1. IDENTIFICATION OF THE SUBSTANCE OR MIXTURE AND OF THE SUPPLIER

PRODUCT IDENTIFIER:	CORONATE HXLV
MANUFACTURER / IMPORTER:	TOSOH SPECIALTY CHEMICALS USA, Inc.
ADDRESS:	1720 Windward Concourse, Suite 125 Alpharetta, Georgia 30005
PHONE:	1-770-442-9501
EMERGENCY PHONE:	CHEMTREC 1-800-424-9300 OR 1-703-527-3887
RECOMMENDED USE:	General industrial products

2. HAZARDS IDENTIFICATION

GHS CLASSIFICATION

Acute toxicity	
Acute toxicity (inhalation: dust, mist)	Category 4
Skin sensitization	Category 1
Specific target organ toxicity – single exposure	Category 3

HAZARD SYMBOL:

SIGNAL WORD:	**WARNING**
HAZARD STATEMENTS:	Harmful if inhaled. May cause an allergic skin reaction. May cause respiratory irritation.
PREVENTION:	Avoid breathing dust/fume/gas/mist/vapors/spray. Use only outdoors or in a well-ventilated area. Wear protective gloves. Contaminated clothing must not be allowed out of the workplace.

2. HAZARDS IDENTIFICATION (continued)

RESPONSE: If inhaled: If breathing is difficult, remove person to fresh air and keep comfortable for breathing.
Call a poison control center/doctor if you feel unwell.
If on skin (or hair): Wash with plenty of water.
If skin irritation or rash occurs: Get medical advice/attention.
Wash contaminated clothing before reuse.

STORAGE: Store in a well-ventilated place. Keep container tightly closed. Store locked up.

DISPOSAL: Dispose of contents/container in accordance with Federal and state regulations.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS #	OSHA Hazardous(Y/N)	Concentration (%)
Hexamethylene diisocyanate polymer	28182-81-2	Y	> 99
Hexamethylene diisocyanate	822-06-0	Y	< 1

4. FIRST AID MEASURES

EYE CONTACT: Hold eyelids open and flush with a steady, gentle stream of water for at least 15 minutes. Seek medical attention if irritation develops or persists.

SKIN CONTACT: Remove contaminated clothing and shoes. Wash with plenty of water, for at least 15 minutes. Seek medical attention if irritation develops or persists. Launder contaminated clothing and shoes before re-use.

INGESTION: Do not induce vomiting. If victim is conscious and alert, give 1-2 glasses of water to drink. Do not give anything by mouth to an unconscious person. Seek immediate medical attention. Do not leave victim unattended.

INHALATION: If respiratory irritation or distress occurs, remove victim to fresh air. Seek immediate medical attention.

NOTES TO PHYSICIAN: All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred. Treat symptomatically. No specific antidote available.

5. FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA: Water spray, fog, dry chemical, foam, CO_2

UNUSUAL FIRE AND EXPLOSION HAZARDS: Closed containers may rupture due to buildup of pressure when exposed to extreme heat. Cool containers exposed to fire with water. After the fire is extinguished, neutralize the spilled material with decontaminant. Keep the area clear. Clean up residual material by washing area with water. Collect washings for disposal.

SPECIAL PROTECTIVE EQUIPMENT FOR FIRE FIGHTERS: Firefighters should wear NIOSH/MSHA-approved self-contained breathing apparatus and full protective clothing. Cool containers exposed to fire with water.

HAZARDOUS DECOMPOSITION MATERIALS UNDER FIRE CONDITIONS: Oxides of carbon, hydrogen cyanide.

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS: Evacuate area. Wear appropriate protective gear for the situation. (See Personal Protection Information in Section 8).

ENVIROMENTAL PRECAUTIONS: Do not flush to drain. Spills may be reportable to the National Response Center (800-424-8802) and to state and/or local agencies.

METHOD FOR CLEAN UP: (Small spill) Spray with a neutralizing agent to neutralize. Absorb with an inert absorbant. Dispose of absorbant and rags, waste paper, etc., remove and store in a container with a lid. (Large spill) Dike spill to contain it. Recover as much spill material as possible. Spray with a neutralizing agent to neutralize. Absorb with an inert absorbant. Clean up residual material by washing area with water. Collect washings for disposal. Spills may be reportable to the National Response Center (800-424-8802) and to state and/or local agencies.

7. HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING: Handle material with suitable protection (See Section 8). Handle with adequate ventilation. Avoid breathing vapors. Avoid contact with eyes, skin and clothing.

VENTILATION: General area dilution/exhaust ventilation.

CONDITIONS FOR SAFE STORAGE: Store upright in a cool, dry, well ventilated area out of direct sunlight. Keep away from heat,open flames and ignition sources. Keep container tightly closed. Do not reuse container.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING MEASURES: Set up hand-wash station and eyewash station near work area. General area dilution/exhaust ventilation.

EXPOSURE LIMITS:

Hexamethylene diisocyanate	0.005 ppm – ACGIH TWA

PERSONAL PROTECTION MEASURES:

Respiratory protection: When respirators are required, select NIOSH/MSHA approved equipment based on actual or potential airborne concentrations and in accordance with regulatory standards and/or industrial recommendations. Self-contained or supplied-air respiratory equipmment is recommended.

Eye protection: Safety glasses with side shields, goggles or face shield are recommended.

Skin protection: Skin contact should be minimized through the use of chemical-resistant gloves and boots, and suitable protective clothing.

