

Section 1. Chemical product and supplier identification

Trade name	H-Go Multi-Vehicle Antifreeze – 30/70
Synonymous	Coolant
Recommended use	Industrial applications : Coolant formulation and antifreeze.
Supplier	Harnois Groupe pétrolier 80, Route 158 Saint-Thomas, QC, J0K 3L0 Canada Tel: (800) 363-2712
Emergencies	CANUTEC: (613) 996-6666



Section 2. Hazards identification

Product classification	<ul style="list-style-type: none"> • Acute toxicity – Oral – Category 4 • Specific target organ toxicity – Single exposure (respiratory tract irritation) – Category 3 – Respiratory tract irritation
------------------------	---

WHMIS pictograms



Warning	<p>WARNING</p> <ul style="list-style-type: none"> • Harmful if swallowed (H302) • May cause respiratory irritation (H335)
Danger	Harmful by inhalation. May damage the target organ, according to data obtained on animals.
Precautionary	<p>Precaution: Harmful if swallowed. Avoid breathing vapor or mist. Avoid contact with eyes, skin and clothing. Can eventually cause target organ damage, based on data obtained on animals. Use only with adequate ventilation. Keep container tightly closed when not in use.</p> <p>Intervention : SKIN CONTACT : In case of contact, immediately flush skin with plenty of water for at least 20 minutes while removing contaminated clothing and shoes.</p> <p>EYE CONTACT: Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 20 minutes, occasionally lifting the upper and lower eyelids.</p> <p>INHALATION : Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.</p>



Material Safety Data Sheet

INGESTION : Do not induce vomiting. If conscious, rinse out mouth with water. Get medical attention immediately.

Potential acute effects on health

Eyes	Eye irritant. Avoid contact with eyes.
Skin	Skin irritant. Avoid contact with skin and clothing.
Inhalation	Harmful by inhalation. Avoid breathing the vapors or mist. Use only in a well-ventilated environment. Keep the container tightly sealed when the product is not used.
Ingestion	Toxic if ingested. May cause burns to the mouth, throat and stomach.

Potential chronic effects on health

Chronic effects	Contains a substance likely to damage the target organ, according to data obtained on animals.
Carcinogenic effects	No known major effect or critical hazard.
Mutagenic effects	No known major effect or critical hazard.
Teratogenic effects	No known major effect or critical hazard.
Effects on fertility	No known major effect or critical hazard.

Over-exposure — signs/symptoms

Inhalation	It is possible to breathe in this product under certain conditions of handling and use.
Ingestion	It is unlikely that ingestion of small quantities of this product during normal handling will have any harmful effects. Ingestion of large quantities may be toxic. In humans, hepatic, renal and cerebral lesions leading to death may occur.
Skin	Harmful symptoms may also include the following: skin irritation and redness.
Eyes	Harmful symptoms may also include the following: burning, stinging, irritation and redness of the eyes.

See Toxicological Information (section 11)



Material Safety Data Sheet

Section 3. Composition/information on ingredients

<u>Name</u>	<u>CAS Number</u>	<u>% by weight</u>
Ethylene glycol	107-21-1	28-30%
Sodium nitrite	7632-00-0	< 1%
Sodium tetraborate	1330-43-4	< 1%
Sodium trioxosilicate	6834-92-0	< 1%
Sodium nitrate	7631-99-4	< 1%
Sodium mercaptobenzothiazole	2492-26-4	< 1%
Sodium tolyltriazole	64665-57-2	< 1%

According to supplier's current knowledge, and in applicable concentrations, this product does not contain any additional ingredients considered hazardous to health or the environment and, consequently, that should be disclosed in this section.

Section 4. First aid measures

Contact with the eyes	Check whether the victim is wearing contact lenses and remove them if necessary. Rinse immediately with running water for at least 15 minutes, occasionally lifting the upper and lower lids. Consult a physician immediately.
Skin contact	In the event of contact, immediately rinse the skin thoroughly and wash with mild soap.
Inhalation	Move the affected person outside. If the person is not breathing, breathing irregularly or is in respiratory arrest, a qualified person must perform artificial respiration or give oxygen. Loosen any tight clothing such as collar, tie or belt. Obtain medical care immediately.
Ingestion	Communicate IMMEDIATELY with a poison centre, an emergency center or a physician.
Rescuer protection	Do not take any steps involving personal risk or if you have not received adequate training.
Note to the attending physician	All signs/symptoms involving the target organs mentioned in this data sheet may worsen in the event of over-exposure.



