

## Section 1. Product and Company Identification

Product Name	ILLUSTRIMUM™ M1172 DTM ISO
Manufacturer	Quantum Technical Services Ltd. (Dba Quantum Chemical) 15 Riel Drive St. Albert, AB, Canada T8N 3Z2 Tel: (780) 458-3355 (non-emergency phone number) Fax: (780) 458-2852 <a href="http://www.quantumchemical.com">www.quantumchemical.com</a>
Chemical Emergencies	For 24-Hour Emergency call Canutec at 613.996.6666

## Section 2. Hazards Identification

### 2.1 Classification

#### GHS Classification

Acute Toxicity: Inhalation – Category 4

Respiratory Sensitization – Category 1

Skin Sensitization – Category 1

Specific Target Organ Toxicity (single exposure) [Respiratory Tract irritation] – Category 3

Specific Target Organ Toxicity – Repeated Exposure Inhalation (Lungs) – Category 2

### 2.2 Label Elements:

#### Pictogram:



Signal Word: **DANGER**

**Emergency Overview: May cause allergic skin reaction. May cause skin, eye, and respiratory tract irritation. Harmful by inhalation and if swallowed.**

#### Hazard Statements:

H317	May cause an allergic skin reaction.
H332	Harmful if inhaled.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.
H373	May cause damage to organs (lungs) through prolonged or repeated exposure.

#### Precautionary Statements:

P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/protective clothing/eye protection /face protection.
P285	In case of inadequate ventilation, wear respiratory protection which meets the requirements in OSHA'S Respiratory Protection Standard (29 CFR 1910.134) or regional standards.

**Response:**

<b>P370 + P378</b>	In case of fire: Use water spray, carbon dioxide, dry chemical, or foam to extinguish.
<b>P303 + P361 + P353</b>	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
<b>P304 + P340</b>	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
<b>P301 + P310</b>	IF SWALLOWED: Immediately call a POISON CENTER/doctor.
<b>P305 + P351 + P338</b>	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
<b>P331</b>	Do NOT induce vomiting.
<b>P332 + P313</b>	If skin irritation occurs: Get medical advice/attention.
<b>P362 + P364</b>	Take off contaminated clothing and wash before reuse.

**Storage:**

<b>P403 + P233</b>	Store in a well-ventilated place. Keep container tightly closed.
<b>P235</b>	Keep cool.

**Disposal**

<b>P501</b>	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.
-------------	--

**Section 3. Composition and Ingredient Information**

Ingredients	%	C.A.S. #
Hexamethylene – 1,6-diisocyanate Homopolymer	65-85	28182-81-2
Diethyl Fumarate	5-10	623-91-6

Note: Ingredient content ranges are given to protect proprietary information.

**Section 4. First Aid Measures**

Eye Contact	Immediately flush with plenty of water for at least 15 minutes. If redness, itching, or a burning sensation develop, seek medical attention.
Skin Contact	Remove from skin immediately. Rinse with clean water for 20-30 minutes. Use soapy water if needed. If redness, itching, or a burning sensation develop, seek medical attention.
Inhalation	Move victim to fresh air immediately. Give oxygen and seek medical attention.
Ingestion	<b>Do not induce vomiting.</b> Dilute with water and seek medical attention immediately.

**Section 5. Fire Fighting Measures**

Flash Point	>200° F (93°C).
Auto Ignition Temperature (C)	
Extinguishing Media	Foam/carbon dioxide/dry chemical/water fog.
Protective Equipment	Safety glasses and gloves.
Unusual Hazards	Closed containers may rupture from build-up of pressure when exposed to extreme heat.
Sensitivity to Mechanical	Not expected to be sensitive to mechanical impact.
Special Fire Fighting Procedures	Remove all ignition sources. Wear self-contained breathing apparatus and complete personal protective equipment when entering confined areas where potential for exposure to vapors or products exist.

## Section 6. Accidental Release Measures

Leak/Spill	Avoid contact with substance. All persons involved in clean-up must be wearing appropriate protective equipment. Stop the spill at source, pump liquid to salvage container. Remaining liquid may be taken up on clay, diatomaceous earth, or other absorbent. Treat with decontamination solutions: Nonionic surfactant Union Carbide's Tergitol TMN-10 (20%) and water (80%); concentrated ammonia (3-8%), detergent (2%) and water (90-95%).
------------	---

## Section 7. Handling and Storage

Handling Procedures	Avoid skin and eye contact. Avoid breathing fumes. Wash thoroughly before eating or drinking.
Storage Needs	Store in a cool and dry place away from ignitable sources as exothermic generation of carbon dioxide may cause dangerous pressure. Store in tightly sealed containers and protect from moisture. Re-seal partially used containers.

