GAP PROFESSIONAL PRODUCTS

Safety Data Sheet
GAP Universal Radiator Stop Leak

SECTION 1: Identification

1.1 GHS Product identifier

Product name	GAP Universal Radiator Stop Leak
Product number	40379
Brand	GAP Professional Products

1.3 Recommended use of the chemical and restrictions on use

Automotive cooling system sealant
Professional Automotive, Industrial, or Commercial uses Only. Not for general consumer use.

1.4 Supplier's details

Name	GAP Professional Products
Address	122 Route 105 Keswick Ridge NB E6L 1B1 Canada
Telephone	(506) 363-9708
Fax	(506) 363-4241
email	info@gapauto.com

1.5 Emergency phone number

For Medical or Transport Emergencies
CANUTEC (24 Hours)
(613) 996-6666

SECTION 2: Hazard identification

2.1 Classification of the substance or mixture

GHS classification in accordance with: WHMIS 2015

- Acute toxicity, oral, Cat. 4
- Serious eye damage/eye irritation, Cat. 2B
- Skin corrosion/irritation, Cat. 3
- Acute toxicity, dermal, Cat. 4
- Acute toxicity, inhalation, Cat. 4
- Acute toxicity, oral, Cat. 5
- Serious eye damage/eye irritation, Cat. 1
- Skin corrosion/irritation, Cat. 2
- Skin sensitizer, Cat. 1

2.2 GHS label elements, including precautionary statements

Pictograms

1. Exclamation mark; 2. Corrosion

Signal word **Danger**

Hazard statement(s)

H302	Harmful if swallowed
H303	May be harmful if swallowed
H312	Harmful in contact with skin
H315	Causes skin irritation
H316	Causes mild skin irritation
H317	May cause an allergic skin reaction
H318	Causes serious eye damage
H320	Causes eye irritation
H332	Harmful if inhaled

Precautionary statement(s)

P261	Avoid breathing dust/fume/gas/mist/vapors/spray.
P264	Wash … thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or in a well-ventilated area.
P272	Contaminated work clothing should not be allowed out of the workplace.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+P312	IF SWALLOWED: Call a POISON CENTER/doctor/...if you feel unwell,
P302+P352	IF ON SKIN: Wash with plenty of water/...
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER/doctor/...
P312	Call a POISON CENTER/doctor/... if you feel unwell.
P321	Specific treatment (see … on this label).
P330	Rinse mouth.
P332+P313	If skin irritation occurs: Get medical advice/attention.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P337+P313	If eye irritation persists: Get medical advice/attention.
P362+P364	Take off contaminated clothing and wash it before reuse.
P501	Dispose of contents/container to …

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Hazardous components

Component	Concentration
Water (CAS no.: 7732-18-5; EC no.: 231-791-2)	**60 - 100 % (weight)**
CLASSIFICATIONS: No data available. HAZARDS: No data available.	
Cellulose, microcrystalline (CAS no.: 9004-34-6; EC no.: 232-674-9)	**1 - 5 % (weight)**

CLASSIFICATIONS: US Combustible dust. HAZARDS: No data available.	
Reaction mass of: 5-Chloro-2-methyl4- isothiazolin-3-one and 2-Methyl-2H-isothiazol-3-one (3:1) (CAS no.: 55965-84-9; EC no.: —; Index no.: 613-167-00-5)	
	0.1 - 3 % (weight)
CLASSIFICATIONS: Acute toxicity, inhalation, Cat. 2; Acute toxicity, dermal, Cat. 2; Acute toxicity, oral, Cat. 3; Skin corrosion/irritation, Cat. 1C; Eye damage/irritation, Cat. 1; Sensitization - skin, Cat. 1A; Hazardous to the aquatic environment, short-term (acute), Cat. 1; Hazardous to the aquatic environment, long-term (chronic), Cat. 1. HAZARDS: H301 - Toxic if swallowed; H310 - Fatal in contact with skin; H314 - Causes severe skin burns and eye damage; H317 - May cause an allergic skin reaction; H318 - Causes serious eye damage; H330 - Fatal if inhaled; H400 - Very toxic to aquatic life; H410 - Very toxic to aquatic life with long lasting effects. [SCLs/M-factors/ATEs]: Skin Corr. 1C; : C ≥ ,6 %; Skin Irrit. 2; H315: ,06 % ≤ C < ,6 %; Eye Dam. 1; : C ≥ ,6 %; Eye Irrit. 2; H319: ,06 % ≤ C < ,6 %; Skin Sens. 1A; : C ≥ ,0015 %; M=100; M=100	
Polyacrylamide (CAS no.: 9003-05-8; EC no.: 618-350-3)	**0.1 - 3 % (weight)**
CLASSIFICATIONS: US Combustible dust. HAZARDS: No data available.	
Methylisothiazolinone	**Not specified**
CLASSIFICATIONS: No data available. HAZARDS: No data available.	

SECTION 4: First-aid measures

4.1 Description of necessary first-aid measures

If inhaled	If affected, remove individual to fresh air. If breathing is difficult, administer oxygen. If breathing has stopped, give artifical respiration. Keep person warm, quiet, and get medical attention
In case of skin contact	Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Consult a physician if symptoms occur. Wash contaminated clothes before reuse
In case of eye contact	Rinse thoroughly with plenty of water for at least 15 minutes. Remove contact lenses if easy to do. Get medical attention if symptoms occur.
If swallowed	Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Most important symptoms/effects, acute and delayed
ACUTE: Dermal /Respiratory irritation, vision effects. DELAYED: No symptoms expected.

4.3 Indication of immediate medical attention and special treatment needed, if necessary
Difficulty breathing, dizziness, extreme drowsiness, eye irritation, loss of vision, skin rash.

SECTION 5: Fire-fighting measures

5.1 Suitable extinguishing media
Treat surrounding material. Regular foam, Water Spray, Water Fog, carbon dioxide or dry chemical. Spray using fog nozzles. Keep containers cool with water. Use caution when applying carbon dioxide in confined spaces.

5.2 Specific hazards arising from the chemical
Vapors/fumes may be irritating, corrosive, and/or toxic. Fire fighters must be protected from smoke with self contained breathing apparatus. Heavy smoke may obscure vision. Smoke may contain oxides of carbon, nitrogen, sulfur, and chlorine.

Reaction mass of: 5-Chloro-2-methyl4- isothiazolin-3-one and 2-Methyl-2H-isothiazol-3-one (3:1) : Carbon oxide. Nitrogen oxides.

5.3 Special protective actions for fire-fighters
Wear full protective clothing and self-contained breathing apparatus. Use water spray to cool exposed containers.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
Wash hands after use. Do not eat, drink and smoke in work areas. Remove contaminated clothing and protective equipment before entering eating areas. Never keep food or drink in the vicinity of chemicals. Never place chemicals in containers that are normally used for food or drink. Keep away from food, drink and animal feedingstuffs. See Secrtion 8 for recommended personel protective equipment.

6.2 Environmental precautions
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

6.3 Methods and materials for containment and cleaning up
LARGE SPILLS: Dike far ahead of spill to prevent further movement. Recover by pumping or by using a suitable absorbent.
SMALL SPILLS: Contain and absorb with absorbent material and place into containers for later disposal. Wash site of spillage thoroughly with water. Dispose in suitable waste container.

Reference to other sections
For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling
Ensure adequate ventilation. Wash hands before breaks and immediately after handling the product. Avoid contact with skin, eyes and clothing. Avoid ingestion and inhalation. Avoid dust formation.dust is formed. For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities
Keep container(s) tighly closed. Use and store this material at room temperature away from sources of ignition, heat, direct sunlight and hot surfaces. Keep away from any incompatible materials (see section 10)

Specific end use(s)
Store in original container. Store as directed by manufacturer

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

1. Cellulose, microcrystalline (CAS: 9004-34-6)
PEL [Cellulose -Total dust] (Inhalation): 15 mg/m3; US (US/OSHA)
OSHA Annotated Table Z-1, www.osha.gov

PEL [Cellulose -Total dust] (Inhalation): 10 mg/m3; US (Cal/OSHA)
OSHA Annotated Table Z-1, www.osha.gov

REL [Cellulose -Total dust] (Inhalation): 10 mg/m3; US (NIOSH)
OSHA Annotated Table Z-1, www.osha.gov

PEL [Cellulose -Respirable fraction] (Inhalation): 5 mg/m3; US (US/OSHA)
OSHA Annotated Table Z-1, www.osha.gov

PEL [Cellulose -Respirable fraction] (Inhalation): 5 mg/m3; US (Cal/OSHA)
OSHA Annotated Table Z-1, www.osha.gov

REL [Cellulose -Respirable fraction] (Inhalation): 5 mg/m3; US (NIOSH)
OSHA Annotated Table Z-1, www.osha.gov

8.2 Appropriate engineering controls
Handle in accordance with good industrial hygiene and safety practice. Showers, eyewash stations, and ventilation systems should be present and in good working order. Wash hands before breaks and at the end of workday.

8.3 Individual protection measures, such as personal protective equipment (PPE)

Eye/face protection
Wear safety glasses with side shields (or goggles).

Skin protection
Wear Nitrile gloves, chemical resistant gloves.

Respiratory protection
Recommended: Dust mask or Respirator should be worn if product is used in confined space or used for a prolonged period of time.

