

**HALL CHEM MFG. INC.**1270 rue Nobel  
Boucherville Qc J4B 5H1

Tel. : (450) 645-0296

Fax : (450) 645-0444

**MATERIAL SAFETY DATA SHEET****EMERGENCY: CANUTEC (613) 996-6666****MSDS :535 -2****PRODUCT IDENTIFICATION AND USE****NAME OF PRODUCT :** Vision X - 40°C**USE OF PRODUCT :** Windshield washer fluid**TRANSPORTATION OF DANGEROUS GOODS**

TDG

**SHIPPING NAME :** Alcohols, flammable, toxic N.O.S. (methanol/water solution) (> 450L only)**WHMIS CLASSIFICATION:** B2, D1B, D2A,D2B**P.N.I. :** UN 1986**PRIMARY CLASS :** 3**PACKING GROUP :** III**SUBSIDIARY CLASS :** 6.1**U.S. DOT HAZARD CLASSIFICATION ( For Ground Shipments Only)****HAZARD CLASS/PACKING GROUP: ORM-D**

Alcohols, flammable, toxic N.O.S. (methanol/water solution), 3,(6.1)UN1986, PGIII

Quantities limit passenger : 60L, Quantities limit cargo aircraft : 220L, Vessel slow req locations : A,

Special Provision: B1,IB3,T7,TP1,TP28

**DOT MARINE POLLUTANTS:** This product does not contain Marine Pollutants as defined in 49 CFR 171.8.**IMDG CODE SHIPPING CLASSIFICATION:**

Only containers not over 5L can be shipped as Limited Quantities

Shipping Name: Alcohols, flammable, toxic N.O.S. (methanol/water solution), 3,(6.1)UN1986, PGIII, FP38C,

IBC instructions : IBC 03, Pack instructions non bulk: P001, Slow&amp;Seg: Category A, Outer package cannot weigh more than 30 kg, Special Provision:223,274,944

**IATA REGULATIONS:**

Shipping Name: Alcohols, flammable, toxic N.O.S. (methanol/water solution), 3, UN1986, PGIII

UN 1986, Class: 3,(6.1) PG: III, Hazard Label: Flammable Liquid&amp;Toxic, Passenger quantities: 60L, Cargo bulk

qty: 220L, Air craft Lim. Qty.: 2L, Ltd.Qty. Packaging instruction:Y309 , ERG code:3HP, Special Provision:A3

**COMPONENTS**

COMPOSITION	% B/W	CASE #	LD <sub>50</sub> mg/kg Oral/rat	LC <sub>50</sub> ppm 4h	TLV ppm 8h
Methanol	40-48	67-56-1	6200 to 13 000	64 000	200
Performance additives					

**PHYSICAL CHARACTERISTICS**

<b>PHYSICAL STATE :</b> Liquid	<b>APPEARANCE :</b> Blue	<b>ODOR :</b> Alcohol	<b>ODORTRESHOLD :</b> Not available
<b>VAPOR TENSION :</b>	<b>VAPOR DENSITY :</b>	<b>EVAPORATING RATE :</b>	



**HALL CHEM MFG. INC.**1270 rue Nobel  
Boucherville Qc J4B 5H1

Tel. : (450) 645-0296

Fax : (450) 645-0444

**MATERIAL SAFETY DATA SHEET****EMERGENCY: CANUTEC (613) 996-6666**

Not available	Not available	Not available
<b>BOILING RANGE : 79°C</b>	<b>FREEZING POINT : -40°C</b>	<b>pH : N/A</b>
<b>DENSITY (20°C) : 0,934</b>	<b>DISTRIBUTION FACTOR WATER/OIL : Not available</b>	<b>SOLUBILITY IN WATER (25°C) : 100%</b>

**REACTIVITY DATA****CHEMICAL STABILITY :** Stable**INCOMPATIBILITY WITH OTHER PRODUCTS :** Avoid contact with oxidizing agents, strong bases and strong acids. Avoid using in presence of natural rubber. May corrode lead and aluminum.**REACTIVITY CONDITIONS :** Avoid excessive heat, flames and other ignition sources. No hazardous polymerization.**EXPLOSION AND FIRE RISKS****FLAMMABILITY :** Flammable**EXTINGUISHING METHODS :** Water, dry chemical powder purple K, FAM resistant to alcohol with 6% foam or carbon dioxide.**FLASH POINT :** 28°C close cup**AUTO-IGNITION TEMPS. :** 385°C**FLAMMABILITY (% per volume)****SUPERIOR LIMIT :** Not available**LOWER LIMIT :** 3,2**HAZARDOUS COMBUSTION PRODUCT :** Vapors forms a flammable/explosive mixture with air between upper and lower flammable limits. Combustion may produce carbon dioxide, carbon monoxide and formaldehyde.**EXPLOSIBILITY DATA :****TOXICOLOGICAL PROPERTIES**

ABSORPTION WAYS			CONTACT						
SKIN	✓	INHALATION	✓	INGESTION	✓	WITH SKIN	✓	EYES	✓

**EFFECTS OF EXPOSURE TO PRODUCT :** Swallowing even small amount of methanol can cause blindness and death other effects may be nausea, headache, abdominal pain, vomiting and visual disturbances ranging from blurred vision to light sensitivity. Inhalation of high airborne concentration can also irritate mucous membranes, cause sleepiness, confusion, loss of consciousness, digestive and visual disturbances and death. May be absorbed through the skin in toxic or lethal amounts. Causes mild irritation, redness, cracking and drying. Repeated exposure by inhalation or absorption may cause systemic poisoning, brain disorders, impaired vision and blindness. Inhalation may worsen conditions such as emphysema or bronchitis.

