SAFETY DATA SHEET

SECTION I - PRODUCT IDENTIFICATION

Product Identifier: Vappro 838

Other means of identification: VCI Radiator Coolant

Recommended use:Radiator coolant for automotive **Supplier's Name:**Magna Chemical Canada Inc.

Address: 1450 Government Road West, Kirkland Lake ON P2N 2E9

Phone: 705 642 3352 or 416 479 9151 **Emergency only:** Canutec 24hr Tel: 613 996 6666

Revision date: 15 January 2019

SECTION II – HAZARDS IDENTIFICATION

GHS CLASSFICATION:

Acute Toxicity, Oral: Category 4

Serious Eye damage/irritation: Category 2

Specific target organ toxicity after repeated exposure: Category 2

GHS LABEL ELEMENTS SYMBOL(S)



SIGNAL WORDS:

Warning

GHS HAZARDS STATEMENTS:

H302: Harmful if swallowed

H319: Causes serious eye irritation

H: 373: May cause damage to Kidney, Lungs Cardiovascular system, through prolonged or repeated exposure.

GHS PRECAUTIONARY STATEMENTS:

PREVENTION

P264: Wash your hands and face thoroughly after handling.

P260: Do not breathe dust/fume/gas/mist/vapours/spray.

P270: Do not eat, drink or smoke when using this product.

P280: Wear protective gloves/protective clothing/ eye protection/ face protection.

RESPONSE:

P301 + P312: IF SWALLOWED: Call a POISON CENTRE or doctor or physician if you feel unwell.

P330: Rinse mouth.

P314: Get medical advice/attention if you feel unwell.

P321: Specific treatment (see on this label).

P362: Take off contaminated clothing and wash before reuse

P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337 + P313: If eye irritation persists: Get medical advice/attention.

SECTION III – COMPOSITION / INFORMATION ON INGREDIENTS				
Ingredient Name:	Weight %:	CAS#		
Ethylene Glycol	30-50	107-21-1		
Proprietary mixture of Salts of carboxylate compound and water	50-70	Mixture		

SECTION IV – FIRST AID MEASURES

Inhalation

Remove person to an uncontaminated area. Administer oxygen if necessary. If breathing has stopped, administer CPR.

Skin Contact

Remove contaminated clothing. Wash affected area with water. If irritation persists, call physician.

Eye Contact

Immediately flush with plenty of water for at least 15 minutes. Make sure to flush under eyelids. Consult physician immediately.

Ingestion

DO NOT INDUCE VOMITING. Get immediate medical attention.

SECTION V – FIRE FIGHTING MEASURES

Suitable Fire-extinguishing media

Foam (alcohol-resistant foam), powder, and carbon dioxide are effective fire-extinguishing agents.

Specific hazards arising from the chemical

Product is noncombustible. Water Spray (Fog); Dry Chemical; or Foam may be used where product is stored.

Special protective actions for fire fighters

Firemen should wear self-contained breathing apparatus and protective clothing when fighting chemical fires.

SECTION VI – ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

Avoid contact with spilled or released material. Immediately remove all contaminated clothing. For guidance of selection of personal protective equipments see Chapter 8 of this Safety Data Sheet.

Environmental Precautions

Prevent spills from entering drains or sewers and contact with soil.

Methods and materials for contaminated and cleaning up

Do not touch or walk through spilled material. Prevent the spilled substances from entering the drainage, canals or closed spaces. If safety permits, try to stop or reduce the spillage. Surround the leakage with sand, soil or other absorbing substances that will not react with the leaking substance.

For small amount of leakage: absorb using absorbents that will not react with the leaking substance. Contaminated absorbents are as hazardous as the leakage and must be kept in covered and labeled container.

For large amount of leakage: Contact the fire department, emergency rescue agency and supplier for assistance.

SECTION VII – HANDLING AND STORAGE

Precautions for safe handling

Do not swallow. Avoid eyes and skin contact. Wear recommended protective equipment. Use only with adequate ventilation. Wash thoroughly after handling material.

Conditions for safe storage, including any incompatibilities

Keep container tightly closed when not in use. Store in dry, cool, well-ventilated area away from incompatibles.

SECTION VIII – EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits:

Ethylene Glycol: Ceiling 50 ppm

Appropriate engineering control measure

Overall gas exchange installation. Local exhaust ventilation system must be required during heating and formation of dewdrops. Provide sufficient fresh air supply to supplement the air discharged by the exhaust ventilation system.

Individual protection measure

Protective Gloves

Neoprene/ PVC gloves.

Eye Protection

Safety glasses with side shields are recommended.

Respiratory Protection

Not required under normal use conditions with good general ventilation. Protect against generated mist/ spray back.

Hygienic Work Practices

Wash hand after use. Do not eat, drink or smoke in immediate area.