Material Safety Data Sheet

Section 5. Fire-fighting measures

Product flammability	Yes, if the product is heated.
Extinguishing media	Use an extinguishing agent appropriate for surrounding fires. If the product is exposed to high temperatures, this may lead to the formation of irritating fumes and vapors. The products of decomposition may include the following substances:
Combustion products	- Carbon dioxide - Carbon monoxide
Firefighting apparatus and methods	In the event of fire, spray with water (mist), foam, extinguishing chemical powder or carbon dioxide.
Special personal protective equipment for the designated firefighting personnel	Firefighters must carry adequate protective equipment, as well as a self-contained breathing apparatus (SCBA) equipped with a full positive pressure mask.
Note on fire Hazard	Low fire hazard. This antifreeze cannot ignite unless it is heated.
Note on the risks of explosion	Do not pressurize, cut, weld, braze, perforate or grind the containers or expose them to heat or sources of ignition.

Section 6. Accidental release measures

Individual precautions	Wear appropriate personal protective equipment (see Section 8). Avoid the dispersion of spilled antifreeze, and its runoff and any contact with the soil, inland waterways, drains and sewers. Alert the competent authorities if the product has caused environmental pollution (sewers, inland waterways, soil or air).
Environmental precautions	

Cleaning methods

Minor spill	Smaller spills can be collected or absorbed using a suitable absorbent material. Product must be disposed of in accordance with local, regional or national legislation.
Major spill	When major spills occur, they must be contained and collected. Note: See Section 1 for information relating to emergencies and see Section 13 for waste disposal.

Section 7. Handling and storage

Maintenance	Eating, drinking and smoking are prohibited in places where this product is handled, stored or processed. Employees should at all times wash their hands and face before eating, drinking or smoking. Before entering areas where food is eaten, it is imperative to remove any contaminated clothing and any personal protective equipment (PPE). Avoid any contact with the eyes, skin or clothing. Do not swallow. Avoid breathing the vapors or mist. Use only if ventilation is adequate.
Storage	Keep the container tightly closed. Store according to local regulations. Keep the product in the original container in a cool, dry and well-ventilated place, away from incompatible substances. Do not store in containers without labels.

Section 8. Exposure controls/personal protection

Technical measures	No special ventilation required. This product must be handled and used in closed containers and equipment. Good overall ventilation is necessary for its use.
Health measures	After handling chemicals, carefully wash your hands, forearms and face before eating, smoking, or going to the toilet and once your work is finished. Use suitable techniques to remove contaminated clothing. Wash contaminated clothing before re-using. Make certain that eye-wash stations and decontamination showers are installed close to work stations.

Individual protection

Eyes	Tight safety goggles to prevent chemical splashing or a face-protecting mask.
Respiratory	Ensure good ventilation with a local ventilation system.
Hands	It is recommended that rubber gloves be worn.

Personal protective equipment (PPE)
(Icons)





Material Safety Data Sheet

Product name

H-Go Multi-Vehicle Antifreeze – 30/70

Exposure limits

Check with local authorities to obtain the acceptable limits of exposure.

Section 9. Physical and chemical properties

Physical and Chemical Properties	Results
Physical state	Liquid
Color	Fluorescent green
Odor	Weak odor
Flash point	NA
Inflammability	NA
Lower flammability or explosive limit	NA
Upper flammability or explosive limit	NA
Spontaneous combustion temperature	NA
pH	10.5
Boiling point at 760 mmHg	125 °C / 257 °F
Freezing point	-17 °C / 1.4 °F
Relative density	1.044
Vapor pressure	0.008 kPa (0,06 mmHg)
Vapour density (air = 1)	2.1
Solubility in water	Complete
Percentage of volatility	NA
Evaporation rate	Less than 1
Sharing coefficient – n-octanol/water	NA
Decomposition temperature	NA
Viscosity	NA



Material Safety Data Sheet

Section 10. Stability and reactivity

Product stability and reactivity	Stable product.
Risk of dangerous reactions	None.
Incompatibility with different substances	Avoid powerful oxidizing agents.
Decomposition products	Combustion can release carbon dioxide or monoxide.
Dangerous polymerization	Cannot occur.