## Section 8. Exposure Controls and Personal Protection.

Protective Equipment	
Eye/Type	Chemical tight goggles; full face shield if possibility of splashing.
Respiratory/Type	Respiratory masks should be worn at all times in the case of inadequate ventilation. A NIOSH/MSHA respirator is acceptable.
Gloves/Type	Use neoprene or rubber gloves.
Clothing/Type	Wear adequate protective coveralls and footwear.
Other/Type	Eyewash fountain. Emergency shower should be in close proximity.
Ventilation Requirements	Ventilate adequately. Local exhaust may be required in certain instances and mechanical exhaust is usually sufficient

## Section 9. Physical and Chemical Properties

Physical State	Liquid.
Appearance	Clear/pale yellow.
Odor	Slightly musty.
Specific Gravity	1.15 @ 25°C.
Vapor Pressure (mm Hg)	Approx. $5.2 \times 10^{-9}$ .
Vapor Density (Air=1)	No Data.
Evaporation Rate	No Data.
Boiling Point	382° F.
pH	No Data.
Solubility in water	Insoluble in water @ 68° F (20°C).
Freezing Point (°C)	N/D
Melting Point	N/D
Percent Solids by Weight	9.6 lb/gal.
Percent Volatile (g/l)	0% by weight; 0% by volume.
VOC (g/l)	0% with water; 0% without water.
Viscosity	650-750

## Section 10. Stability and Reactivity

Stability	Stable.
Conditions to Avoid	Excessive heat, open flame, sparks, and strong oxidizing agents. Protect from atmospheric moisture. Replace outage with inert dry nitrogen.
Incompatibility	Water, acid, base (alkalis, ammonia), alcohols, metal compounds.
Reactivity Conditions	See "incompatibility".
Hazardous Products of Decomposition	Isocyanate vapors or mist, carbon dioxide, carbon monoxide, nitrogen oxides.
Conditions to Avoid	Avoid incompatible reactants, especially strong bases, water or temperatures over 160°C.

## Section 11. Toxicological Information

Acute Oral Toxicity(LD50)	>10000 mg/Kg (rats).
Dermal (LD50)	>5000 mg/Kg (rabbits).
Inhalation (LC50)	Lower respiratory (pulmonary) irritant. LC50 Value Range from 137-1150 MG/M3 were obtained in rats exposed to aerosols. (4H EXP.)
Severe Irritant	Capable of inducing corneal injury (rabbit). Maximum primary eye irritant score: 54.6/110 for 24 hour skin effects: Moderate and Dermal. Primary dermal irritation score: 3.4/8.0 (rabbit).
Sensitizing Capability of Material	Pulmonary and dermal sensitizer in animals and humans.
Carcinogenicity of Material	Not classified as carcinogenic.
Teratogenicity	Not available.
Mutanagenicity	Not available.
Reproductive Effects	Not available.
Synergistic Materials	None known.

## Section 12. Ecological Information

<b>Aquatic Toxicity:</b>	
Zebra Fish : LC50 (96hr) 100 mg/l.	
Water Flea: EC50 (48 hour) .100 mg/l.	
<b>Persistence/Degradability</b>	Not readily biodegradable.
<b>Bioaccumulation</b>	Accumulation is not expected.

## Section 13. Disposal Considerations

Waste Disposal	In accordance with municipal, provincial and federal regulations. Empty containers must be handled with care due to product residue. Do not heat or cut empty containers with electric or gas torch.
----------------	--

## Section 14. Transport Information

Proper Shipping Name	Polyisocyanate.
Hazard Class:	Non-regulated in 55 gallon drums, NOI.

## Section 15. Regulatory Information

TSCA

(Toxic Substance Control Act)

If exported to the United States all chemical substances in this shipment comply with all applicable rules or orders under TSCA and there are no chemical substances in violation of TSCA or any applicable rule or order thereunder.

## Section 16. Other Information

Revision Date:

July 11, 2018

Note

This information is furnished without warranty, expressed or implied, except that it is accurate to the best knowledge of Quantum Technical Services Ltd. The data on this sheet relates only to the specific material designated herein. Quantum Technical Services Ltd. assumes no legal responsibility for use or reliance upon this data.