SECTION IX – PHYSICAL AND CHEMICAL PROPERTIES				
Appearance Physical State	Liquid			
Color	Fluorescent Green			
Odour	Sweet			
Odour Threshold	Not available			
pH	12±0.05			
Melting Point	Not applicable			
Freezing Point	Approx -30°C			
Boiling Point	Approx 110°C			
Flash Point	>100°C			
Evaporation Rate	Not available			
Flammability (solid, gas)	Not applicable			
Upper explosive limit	Not applicable			
Lower explosive limit	Not applicable			
Vapour Pressure	Not available			
Vapour Density	Not available			
Relative Density	$1.1 \text{ g/cm}^3 \pm 0.05$			
Solubility	Completely soluble in water			
Partition coefficient: n-octanol/water	Not available			
Viscosity	Free Flowing Liquid			
Auto-ignition Temperature	Not applicable			

SECTION X - STABILITY & REACTIVITY

Reactivity/Incompatible materials

React with strong acid and oxidizing materials. Tetraphosphorous trisulfide (such as per chloric acid, nitrate, butyric acid): Increases the danger of fire and explosion.

Chemical stability

Stable under normal temperature and pressure.

Possible of hazardous reaction

Data not available.

Conditions to avoid

Heat, contact with incompatible materials, open flame. DC silver -copper wire.

Hazardous decomposition products

Burning may produce oxide of carbons and other substances.

SECTION XI – TOXICOLOGICAL INFORMATION

Oral LD 50

LC 50

Ethylene Glycol

4700 mg/kg (Rat)

 12 mg/m^3

PRIMARY ROUTES OF EXPOSURE

Xeye

Xskin

Xoral

inhalation

other

Eyes: Classified as a serious eye irritant. Liquid will cause irritation and inflammation of the eyelids but will not cause permanent damage.

Skin: Classified as a skin irritant. Exposure to the skin may give rise to irritation. Prolonged and persistent contact may lead to dermatitis through skin de-fatting.

Inhalation: Unlikely to present any significant hazard at ambient temperature. Excessive exposure to mists caused by atomising systems may cause irritation to eyes and respiratory tract.

Ingestion: Induces symptoms of suppression of central nervous system such as nausea, vomiting, lower abdominal pain, feebleness, fatigue, dizziness, absent-mindedness, convulsion, shocks, etc.

Repeated Dose Toxicity: Kidney: can cause kidney damage.

Mutagenicity: Not considered a mutagenic hazard.

Carcinogenicity: Components are not known to be associated with carcinogenic effects.

Reproductive and Developmental Toxicity: Causes foetotoxicity in animals; considered to be secondary to maternal toxicity.

SECTION XII – ECOLOGICAL INFORMATION

Eco-toxicity: LC50 (Fish): 18500 ~ 4100 mg/L/96H

Bio-concentration Factor (BCF): 10~190

Mobility: The product should not be allowed to enter drains or watercourses or be deposited where it can affect ground or surface waters. Avoid transfer into the environment.

Persistence and Degradability: Theoretically, in the presence of 100% oxygen, ethylene glycol will decompose completely in 1-4 days. In reality, it will probably take several weeks. Will decompose in water and will not absorb the deposits.

Bio-accumulative Potential: Not expected to bio-accumulate.

SECTION XIII – DISPOSAL CONSIDERATIONS

Dispose of in accordance with existing Federal, State and local environmental regulation.

SECTION XIV – TRANSPORT INFORMATION				
	Land (ADR)	Sea (IMDG)	Air (IATA)	
UN Number:	Not regulated	Not regulated	Not regulated	
Class:	Not regulated	Not regulated	Not regulated	
Subsidiary risk:	Not regulated	Not regulated	Not regulated	
Packing Group:	Not regulated	Not regulated	Not regulated	
Proper Shipping Name:	Not regulated	Not regulated	Not regulated	

SECTION XV – REGULATORY INFORMATION

SECTION XVI – OTHER INFORMATION

H.M.I.S rating: Health - 2, Fire -0, Reactivity -1, Protection -B

Where

0 = Insignificant

1 = Slight A = Safety Glass

2 = Moderate B = Safety Glass & Gloves

3 =Serious C =Safety Glass, Gloves & Apron 4 =Severe D =Face Shield, Gloves & Apron

Replaces edition of: 10 March 2016

H.M.I.S: Hazardous Materials Identification System

CAS#: Chemical Abstracts Service Number

ACGIH: American Conference of Governmental Industrial Hygienists

OSHA: Occupational Safety and Health Administration

TLV: Threshold Limit Value **PEL**: Permissible Exposure Limit **REL**: recommended exposure limit

TWA8: The time weighted average concentration for a normal 8-hour workday and a 40-hour workweek, to which nearly all workers may be repeatedly exposed, day after day, without adverse effect.

N.A: Not applicable N/E: Not establish N.D: Not determine

C: Ceiling (The concentration that should not be exceeded during any part of the working exposure).

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