KRETUS GROUP®

Safety Data Sheet

SECTION 1: IDENTIFICATION

Product Name: KRETUS® Polyurethane HS, Part B (EZ, Fast)

Recommended Use: For residential and industrial use.

Manufacturer: Kretus Group®, 1055 W. Struck Ave., Orange, CA 92867

Telephone: (714) 681-2286

24 Hour Emergency Telephone Number: (800) 255-3924 (CHEMTEL)

Emergency telephone numbers are to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure, or accident involving chemicals. All non-emergency questions should be directed to customer service.

Comments: To the best of our knowledge, this Safety Data Sheet conforms to the requirements of US OSHA 29 CFR1910.1200, 91/155/EEC and Canadian Hazardous Product Act.

SECTION 2: HAZARD IDENTIFICATION

Acute toxicity, dermal: Category 5

Acute toxicity, inhalation: Category 4

Skin corrosion/irritation: Category 3

Serious eye damage/irritation: Category 2B

Warning

Harmful if inhaled. Causes eye and mild skin irritation.

Prevention

Avoid breathing fume/gas/mist/vapors/spray. Use only outdoors or in a well-ventilated area. If material comes into contact with skin, wash hands thoroughly after handling.

Response

IF INHALED: Remove person to fresh air and keep comfortable for breathing. If you feel unwell: Get medical attention.

IF SKIN IRRITATION OCCURS: Get medical attention.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.

Disposal

Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

Other Information

This product does not contain any substances that are considered by OSHA, NTP, IARC, or ACGIH to be “probable” or “suspected” human carcinogens.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

Chemical Name	CAS No.	Concentration (% by Weight)	TLV-TWA
Hexane, 1,6-Diisocyanato-,Homopolymer	28182-81-2	<99	TWA: 1 mg/m^3
Hexamethylene Diisocyanate (HDI)	822-06-0	<0.3	TWA: 0.005 ppm ACGIH

SECTION 4: FIRST-AID MEASURES

Contact with Eyes

Hold eyelids open and immediately flush with plenty of water for at least 15 minutes. Get medical attention.

Contact with Skin

In case of contact, immediately wash skin with plenty of soap and water for at least 5 minutes. Get medical attention and provide SDS to physician. Remove contaminated clothing and shoes. Clean contaminated clothing and shoes before re-use.

Inhalation

If respiratory irritation or distress occurs, remove victim to fresh air. Seek medical attention if respiratory irritation or distress continues. If breathing is labored, administer oxygen. If breathing has stopped, administer artificial respiration and seek emergency medical attention.

Ingestion

If swallowed, do not induce vomiting. If the person is conscious and has no trouble breathing, wash out the mouth with water and keep at rest. Do not leave victim unattended. Vomiting may occur spontaneously. To prevent aspiration of swallowed product, lay victim on side with head lower than waist. Immediately get medical attention. Do not give fluids to an unconscious person.

SECTION 5: FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Dry chemical, carbon dioxide, foam. DO NOT USE WATER.

Special Risks

Product will burn under fire conditions. Under fire conditions, toxic, corrosive fumes are emitted. Reacts with water, releasing large amounts of carbon dioxide which may cause pressure build-up in confined spaces. Oxides of nitrogen and carbon may be released under fire conditions.

Special Protective Equipment for Fire-Fighting

NIOSH/MSHA approved self-contained breathing apparatus and full protective clothing. Cool tightly closed containers exposed to fire with water. Eliminate all sources of ignition. Combustible liquid.

SECTION 6: ACCIDENTAL RELEASE MEASURES

For Emergency Responders

Evacuate non-emergency personnel. Prevent access to spill area. Remove ignition sources. Use protective clothing and equipment. Control source of spill or leak. Ventilate area.

Methods and Materials for Containment and Clean-up

Use dry material to absorb/contain spill. Saturate absorbent material with neutralization solution and mix thoroughly. After 15 minutes, transfer material to a covered, but not sealed, open-head container for disposal. Flush area with neutralization solution with scrubbing to decontaminate and remove. Repeat as necessary.

Suggested neutralization solutions: (1) a mixture of 75% water, 20% non-ionic surfactant (tergitol tmn-10) and 5% n-propanol, (2) a mixture of 80% water, 20% non-ionic surfactant (e.g., tergitol tmn-10), or (3) a mixture of 90% water, 3-8% ammonium hydroxide or concentrated ammonia, and 2% liquid detergent.