SECTION 9: Physical and chemical properties

Appearance, such as physical state and colour	Clear slightly hazy liquid
Odour	Mild, characteristic
Odour threshold	Not determined
pH	6.0 - 7.5
Melting point and freezing point	~0°C (32°F)
Initial boiling point and boiling range	~100°C (212°F)
Flash point	N/A Water Based
Evaporation rate	<1 (Butyl Acetate
Flammability, in the case of solids and gases	Not Determined
Upper and lower flammability or explosive limits	Not Determined
Vapour pressure	<0.99 mmHg (20°C) (based on constituents)
Vapour density	>1 (air=1)
Relative density	1.0-1.09 kg/l 60C
Solubility	100% soluble
Partition coefficient — n-octanol/water	Log KOW > 4 (mineral oil data)
Auto-ignition temperature	Not Determined
Decomposition temperature	Not Available
Viscosity	N/A Water Based

Additional properties

Physical state	Liquid
Colour	Clear
Explosive properties	Not Determined
Oxidising properties	None

SECTION 10: Stability and reactivity

10.1 Reactivity
None under normal use conditions.

10.2 Chemical stability
Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions
Stable under normal use conditions.

10.4 Conditions to avoid
Avoid storing in direct sunlight and avoid extremes of temperature.

10.5 Incompatible materials
Strong oxidizing agents

10.6 Hazardous decomposition products

Oxides of carbon, oxides of sulfur, oxides of phosphorus, oxides of nitrogen, amines, aliphatic compounds, toxic by-products.

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity
Cellulose, microcrystalline
LD50 Oral - Rat - > 5,000 mg/kg
LD50 Skin - Rabbit - > 2,000 mg/kg

Polyacrylamide
LD50 Oral - Rat - > 1,000 mg/kg

Skin corrosion/irritation
Methylisothiazolinone component may cause skin irritation and allergic reactions. Prolonged or repeated contact may cause sensitization in susceptibleindividuals. Other components are generally non-irritating.

Serious eye damage/irritation
Causes serious eye damage. Kathon is a severe eye irritant that cancause corneal injury. Immediate and prolonged irrigation required.

Respiratory or skin sensitization
Respiratory Sensitization:
Not classified. However, inhalation of mist may cause respiratorytract irritation.
Skin Sensitization:
May cause allergic skin reaction (Category 1). Kathon (CMIT/MIT) is aknown skin sensitizer. Repeated exposure may increase severity ofreaction.

Germ cell mutagenicity
Cellulose, microcrystalline
LD50 Oral - Rat - > 5,000 mg/kg
LD50 Skin - Rabbit - > 2,000 mg/kg
Polyacrylamide
LD50 Oral - Rat - > 1,000 mg/kg

Carcinogenicity
Not classified. None of the components are listed as carcinogens byIARC, NTP, or OSHA.

Reproductive toxicity
Not classified based on available data.

Summary of evaluation of the CMR properties
Xanthan gum dust may cause respiratory irritation and form gel-likematerial in airways if inhaled in powder form. Product is extremelyslippery and presents slip hazard when spilled on walking surfaces.

Specific target organ toxicity (STOT) - single exposure
DISTILLED WATER: No Hazard;
ETHYLENEDIAMINETETRAACETICACID SODIUM SALT: No Data Available;
MONOETHANOLAMINE: Cat 3 Transient Toxicant - CNS, Liver, Kidneys;
ALKYL ETHER SURFACTANT: ; 2-HYDROXYPROPANE-1,2,3-TRICARBOXYLIC ACID: No Hazard

Specific target organ toxicity (STOT) - repeated exposure
DISTILLED WATER: No Hazard;
ETHYLENEDIAMINETETRAACETICACID SODIUM SALT: Cat 2 Toxicant- CNS, Liver, Kidneys (animal data);
MONOETHANOLAMINE: ; ALKYL ETHER SURFACTANT: ; 2-HYDROXYPROPANE-1,2,3-TRICARBOXYLIC ACID: No Hazard

Aspiration hazard
DISTILLED WATER: No Hazard; ETHYLENEDIAMINETETRAACETICACID SODIUM SALT: No Hazard; MONOETHANOLAMINE: ; ALKYL
ETHER SURFACTANT: ; 2-HYDROXYPROPANE-1,2,3-TRICARBOXYLIC ACID: No Hazard

Additional information
No Other Information Available.

