

#### **SECTION 1. CHEMICAL PRODUCT IDENTIFICATION**

Product Name	HYPERSEAL
Chemical Name	5,000±2,000cPS at 25°C
Chemical Formula	85±2%
Emergency Contact	Xylene, Ethyl Acetate

## SECTION 2. COMPOSITION / INFORMATION OF HAZARDOUS INGREDIENT

Chemical Name	CAS No.	Amount	OSHA PEL	ACGIH TLV
Polyurethane Prepolymer	Trade Secret	<80	None estab	None estab
N-Methyl-2-pyrrolidone	872-50-4	<20	100 ppm	100 ppm

## **SECTION 3. HEALTH HAZARD IDENTIFICATION**

#### **Potential Health Effects:**

#### **Primary Routes of Exposure:**

Routes of entry for solids and liquids include eye and skin contact, ingestion and inhalation. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquefied gases.

## **Human Effects and Symptoms of Overexposure**

## Skin Contact:

Some components used in this material are reported to be severely irritation in rabbit dermal irritation studies and will probably irritate human skin. Skin sensitization and irritation may develop after repeated and/or prolonged contact with human skin.

# Eye Contact:

Some components used in this material are reported to induce chemical burns in rabbit eye studies; a similar degree of eye injury may develop after contact with human eyes.

# Skin Absorption:

Systemically toxic concentrations of this product will probably not be absorbed through human skin.

## Ingestion:

Irritation of chemical burns of the mouth, pharynx, esophagus and stomach can develop following ingestion.

# Inhalation:

Vapors can irritate eyes, nose and respiratory passages. Severe overexposure may induce respiratory sensitization with asthma like symptoms. Symptoms include chronic cough, tightness of chest with difficulty in breathing. These symptoms may be immediate or delayed up to several hours after exposure. There are reports that chronic exposures may result in permanent decreases in lung function.

# **Health Hazards:**

ACUTE - Exposure may cause mucous membrane and respiratory tract irritation, tightness of chest, headache, shortness of breath, and a dry cough. At concentrations exceeding current occupational limits and for sensitized individuals at levels less than or greater than current occupational limits, asthma-like symptoms may occur. These symptoms may include coughing, wheezing, and shortness of breath. Hypersensitive pneumonias may also occur if the person is sensitized. This syndrome is characterized by fever, non-productive cough, wheezing, chills, and shortness of breath. The effects of acute exposure may be delayed in onset up to 12-24 hours. CHRONIC - Repeated exposure above current occupational limits may cause an allergic sensitization of the respiratory tract. This is characterized by an asthma-like response upon reexposure to the chemical. The symptoms may include coughing, wheezing, shortness of breath and chest tightness, and may be fatal.

# Carcinogenicity:

Chemical Name	NPT	AIRC	OSHA
N-Methyl-2-pyrrolidone	NO	NO	NO

# Medical Conditions Generally Aggravated By Exposure:

Cardiovascular disease, Asthma or Asthmatic Bronchitis, Allergic Disease, Chronic Respiratory Disease, Sinusitis, Headache, Dizziness.

## **SECTION 4. FIRST AID MEASURES**

# Eve Contact:

Immediately flush eyes with plenty of water. After initial flushing, remove and contact lenses and continue flushing for at least 15 minutes. Have eyes examined and treated by medical personnel.

## Inhalation

Remove victim to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. If breathing is labored, give oxygen. Consult medical personnel.

## **Skin Contact:**

Wash material off of the skin with plenty of soap and water. If redness, itching, or a burning sensation develops, get medical attention. Wash contaminated clothing and decontaminate footwear before reuse.



# **MATERIAL SAFETY DATA SHEET**

#### Ingestion:

Do not induce vomiting. Give 1 or 2 glasses of water to drink and refer person to medical personnel. (Never give anything by mouth to an unconscious person).

#### Inhalation:

Vapors can irritate eyes, nose and respiratory passages. Severe overexposure may induce respiratory sensitization with asthma like symptoms. Symptoms include chronic cough, tightness of chest with difficulty in breathing. These symptoms may be immediate or delayed up to several hours after exposure. There are reports that chronic exposures may result in permanent decreases in lung function.

# **SECTION 5. FIRE FIGHTING MEASURES**

#### **Potential Health Effects:**

Flash Point: > 91 °C standard N-Methyl-2-pyrrolidone (ASTM D-9373)

**Auto ignition:** 240-256 °C standard N-Methyl-2-pyrrolidone

Extinguishing Media: Use water, dry extinguishing media, carbon dioxide (CO2) or foam.

#### Specific fire and explosion risks:

Use air-supplied rescue equipment for enclosed areas. Cool exposed containers with water spray. Avoid breathing vapor or fumes.

#### Fire fighting Procedures:

Full emergency equipment with self-contained breathing apparatus and full protective clothing should be worn by firefighters. Explosive rupture is possible. Therefore use cold water to cool fire exposed containers.

#### **SECTION 6. SPILL OR LEAK PROCEDURES**

#### General:

Evacuate and ventilate spill area, dike spill to prevent entry into water system, wear full protective equipment including respiratory equipment during clean up.

# Major Spill:

Transfer as much liquid as possible via pump or vacuum device into closed but not sealed containers for disposal.

#### **SECTION 7. HANDLING AND STORAGE**

## Clothing:

Rubber gloves, coveralls, hardhat, boots and rubber apron to avoid skin contact. Contaminated equipment or clothing should be cleaned after each use or disposed of.