SECTION 7: HANDLING AND STORAGE

Precautions for Safe-Handling and Conditions for Safe Storage

Product should be stored in a cool area and drums should be kept tightly closed when not in use. Maximum storage temperature: <40°C.

Do not breathe vapors. Do not get in eyes. Avoid direct or prolonged contact with skin. Do not ingest. Store, transfer, and handle under a nitrogen blanket. Use nonsparking tools and grounded/bonded equipment and containers when transferring material. Before closing partially empty containers, apply a dry nitrogen blanket. Avoid contact with water and excess humidity. Personal hygiene is an important work practice as an exposure control measure.

The following general measures should be taken when working with or handling this material:

1. Do not store, use, and/or consume foods, beverages, tobacco products, or cosmetics in areas where this material is stored.
2. Wash hands and face carefully before eating, drinking, using tobacco, applying cosmetics, or using the toilet.
3. Wash exposed skin promptly to remove accidental splashes or contact with this material.

Store in tightly closed, original container. Store in an area that is dry, cool, well-ventilated, and away from sources of ignition. Recommended container material includes aluminum, steel. Do not use polyethylene, polystyrene, copper, or tin as container material. Certain state and local regulations may limit storage quantities, arrangements, and locations. Consult equipment manufacturers for selection, use, and maintenance of worker protection equipment.

SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

Respiratory: Use NIOSH/MSHA approved respiratory protection based on actual or potential airborne concentrations and in accordance with the appropriate regulatory standards and/or industrial recommendations or if exposure exceeds OSHA limits.

Under normal conditions, in the absence of other airborne contaminants, the following devices should provide protection from this material up to the conditions specified by the appropriate OSHA, WHMIS, or ANSI standard(s): full-face air-purifying respirators are required in work environments where isocyanate airborne concentrations exceed the action level but are significantly lower than the IDLH, provided that cartridges are changed daily. Use combination HEPA filter for the polyisocyanate aerosol and an organic vapor cartridge for the solvents used. Install organic vapor cartridge closest to face.

Full-face supplied-air respirators (SAR) are required in work environments where isocyanate airborne concentrations have not been characterized or are expected to exhibit considerable and sudden variations such as in spray-type application.

Eye/face: Use safety glasses with side shields or splash-proof goggles. An emergency eye wash must be readily accessible to the work area.

Skin: Skin contact should be minimized through use of gloves and suitable long-sleeved clothing (i.e., shirts and pants) consideration must be given both to durability as well as permeation resistance. Wear chemical resistant gloves such as Viton. For limited use, PVC, butyl, or nitrile rubber gloves may be worn.

Other Precautions: Provide good ventilation in areas of storage

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES	
Appearance	liquid; colorless to pale yellow
Odor	Minimal to no odor
Odor Threshold	Not applicable
pH	Not applicable
Melting/Freezing Point	°F
Initial Boiling Point and Boiling Range	220°C at 760 mmHg
Flash Point	170°F, Method: TCC
Evaporation Rate	<1 (Butyl acetate = 1)
Flammability	No data
Upper/Lower Flammability or Explosive Limits	No data
Explosion Limits: lower	No data
Auto-ignition Temperature	No data
Vapor Pressure	12 mmHg @ 50°C
Vapor Density	Not available
Relative Density	1.12 @ 25°C (H_2O = 1)
Solubility(ies)	REACTS in water
Partition Coefficient: n-octanol/water	No data
Auto-ignition Temperature	480°C
Decomposition Temperature	No data
Viscosity	No data

SECTION 10: STABILITY AND REACTIVITY

Chemical Stability

This material is stable under normal handling and storage conditions, including room temperature, described herein.

Chemical Incompatibility

Incompatible with water, strong bases, strong acids, strong oxidizing agents, alcohols, and amines.

Conditions to be avoided

Extreme heat, open flame, and moisture. Keep away from ignition sources.

Hazardous Decomposition Products

Hydrolysis: Carbon Dioxide. Thermal: Oxides of Nitrogen and Carbon.

Further information

Hazardous polymerization will not occur.