**PREVENTIVE MEASURES****PROTECTIVE EQUIPMENT :** Gloves, security glasses and protective apron.**GLOVES :** Butyl and nitrite.

## HALL CHEM MFG. INC.

1270 rue Nobel  
Boucherville Qc J4B 5H1

Tel. : (450) 645-0296

Fax : (450) 645-0444

# MATERIAL SAFETY DATA SHEET

**EMERGENCY: CANUTEC (613) 996-6666**

**RESPIRATORY SYSTEM :** Necessary over the permitted limit.

**OCULAR INSTRUMENT :** Security glasses and face shield.

**CLOTHING :** Apron, jacket

**TECHNICAL CONTROL :** Ventilation

**PROCEDURE IN CASE OF LEAKS/SPILLS :** Extremely flammable liquid. Eliminate all ignition sources, stop spill and use absorbent materials. Collect liquid with explosion proof pumps. For small spills, collect with a non-combustible absorbent. Recover methanol or dilute with water to reduce fire hazard. Do not throw in the sewers or garbage.

**HANDLING :** Avoid breathing vapor. Do not get in eyes, skin or on clothing. Wash thoroughly with soap and water after handling.

**WASTE DISPOSAL :** Incineration, biological treatment of dilute solution, or landfill of solidified prior to disposal in accordance with local, federal and provincial regulations.

**STORAGE :** In a cool, dry and well ventilated area. Keep away from incompatible material and from sources of ignition (naked flames, sparks, electricity). Keep the containers grounded especially during pumping and transfer operations.

## FIRST AID

**EYES :** Remove contact lenses if present and easy to do so. In case of contact, immediately flush eyes with plenty of clean running water for at least 15 minutes, lifting the upper and lower eyelids occasionally. Obtain medical attention.

**SKIN :** If in skin or hair, remove immediately all contaminated clothing. Rinse skin with water/shower. In case of contact, remove contaminated clothing. In a shower, wash affected areas with soap and water for at least 15 minutes. Seek medical attention if irritation occurs or persists. Wash contaminated clothing before reuse. Prolonged contact with methanol may defat skin tissue, resulting in drying and cracking.

**INGESTION :** If swallowed immediately call a POISON CENTRE or doctor. Rinse mouth. Swallowing methanol is potentially life threatening. Onset of symptoms may be delayed for 18 to 24 hours after digestion. If conscious and medical aid is not immediately available, do not induce vomiting. In actual or suspected cases of ingestion, transport to medical facility immediately. (See note to physician)

**INHALATION :** If inhaled, remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTRE or doctor. Specific treatment is urgent (see note to physician).

**NOTES TO THE ATTENTION OF THE DOCTOR :** Acute exposure to methanol, either through ingestion or breathing high airborne concentrations can result in symptoms appearing between 40 minutes and 72 hours after exposure. Symptoms and signs are usually limited to the Central Nervous System (CNS), eyes and gastrointestinal tract. Because of the initial CNS's effects of headache, vertigo, lethargy and confusion, there may be an impression of ethanol intoxication. Blurred vision, decreased acuity and photophobia are common complaints. Treatment with ipecac or lavage is indicated in any patient presenting within two hours of ingestion. A profound metabolic acidosis occurs in severe poisoning and serum bicarbonate levels are a more accurate measure of severity than serum methanol levels. Treatment protocols are available from most major hospitals and early collaboration with appropriate hospitals is recommended. Ethanol significantly decreases the toxicity of methanol because it competes for the same metabolic enzymes, and has been used to treat methanol poisoning.



**HALL CHEM MFG. INC.**

1270 rue Nobel  
Boucherville Qc J4B 5H1

Tel. : (450) 645-0296

Fax : (450) 645-0444

**MATERIAL SAFETY DATA SHEET**

**EMERGENCY: CANUTEC (613) 996-6666**

---

---

**INFORMATION ON THE M.S.D.S. PREPARATION**

**PREPARED BY :**  
**Hall Chem Mfg. Inc.**

**TELEPHONE : (450) 645-0296**

**REVISED January 2015**

**NOTE :**

The information in this detailed M.S.D.S. is available on request, for the customer service. It must not be used for any other purpose and its reproduction and/or publication is forbidden without the consent of HALL CHEM MFG. INC. Even though this information is based on reliable sources, HALL CHEM MFG. INC. cannot guarantee its accuracy and formally excludes all explicit guarantee relative to the exactitude of this information or of the results following its application.