Section 11. Toxicological information

Potential acute effects on health

Inhalation	Exposure to high vapor concentrations coming from this heated antifreeze or to mists of the product may cause nausea, vomiting, headache, dizzy spells and irregular eye movements.
Ingestion	Ingestion leads to abdominal pain and discomfort, dizzy spells, back pain, oliguria, the uremia and a depression of the central nervous system. Ingestion of a large amount may cause renal lesions and death.
Skin contact	Possible minor irritation of the skin. Prolonged or repeated contact may be slightly toxic.
Contact with the eyes	Possible irritation.
Chronic effects	Not available.
Carcinogenic effects	Not available.
Mutagenic effects	Not available.
Teratogenic effects	Not available.
Effects on fertility	Not available.



Material Safety Data Sheet

<u>Name of the product or ingredient</u>	<u>Result</u>	<u>Species</u>	<u>Dose</u>	<u>Exposure</u>
Ethylene glycol	Oral LD50	Rat	4,700 mg/kg	-----
	Cutaneous LD50	Rabbit	11,890 mg/kg	-----
Sodium nitrite	Oral LD50	Rat	12,000 mg/kg	-----
	LC50 dust and mist inhalation	Rat	5.5 mg/m ³	4 hours
Sodium tetraborate	Oral LD50	Rat	85 mg/kg	-----
Sodium trioxosilicate	Oral LD50	Rat	1,200 mg/kg	-----
Sodium nitrate	Oral LD50	Rat	> 1,000 mg/kg	-----
Sodium mercaptobenzothiazole	Oral LD50	Rat	1,267 mg/kg	-----
Sodium tolytriazole	Oral LD50	Rabbit	> 1,025 mg/kg	-----
	Oral LD50	Rat	5,200 mg/kg	-----
	Dermal LD50	Rabbit	> 2,000 mg/kg	-----
	Oral LD50	Rat	640 mg/kg	-----

Section 12. Ecological information

Effects on the environment	May cause a negative long-term impact on the aquatic environment.
Ecotoxicity in an aquatic environment	Not available.
Biodegradability	Not available.
Miscellaneous harmful effects	Not available.

Section 13. Disposal considerations

Waste disposal	Check with the managers of the local sewerage systems and federal, provincial and municipal bodies to determine the most appropriate means of disposing of the product.
----------------	---

Check with the local or regional authorities.

Refer to Section 7: HANDLING AND STORAGE and to Section 8: MONITORING EXPOSURE AND INDIVIDUAL PROTECTION for any additional information on handling and on protection of personnel.



Material Safety Data Sheet

Section 14. Transport information

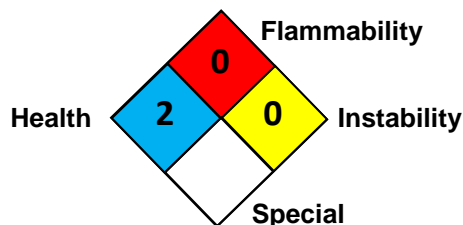
Regulatory Information	UN number	Correct shipping name	Category	Packing group	Label	Other information
DOT Classification	UN 3082	Hazardous materials for environment, liquid, n.s.a (Ethylene glycol)	Class 9	III	-----	-----
TDG Classification	Not regulated.	-----	-----	-----	-----	-----
Mexico Classification	Not regulated.	-----	-----	-----	-----	-----

Section 15. Regulatory information

United States HCS classification	May damage the target organ.
International regulations	Not regulated.
Canadian inventory	All components are inventoried or excluded.
United States inventory (TSCA 8b)	All components are inventoried or excluded.
European inventory, international lists	All components are inventoried or excluded.

Section 16. Other information

National Fire Protection Association
(United States), NFPA Index



Hazardous Materials Systems
Identification, HMIS Index

Health	2
Flammability	0
Physical dangers	0

Information to be put on the label

WARNING

- Harmful if swallowed (H302)
- May cause respiratory irritation (H335)

Issue date

2016.12.02

Notice

To our knowledge, the information contained in this Material Safety Data Sheet is accurate at the date of its publication. The supplier mentioned above cannot assume any liability whatsoever in regard to the accuracy or completeness of the information contained herein. This information is provided indicatively with regard to safety and applies only to the product and the uses indicated in the present Material Safety Data Sheet. This information does not necessarily apply to this product if it is associated with one or more other products, or if it is used for other purposes than those described here. The user is solely responsible for the final decision as to the appropriate use of any product. All products may present unknown hazards and must be used with care. Although certain hazards are described in this document, we cannot guarantee that there are no other hazards.