SECTION 11: TOXICOLOGICAL INFORMATION

After inhalation: If respiratory irritation or distress occurs, remove victim to fresh air. Seek medical attention if respiratory irritation or distress continues. If breathing is labored, administer oxygen. If breathing has stopped, administer artificial respiration and seek emergency medical attention.

After eye contact: Hold eyelids open and immediately flush with plenty of water for at least 15 minutes. Get medical attention.

After skin contact: In case of contact, immediately wash skin with plenty of soap and water for at least 5 minutes. Get medical attention and provide SDS to physician. Remove contaminated clothing and shoes. Clean contaminated clothing and shoes before re-use.

After ingestion: If swallowed, do not induce vomiting. If the person is conscious and has no trouble breathing, wash out the mouth with water and keep at rest. Do not leave victim unattended. Vomiting may occur spontaneously. To prevent aspiration of swallowed product, lay victim on side with head lower than waist. Immediately get medical attention. Do not give fluids to an unconscious person.

SECTION 12: ECOLOGICAL INFORMATION

No environmental hazard is anticipated provided that the material is handled and disposed of with due care and attention.

SECTION 13: DISPOSAL CONSIDERATIONS

This product is not a hazardous waste under 40 CFR 261. Consult state or local officials for proper disposal method. Chemical additions, processing or otherwise altering this material may make the waste management information herein incomplete, inaccurate, or otherwise inappropriate. Please be advised that state and local regulations regarding the proper disposal of this material may be more restrictive or otherwise different than federal laws and regulations.

Empty containers retain product residue. Follow all precautions for product. Do not heat or cut empty containers with electric or gas torch since highly toxic vapors and gases are formed. Do not reuse container. If container is to be disposed, ensure all product residues are removed prior to disposal.

SECTION 14: TRANSPORT INFORMATION

Transportation status: IMPORTANT! Statements below provide additional data on listed dot classification.

The classification shown may not be applicable to the package size being shipped. This product contains an ingredient identified as a hazardous substance in Appendix A to 49 CFR 172.101. The classification shown below only applies to those package sizes where the RQ for the hazardous substance has been met or exceeded in the package and is therefore regulated for transport.

U. S. Department of Transportation:

Shipping Name: Environmentally Hazardous Substance, Liquid, N.O.S.

Contains: Hexamethylene Diisocyanate

UN-No.: 3082

UN Packing Group: III

IMO: Class 9

Emergency Guide#: 171

SECTION 15: REGULATORY INFORMATION

Inventory Status: TSCA, DSL, EINECS/ELINCS, AICS, MITI, KECL - All ingredients are on the inventory or fall under the polymer exemption or are on the no-longer polymer list.

Federal Regulations

All functional components of this product are listed on the TSCA Inventory.

SARA TITLE III Hazard Classes

Fire Hazard - No

Reactive Hazard - No

Release of Pressure - No

Acute Health Hazard - Yes

Chronic Health Hazard - Yes

SARA Extremely Hazardous Substances (EHS)/CERCLA Hazardous Substances Ingredient:

HEXAMETHYLENE DIISOCYANATE (HDI): 100 Lbs. CERCLA/SARA RQ

State Regulations: This product does not contain any components that are regulated under California Proposition 65.

NATIONAL FIRE PROTECTION ASSOCIATION HAZARD RATING - NFPA®

2 Health Hazard Rating -Moderate

1 Flammability Rating - Slight

1 Instability Rating - Slight

SECTION 16: OTHER INFORMATION

Prepared by Kretus Group

Revision date 8-4-2019

Revision Note No information available

The information on this Safety Data Sheet (SDS) is based on the present state of our knowledge, current national legislation and guidelines. As the specific conditions of use of the product are outside the supplier's knowledge and control the user is responsible for ensuring that the requirements of relevant legislation are complied with. This SDS should not be construed as any guarantee of the technical performance or suitability for particular applications. UNLESS SUPPLIER AGREES OTHERWISE IN WRITING, SUPPLIER MAKES NO WARRANTIES, EXPRESS OR IMPLIED, AND DISCLAIMS ALL IMPLIED WARRANTIES INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR FREEDOM FROM PATENT INFRINGEMENT. SUPPLIER WILL NOT BE LIABLE FOR ANY SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES.