

SECTION 1. IDENTIFICATION

Product Identifier Catalyst 275-50C
Other Means of Identification 2 component polyurethane
Manufacturer Glass-Shield, 111 Bombardier, Chateauguy, Quebec, J6J 4Z2, H&S Department, 1-800-361-6652
Emergency Phone No. CANUTEC, 1-613-996-6666, 24 hours
SDS No. 0034
Date of Preparation avril 07, 2015

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

Flammable liquid - Category 2; Acute toxicity (Inhalation) - Category 2; Skin corrosion/irritation - Category 2; Serious eye damage/eye irritation - Category 1; Aspiration hazard - Category 1; Aquatic hazard (Chronic) - Category 2

GHS Label Elements



Signal Word:

Danger

H225 Highly flammable liquid and vapour.
H304 May be fatal if swallowed and enters airways.
H315 Causes skin irritation.
H318 Causes serious eye damage.
H411 Toxic to aquatic life with long lasting effects.

Precautionary Statement(s):

Prevention:

P210 Keep away from heat/sparks/open flames/hot surfaces. – No smoking.
P260 Do not breathe dust/fume/gas/mist/vapours/spray.
P280 Wear protective gloves/eye protection/face protection.
P301 + P310 IF SWALLOWED: Immediately call a POISON CENTRE/doctor
P284 In case of inadequate ventilation wear respiratory protection (NIOSH approved air-purifying respirator with an organic vapour cartridge).

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixture:

Chemical Name	CAS No.	%	Other Identifiers
Hexamethylene diisocyanate based isocyanurates	28182-81-2	30-60%	

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Xylene (mixed isomers)	1330-20-7	15-40%	
Ethyl Benzene	100-41-4	7-13%	
n-Butyl acetate	123-86-4	7-13%	
Hexamethylene diisocyanate	822-06-0	0,1-1,0%	
Isophorone diisocyanate	4098-71-9	0,1-1,0%	
Cyclohexane, 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethyl-, homopolymer	53880-05-0	10-30%	

SECTION 4. FIRST-AID MEASURES

First-aid Measures

Inhalation

Move to fresh air. If breathing has stopped, trained personnel should begin rescue breathing. Get medical advice/attention if you feel unwell or are concerned.

Skin Contact

Immediately rinse with lukewarm, gently flowing water for 15-20 minutes. Get medical advice/attention if you feel unwell or are concerned.

Eye Contact

Immediately rinse the contaminated eye(s) with lukewarm, gently flowing water for 15-20 minutes, while holding the eyelid(s) open. If eye irritation persists, get medical advice/attention.

Ingestion

Do not induce vomiting. Never give anything by mouth if victim is rapidly losing consciousness, or is unconscious or convulsing. Do not induce vomiting. Rinse mouth with water. Immediately call a Poison Centre or doctor.

First-aid Comments

Get medical advice/attention if you feel unwell or are concerned. Some of the first-aid procedures recommended here require advanced first-aid training.

Most Important Symptoms and Effects, Acute and Delayed

Symptoms may include headache, nausea, dizziness, drowsiness and confusion.

SECTION 5. FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media

Carbon dioxide, dry chemical powder, appropriate foam, water spray or fog.

Unsuitable Extinguishing Media

Water is not effective for extinguishing a fire. It may not cool product below its flash point.

Specific Hazards Arising from the Chemical

Reactive flammable.

Very toxic carbon monoxide, carbon dioxide.

Special Protective Equipment and Precautions for Fire-fighters

Fight fire from a safe distance or a protected location.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment, and Emergency Procedures

Evacuate the area immediately. Isolate the hazard area. Keep out unnecessary and unprotected personnel. Get expert advice. Use the personal protective equipment recommended in Section 8 of this safety data sheet. Increase ventilation to area or move leaking container to a well-ventilated and secure area. Eliminate all ignition sources. Use grounded, explosion-proof equipment.

Environmental Precautions

It is good practice to prevent releases into the environment. Do not allow into any sewer, on the ground or into any

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waterway. If the spill is inside a building, prevent product from entering drains, ventilation systems and confined areas.

Methods and Materials for Containment and Cleaning Up

Stop or reduce leak if safe to do so. Contain and soak up spill with absorbent that does not react with spilled product. Do not use absorbents. Contain spill using noncombustible material such as vermiculite, earth or sand.

Other Information

Report spills to local health, safety and environmental authorities, as required. Contact supplier, local fire and emergency services for help.

SECTION 7. HANDLING AND STORAGE

Precautions for Safe Handling

Avoid repeated or prolonged skin contact. Do not get in eyes. Avoid breathing in this product. Avoid release to the environment. Eliminate heat and ignition sources such as sparks, open flames, hot surfaces and static discharge. Post "No Smoking" signs. Good housekeeping is extremely important. Prevent dust accumulation on ALL surfaces including ceiling rafters and other hidden surfaces. Do not carry or transfer this product in an enclosed space (e.g. in an elevator or inside a vehicle). Keep dry. Prevent exposure to water and humidity. Handle under inert gas atmosphere in dry equipment. Prevent any accidental contact with water in handling and storage areas. Do NOT smoke in work areas.

Conditions for Safe Storage

Store in an area that is: cool, temperature-controlled, dry, well-ventilated, an approved, fire-resistant area.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

Chemical Name	ACGIH TLV®		OSHA PEL		AIHA WEEL	
	TWA	STEL	TWA	Ceiling	8-hr TWA	TWA
Ethyl Benzene	25 ppm	125 ppm	100 ppm			
Xylene (mixed isomers)	100 ppm A4	150 ppm A4	100 ppm			
n-Butyl acetate	150 ppm	200 ppm	150 ppm			
Hexamethylene diisocyanate	0,00500 ppm	0,00500 ppm	0,00500 ppm			
Isophorone diisocyanate	0,0005 ppm	0,02 ppm	0,005 ppm			
Cyclohexane, 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethyl-, homopolymer	Not established	Not established	Not established			
Hexamethylene diisocyanate based isocyanurates	0,00500 ppm	0,00500 ppm	0,00500 ppm			

Appropriate Engineering Controls

Use non-sparking ventilation systems, approved explosion-proof equipment and intrinsically safe electrical systems in areas where this product is used and stored. Control static electricity discharges which includes bonding of equipment to ground. Provide eyewash and safety shower if contact or splash hazard exists.

Individual Protection Measures

Eye/Face Protection

Wear chemical safety goggles.

Skin Protection

Wear chemical protective clothing e.g. gloves, aprons, boots.
Nitrile rubber.

Respiratory Protection

Wear a NIOSH approved air-purifying respirator with an organic vapour cartridge.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Basic Physical and Chemical Properties

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Appearance	Colourless. Particle Size: Not applicable
Odour	Ethereal (n-Butyl acetate)
Odour Threshold	Not available
pH	Not applicable
Melting Point/Freezing Point	Not available (melting); -78 °C (n-Butyl acetate) (freezing)
Initial Boiling Point/Range	126 °C (estimated) (Ethyl Benzene)
Flash Point	22 °C
Evaporation Rate	1
Flammability (solid, gas)	Not available
Upper/Lower Flammability or Explosive Limit	8% (upper); 1% (lower)
Vapour Pressure	>= 1 kPa (n-Butyl acetate)
Vapour Density (air = 1)	4
Relative Density (water = 1)	1 at 25 °C (n-Butyl acetate)
Solubility	Practically insoluble (less than 1 g/L) in water; Soluble in all proportions in common organic solvents.
Partition Coefficient, n-Octanol/Water (Log Kow)	Not available
Auto-ignition Temperature	425 °C
Decomposition Temperature	Not available
Viscosity	1 mm ² /s (kinematic); Not available (dynamic)
Other Information	
Physical State	Liquid
Molecular Formula	Not available
Molecular Weight	116.16
Bulk Density	Not available
Surface Tension	Not available
Critical Temperature	Not available
Electrical Conductivity	4.3 x 10 ⁽³⁾ pS/m (19,21)
Vapour Pressure at 50 deg C	Not available
Saturated Vapour Concentration	13200 ppm at 20 °C
Other Physical Property 1	Not available
Other Physical Property 2	Not available
Other Physical Property 3	Not available

SECTION 10. STABILITY AND REACTIVITY

Reactivity

Not reactive.

Chemical Stability

Normally stable.

Possibility of Hazardous Reactions

Reacts in the presence of contaminants. May cause a fire.

Conditions to Avoid

Open flames, sparks, static discharge, heat and other ignition sources.

Incompatible Materials

Reacts violently with: organic acids (e.g. acetic acid), inorganic acids (e.g. hydrofluoric acid), oxidizing agents (e.g. peroxides).

Hazardous Decomposition Products

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SECTION 11. TOXICOLOGICAL INFORMATION**Acute Toxicity**

Chemical Name	LC50	LD50 (oral)	LD50 (dermal)
Ethyl Benzene	4000 ppm (rat) (4-hour exposure)	3500 mg/kg (rat)	15380 mg/kg (rabbit)
Xylene (mixed isomers)	6700 ppm (rat) (4-hour exposure)	3523 mg/kg (rat)	Not available
n-Butyl acetate	2000 ppm (rat) (4-hour exposure)	12700 mg/kg (male rat)	< 5000 mg/kg (rabbit)
Hexamethylene diisocyanate	462 mg/m ³ (rat) (4-hour exposure)	19800 mg/kg (rat)	< 15800 mg/kg (rabbit)
Isophorone diisocyanate	123-160 mg/m ³ (rat)	> 2500 mg/kg (male rat)	1000 mg/kg (rat) (4-hour exposure)
Cyclohexane, 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethyl-, homopolymer	Not available	Not available	Not available
Hexamethylene diisocyanate based isocyanurates	462 mg/m ³ (rat) (4-hour exposure)	19800 mg/kg (rat)	< 15800 mg/kg (rabbit)

Skin Corrosion/Irritation

Human experience shows moderate or severe irritation.

Serious Eye Damage/Irritation

Symptoms include slight redness and pain.

STOT (Specific Target Organ Toxicity) - Single Exposure**Inhalation**

May be harmful.

Skin Absorption

May be harmful.

Ingestion

May be harmful based on information for closely related materials.

Aspiration Hazard

Symptoms may include coughing, choking, shortness of breath, difficult or rapid breathing, and wheezing.

STOT (Specific Target Organ Toxicity) - Repeated Exposure

Causes damage to organs based on information for closely related chemicals.

Respiratory and/or Skin Sensitization

Not known to be a respiratory sensitizer.

Carcinogenicity

Chemical Name	IARC	ACGIH®	NTP	OSHA
Ethyl Benzene	Not evaluated			
Xylene (mixed isomers)	Group 3			
n-Butyl acetate	Not evaluated			
Hexamethylene diisocyanate	Not evaluated	Not Listed	Not Listed	
Hexamethylene diisocyanate based isocyanurates	Not evaluated	Not Listed	Not Listed	

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Conclusions cannot be drawn from the limited studies available.

Key to Abbreviations

A2 = Suspected human carcinogen.

Reproductive Toxicity

Development of Offspring

No information was located.

Sexual Function and Fertility

No information was located.

Effects on or via Lactation

No information was located.

Germ Cell Mutagenicity

No information was located.

Interactive Effects

No information was located.

SECTION 12. ECOLOGICAL INFORMATION

(Xylene (mixed isomers)). (n-Butyl acetate). (Ethyl Benzene). (Light aromatic solvent naphtha)

Persistence and Degradability

Does not degrade rapidly based on quantitative tests.

Bioaccumulative Potential

This product and its degradation products are not expected to bioaccumulate based on quantitative structure-activity relationships.

Mobility in Soil

If released into the environment, this product does not move through the soil.

Other Adverse Effects

This product contains volatile organic compounds.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal Methods

Recycle and reuse product, if possible. Contact local environmental authorities for approved disposal or recycling methods in your jurisdiction. The required hazard evaluation of the waste and compliance with the applicable hazardous waste laws are the responsibility of the user. This product and its container must be disposed of as hazardous waste. Do NOT dump into any sewers, on the ground or into any body of water. Treat waste in an approved waste disposal facility.

SECTION 14. TRANSPORT INFORMATION

Regulation	UN No.	Proper Shipping Name	Transport Hazard Class(es)	Packing Group
US DOT	1263	Catalyst 275-50C	3	III

Special Precautions for User Not applicable

Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15. REGULATORY INFORMATION

Safety, Health and Environmental Regulations

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Canada

WHMIS Classification



Class B2



Class D2B

B2 - Flammable Liquid; D2B - Toxic

Domestic Substances List (DSL) / Non-Domestic Substances List (NDSL)

All ingredients are listed on the DSL/NDSL.

CEPA - National Pollutant Release Inventory (NPRI)

Part 5.

USA

Toxic Substances Control Act (TSCA) Section 8(b)

All ingredients are listed on the TSCA Inventory.

SECTION 16. OTHER INFORMATION

NFPA Rating

Flammability - 2

Instability - Not assigned.

Revision Indicators

The following MSDS content was changed on avril 01, 2015:
Section 8 - Exposure Controls/Personal Protection; Exposure Guidelines.
The following MSDS content was changed on avril 02, 2015:
Section 8 - Exposure Controls/Personal Protection; Exposure Guidelines.
The following MSDS content was changed on avril 02, 2015:
Section 11 - Toxicological Information; LC50/LD50 values.
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Section 11 - Toxicological Information; LC50/LD50 values.
The following MSDS content was changed on avril 02, 2015:
Section 8 - Exposure Controls/Personal Protection; Exposure Guidelines.
The following MSDS content was changed on avril 07, 2015:
Section 8 - Exposure Controls/Personal Protection; Exposure Guidelines.
The following MSDS content was changed on avril 07, 2015:
Section 11 - Toxicological Information; LC50/LD50 values.
The following MSDS content was changed on avril 08, 2015:
Section 8 - Exposure Controls/Personal Protection; Exposure Guidelines.
The following MSDS content was changed on avril 28, 2015:
Section 11 - Toxicological Information; LC50/LD50 values.
The following MSDS content was changed on mai 08, 2015:
Section 8 - Exposure Controls/Personal Protection; Exposure Guidelines.
The following MSDS content was changed on mai 08, 2015:
Section 11 - Toxicological Information; LC50/LD50 values.

Key to Abbreviations

ACGIH® = American Conference of Governmental Industrial Hygienists
AIHA = American Industrial Hygiene Association
HSDB® = Hazardous Substances Data Bank
IARC = International Agency for Research on Cancer
NFPA = National Fire Prevention Association
NIOSH = National Institute for Occupational Safety and Health
NTP = National Toxicology Program
OSHA = US Occupational Safety and Health Administration
RTECS® = Registry of Toxic Effects of Chemical Substances

References

CHEMINFO database. Canadian Centre for Occupational Health and Safety (CCOHS).
HSDB® database. US National Library of Medicine. Available from Canadian Centre for Occupational Health and Safety (CCOHS). NIOSH Pocket Guide database. National Institute for Occupational Safety and Health. Available from Canadian Centre for Occupational Health and Safety (CCOHS). Registry of Toxic Effects of Chemical Substances (RTECS®) database.

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