#### Eyes:

Wear fitted chemical goggles or face shield and safety glasses.

# Respiration:

For situations where the airborne concentrations may exceed the level for which an air purifying respirator is effective, or where the levels are unknown or Immediately Dangerous to Life or Health (IDLH), select and use an appropriate positive pressure air supplying respirator (airline or self-contained breathing apparatus). When atmospheric levels may exceed the occupational exposure limit (PEL or TLV) approved airpurifying respirators equipped with an organic vapor sorbent and particulate filter can be used as long as appropriate precautions and change out schedules are in place.

# Ventilation:

Use local exhaust as necessary to maintain P.E.L.

# SECTION 8. PHYSICAL AND CHEMICAL PROPERTIES

Color	Light yellow Transparency
Form	Liquid
Odor	Mid
Odor Threshold	Not Established
Specific Gravity	1.1 (@25 °C)

Sol. In Water:	Not soluble
Viscosity	5,000 ± 2,000 cps
pН	85±2%
Boiling Pt	Not available
Specific Gravity	Not available
Vapor Density	Heavier than air

# **SECTION 10. STABILITY AND REACTIVITY**

Stability Data	Stable
Incompatibility	Water, Oxidizing agents, Active hydrogen compounds.
Hazardous Decomposition Products	These are non-existent if storage and handling rules are followed. CO, CO2, N2, Toxic
Polymerization	Will not occur

# SECTION 11. TOXICOLOGICAL INFORMATION

# **Eye Effects:**

Some components used in this material are reported to induce chemical burns in rabbit eye studies; a similar degree of eye injury may develop after contact with human eyes.

## Skin Effects

Repeated or prolonged single exposure may cause irritation to the skin. May cause a cutaneous allergic reaction in predisposed individuals. It appears unlikely that any danger is attached to absorption of quantities of the product through the skin following prolonged single exposure.

## Inhalation

This product contains Xylene. High vapor/aerosol concentrations (greater than approximately 1000 ppm) are irritating to the eyes and the respiratory tract, may cause headaches, dizziness, anesthesia, drowsiness, unconsciousness, and other central nervous system effects, including death. Negligible hazard at ambient temperature (-18 to 38° C)

## Ingestion

This product contains Xylene. Small amounts of this product aspirated into the respiratory system during ingestion or vomiting may cause mild to severe pulmonary injury, possibly progressing to death. Low order of toxicity.



# **MATERIAL SAFETY DATA SHEET**

#### Sensitization:

No foreseeable harmful effects.

## **Developmental Toxicity:**

Chemical Name	Type dose	Mode	Specie	Amount	Units	Other
N-Methyl-2-pyrrolidone	LD50	oral	rat	3,500	mg/kg	

## **SECTION 12. ENVIRONMENTAL INFORMATION**

#### **Biodegradability:**

Possibly hazardous short term degradation of products are not likely. However, long term degradation of products may arise.

#### **Ecotoxicity:**

Not available.

## SECTION 13. DISPOSAL CONSIDERATIONS

## Waste Disposal:

Incinerate or landfill in a licensed facility. Do not discharge into waterways or sewer systems. Waste must be disposed of according to country and local low.

#### **Container Disposal:**

Steel drums must be emptied (as defined by RCRA, Section 261. 7 or state regulations that may be more stringent) and can be sent to a licensed drum reconditioner for reuse, a scrap metal dealer, or an approved landfill. Check with reconditioner to determine if they require them to be decontaminated. Drums destined for a scrap dealer or landfill must be decontaminated and punctured or crushed to prevent reuse.

#### **SECTION 14. TRANSPORT INFORMATION**

Technical Shipping Name	N/A
Freight Class Bulk	N/A
Freight Class Package	N/A
Product Label	Product label established
Hazard Class	N/A
UN/NA Number	N/A
DOT	Non-Regulated

# **SECTION 15. REGULATORY INFORMATION**

OSHA:

This product is hazardous under the criteria of the federal OSHA Hazard Communication Standard 29 CFR 1910.1000 Subpart Z

TSCA:

Some components are included in the Toxic Substances Control Act Chemical Substance

SARA Title III:

Section 311/312 Hazard Categories: Immediate health, Delayed Health, Fire Section 313 Toxic Chemicals: N-Methyl-2-pyrrolidone(CAS: 872-50-4, AMOUNT: <20.0%)

# **SECTION 16. OTHER INFORMATION**

	Health	Fire	Reactivity	Special
HMIS	3	1	1	NA

This sheet provides a complement to the product use instructions but does not replace them. The information is based on our current knowledge of the product concerned at the date of drafting. That information is given in good faith and does not remove from the user his duty to be aware of and to follow all legal regulations and statutes covering his/her activities. The user takes sole responsibility for the application of safety measures covering the use of the product he/she is aware of. We also draw the user's attention to any use of the product for which it was not designed.

END OF DATA SHEET



# **Get in Touch:**

T +852 3956 1868
E engineering@escpile.com
W www.escpile.com
GLOBAL PILING SOLUTIONS

ESC App available now Scan QR Code or search for "ESC Group" or click on the links below











Revision 0, Q3 2018

Disclaimer The information provided within this datasheet is for general information purposes only, without any warranty. ESC shall not be held responsible for any errors, omissions or misuse of any of the information provided. ESC disclaims any and all liability resulting from the ability or inability to use the information within this document. Anyone using the information contained does so at their own risk. ESC shall not be held liable for any damages which includes any financial losses or incidental or consequential damages arising from the use of this information. The product range contained is liable to change without notice.