Moderate				
3-High				
4-Extreme				

Other Information: This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200. This information is furnished without warranty, expressed or implied, except that it is accurate to the best knowledge of Industrial Polymers, Inc. The data on this sheet relates only to the specific material designated herein. Industrial Polymers, Inc assumes no legal responsibility for use or reliance upon this data.