The following general measures should be taken when working 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 of contact with this material.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE:	Liquid
COLOR:	Pale yellow
ODOR:	Nearly odorless
pH:	No data available
MELTING POINT:	No data available
BOILING POINT:	No data available
FLASH POINT:	441F (227C)
AUTOIGNITION POINT:	No data available
EXPLOSIVE LIMITS(Lower):	No data available
EXPLOSIVE LIMITS(Upper):	No data available
VAPOR PRESSURE:	No data available
VAPOR DENSITY:	No data available
EVAPORATION RATE:	No data available
SPECIFIC GRAVITY:	1.155 @ 73F (23C)
SOLUBILITY IN WATER:	Insoluble
PARTITION COEFFICIENT:	No data available
DECOMPOSITION TEMPERATURE:	No data available

10. STABILITY AND REACTIVITY

CHEMICAL STABILITY:	Material is reacts with water, forming carbon dioxide. Reacts exothermically with amines, water, and alcohols.
CONDITIONS TO AVOID:	Heat, open flame, sparks.
INCOMPATIBLE MATERIALS:	Strong oxidizing agents, strong acids, amines, water, and alcohols.
HAZARDOUS DECOMPOSITION PRODUCTS:	Oxides of carbon, hydrogen cyanide.
HAZARDOUS POLYMERIZATION:	Not applicable

11. TOXICOLOGICAL INFORMATION

EYE CORROSION/IRRITATION:	Slightly irritating, rabbit.
SKIN CORROSION/IRRITATION:	Slightly irritating, rabbit.
ACUTE TOXICITY:	
ACUTE ORAL TOXICITY:	LD_{50} > 5000 mg/kg, rat.
ACUTE DERMAL TOXICITY:	LD_{50} > 9400 mg/kg, rabbit. (Data for polyisocyante class)
ACUTE INHALATION TOXICITY:	LC_{50} = 402 mg/ m^3/4 hour, rat (aerosol). Such aerosols are not encountered outside of the experimental laboratory.
SKIN SENSITIZATION	Positive dermal sensitizer (guinea pig and Local Lymph Node Assay).
GENETIC TOXICITY	Negative in the Ames, the Chinese Hamster Ovary and the Chromosomal Aberration studies
CARCINOGENICITY:	No data available. This product does not contain any substances that are considered by OSHA, NTP, IARC or ACGIH to be “probable” or “suspected” human carcinogens.
REPRODUCTIVE TOXICITY:	Female rats were treated daily for 6 hours/day by inhalation (nose-only) with a similar material (isophorone diisocyanate (IPDI)) from day 6 to day 19 post-coitum to examine potential developmental toxicity effects of the test substance. Dose levels ranged from 0.25 to 4 mg/m^3. Intrauterine development, gestation rate, implantation loss, litter size, sex distribution were not affected at exposure levels up to and including 4 mg/m^3. Reduction of fetal weight was evident in the 4 mg/m^3 group. No-observed-adverse-effect concentrations (NOAECs) for both developmental and maternal toxicity were 1 mg/m^3.
STOT-SINGLE EXPOSURE:	Inhalation is expected to be irritating.
STOT-REPEATED EXPOSURE:	No data available.

12. ECOLOGICAL INFORMATION

ECOTOXICITY:

96hr LC_{50} > 100 mg/L, zebra fish
48hr EC_{50} > 100 mg/L, daphnia
72hr EC_{50} > 72hr EC_{50} > 1000 mg/L freshwater algae, growth rate

PERSISTENCE AND DEGRADABILITY: Not readily biodegradable (Data for polyisocyante class)

MOBILITY IN SOIL: No data available

13. DISPOSAL CONSIDERATION (INCLUDING CONTAINER)

RESIDUAL WASTE: Chemical additions, processing or otherwise altering this material may make the waste management information presented in this SDS incomplete, inaccurate or otherwise inappropriate. Please be advised that state and local requirements for waste disposal may be
more restrictive or otherwise different from Federal laws and regulations. Consult state and local regulations regarding the proper disposal of this material.

CONTAMINATED VESSELS AND CONTAINERS: Rinse containers before disposal. Do not allow rinsate to enter the water systems.
EPA Hazardous Waste = No

14. TRANSPORTATION INFORMATION

PROPER SHIPPING NAME: NOT REGULATED
UN NUMBER: None
UN CLASS or DIVISION: None
UN PACKING GROUP: None
LABELS: None
EMERGENCY GUIDE#: None

15. REGULATORY INFORMATION

Inventory Status:

US (TSCA): Yes
Canada (DSL): Yes
EU (REACH): Exempt (polymer)
Australia (AICS): Yes
Japan (METI): Yes
Korea (KECL): Yes

Where: Yes = all ingredients are listed on the inventory, Exempt = All ingredients are either on the inventory or exempt from the requirements of listing, No = Not determined, or one or more ingredients are not on the inventory and are not exempt from listing

15. REGULATORY INFORMATION (continued)

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/CERCLA Hazardous Substances:
Diisocynates (generic group) 100%
California Proposition 65: This product does not contain any components that are regulated under Proposition 65.

16. OTHER INFORMATION INCLUDING INFORMATION ON PREPARATION AND REVISION OF THIS SDS

National Fire Protection Association ("NFPA") Hazard Ratings:

Health: 2 (Moderate)
Flammability: 1 (Slight)
Reactivity: 1 (Slight)

National Paint and Coatings Hazardous Materials Identification System ("HMIS") Hazard Ratings:

Health: 2 (Moderate)
Flammability: 1 (Slight)
Physical Hazard: 1 (Slight)

HISTORY:

Date previous SDS:	April 5, 2015
Date of issue:	September 14, 2019
Reasons for Revision:	Regulatory review and update. Change(s) in Section(s): 11, 12

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END OF SAFETY DATA SHEET