Sodium Molybdate Dihydrate: mouse LD50 intraperitoneal 257mg/kg (257mg/kg) BEHAVIORAL: SOMNOLENCE (GENERAL DEPRESSED ACTIVITY)

BEHAVIORAL: COMA Archives Internationales de Pharmacodynamie et de Therapie. Vol. 154, Pg. 243, 1965.
Link to PubMed
rat LD50 intraperitoneal 520mg/kg (520mg/kg) BEHAVIORAL: SOMNOLENCE (GENERAL DEPRESSED ACTIVITY)

BEHAVIORAL: COMA Archives Internationales de Pharmacodynamie et de Therapie. Vol. 154, Pg. 243, 1965.
Link to PubMed

Cellulose, microcrystalline: From NIH:

rabbit LD50 skin 2gm/kg (2000 mg/kg) Toxicology Letters. Vol. (Suppl), Pg. 243, 1992.
rat LC50 inhalation 5800mg/m3/4H (5800 mg/kg) FAO Nutrition Meetings Report Series. Vol. 50A, Pg. 83, 1972.
rat LD50 intraperitoneal 31600mg/kg (31600 mg/kg) Toxicology Letters. Vol. (Suppl), Pg. 243, 1992.
rat LD50 oral 5gm/kg (5000 mg/kg) Toxicology Letters. Vol. (Suppl), Pg. 243, 1992.

SECTION 12: Ecological information

Toxicity

Kathon (fish, 96h)	0.19-0.34mg/L	Oncorhynchusmykiss
Kathon (daphnia, 48h)	0.05 mg/L	Daphnia magna
Kathon (algae, 72h)	0.027 mg/L	Pseudokirchneriella
Polyacrylamide (fish,96h)	>100 mg/L	Low toxicity
Xanthan Gum	>100 mg/L	Low toxicity

Persistence and degradability
Kathon (CMIT/MIT):
Biodegradable. Aerobic half-life: 0.38-1.4days. Rapidly degradable in aquatic environment.

Polyacrylamide:
Persistent. Very slow biodegradation. Notreadily biodegradable.

Xanthan Gum:
Biodegradable under aerobic conditions.

Cellulose:
Readily biodegradable.

Jojoba Oil:
Biodegradable.

Bioaccumulative potential
Alkaline or Acid cleaners are water soluble and have low bioaccumulatoin potential. Information on components is shown below

No further information available

Mobility in soil
Product is water-miscible and will migrate in soil and groundwater.Kathon has low soil adsorption and may leach. Polyacrylamide mayadsorb to soil particles.

Results of PBT and vPvB assessment
No data available

Other adverse effects
Very toxic to aquatic life with long lasting effects (H410) - driven byKathon preservative content. Avoid release to the environment. Very toxic to aquatic organisms.May cause long-term adverse effects in aquatic ecosystems. Prevententry into waterways, sewers, and soil.

SECTION 13: Disposal considerations

Disposal methods

Product disposal
Dispose of accordance in local, and provincial regulations for solvent and oil materials

Packaging disposal
Disposal should be in accordance with applicable regional, national and local laws and regulations.

Other disposal recommendations
Prevent the material from entering drains and water courses. Do not discharge directly to a water source. Advise Authorities if spillage has eterned watercourse or sewer or has contaminated soil or vegetation.

SECTION 14: Transport information

DOT (US)
Not dangerous goods

IMDG
Not dangerous goods

IATA
Not dangerous goods

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations specific for the product in question

Canadian Domestic Substances List (DSL)
All components of this product are listed on the Canadian Domestic Substance List

Canadian Domestic Substances List (DSL)
Chemical name: 3(2H)-Isothiazolone, 5-chloro-2-methyl-, mixt. with 2-methyl-3(2H)-isothiazolone
CAS number: 55965-84-9

Canadian Domestic Substances List (DSL)
Chemical name: 2-Propenamide, homopolymer
CAS number: 9003-05-8

Canadian Domestic Substances List (DSL)

Chemical name: Cellulose
CAS number: 9004-34-6

Canadian Non-Domestic Substances List (NDSL)

SECTION 16: Other information

This Safety Data Sheet was prepared in good faith from the most recent information available. HOWEVER, NO WARRANTY OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR ANY OTHER WARRANTY IS EXPRESSED OR IS TO BE IMPLIED REGARDING THE ACCURACY OR COMPLETENESS OF THE INFORMATION PROVIDED ABOVE, THE RESULTS TO BE OBTAINED FROM THE USE OF THIS INFORMATION OR THE PRODUCT, THE SAFETY OF THIS PRODUCT, OR THE HAZARDS RELATED TO ITS USE. No responsibility is assumed for any damage or injury resulting from abnormal use or from any failure to adhere to recommended practices. The information provided above, and the product, are furnished on the condition that the person receiving them shall make their own determination as to the suitability of the product for their particular purpose and on the condition that they assume the risk of their use.

16.2 Preparation information
Prepared by Craig Gourley