GAP PROFESSIONAL PRODUCTS

Safety Data Sheet
GAP Universal Cooling System Cleaner

SECTION 1: Identification

1.1 GHS Product identifier

Product name	GAP Universal Cooling System Cleaner
Product number	40305
Brand	GAP Professional Products

1.3 Recommended use of the chemical and restrictions on use

Cleaner for Automotive cooling system
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, inhalation, Cat. 5
- Serious eye damage/eye irritation, Cat. 1
- Skin corrosion/irritation, Cat. 1B

2.2 GHS label elements, including precautionary statements

Pictograms

1. Corrosion

Signal word **Danger**

Hazard statement(s)

H314	Causes severe skin burns and eye damage
H318	Causes serious eye damage
H333	May be harmful if inhaled

Precautionary statement(s)

P260	Do not breathe dust/fume/gas/mist/vapors/spray.
P264	Wash … thoroughly after handling.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P304+P312	IF INHALED: Call a POISON CENTER/doctor/... if you feel unwell.
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/...
P321	Specific treatment (see … on this label).
P363	Wash contaminated clothing before reuse.
P405	Store locked up.
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.	
Ethylenediamine Tetraacetic Acid, Tetrasodium Salt Dihydrate (CAS no.: 10378-23-1)	**5 - 15 % (weight)**
CLASSIFICATIONS: No data available. HAZARDS: No data available.	
CITRIC ACID (CAS no.: 77-92-9; EC no.: 201-069-1)	**5 - 15 % (weight)**
CLASSIFICATIONS: Serious eye damage/eye irritation, Cat. 2A. HAZARDS: No data available.	
Monoethanolamine (CAS no.: 141-43-5; EC no.: 205-483-3; Index no.: 603-030-00-8)	**1 - 5 % (weight)**
CLASSIFICATIONS: Flammable liquids, Cat. 4; Serious eye damage/eye irritation, Cat. 1; Specific target organ toxicity following single exposure, Cat. 3; Hazardous to the aquatic environment, short-term (acute), Cat. 2; Hazardous to the aquatic environment, long-term (chronic), Cat. 3; Acute toxicity, inhalation, Cat. 4; Acute toxicity, dermal, Cat. 4; Acute toxicity, oral, Cat. 4; Skin corrosion/irritation, Cat. 1B. HAZARDS: H227 - Combustible liquid; H302 - Harmful if swallowed; H312 - Harmful in contact with skin; H314 - Causes severe skin burns and eye damage; H318 - Causes serious eye damage; H332 - Harmful if inhaled; H335 - May cause respiratory irritation; H401 - Toxic to aquatic life; H412 - Harmful to aquatic life with long lasting effects. [SCLs/M-factors/ATEs]: STOT SE 3; H335: C ≥ 5 %	
ALKYL ETHER SURFACTANT	**1 - 5 % (weight)**
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.

CITRIC ACID: Carbon 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. Monoethanolamine (CAS: 141-43-5)
PEL (Inhalation): 3 ppm (OSHA)
OSHA Annotated Table Z-1, www.osha.gov

PEL (Inhalation): 6 mg/m3 (OSHA)
OSHA Annotated Table Z-1, www.osha.gov

PEL (Inhalation): 3 ppm, (ST) 6 ppm (Cal/OSHA)
OSHA Annotated Table Z-1, www.osha.gov

REL (Inhalation): 3 ppm, (ST) 6 ppm (NIOSH)
OSHA Annotated Table Z-1, www.osha.gov

STEL (Inhalation): 6 ppm (ACGIH)
Eye irritation. Skin irritation

TLV® (Inhalation): 3 ppm (ACGIH)
Eye irritation. Skin irritation

TLV® (Inhalation): 3 ppm, (ST) 6 ppm; USA (ACGIH)
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	Low Indescript
Odour threshold	Not determined
pH	7.0 - 11.5
Melting point and freezing point	0
Initial boiling point and boiling range	Not Determined
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

CITRIC ACID: Oxidizing agents, Bases, Reducing agents, Nitrates

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
Acute Oral Toxicity:
DISTILLED WATER: Non Hazardous;
ETHYLENEDIAMINETETRAACETICACID SODIUM SALT: LD50 >2000 mg/Kg;
MONOETHANOLAMINE: LD50 301-2000 mg/kg;
ALKYL ETHER SURFACTANT: ; 2-HYDROXYPROPANE-1,2,3-TRICARBOXYLIC ACID: Non Hazardous

Acute Skin Toxicity:
DISTILLED WATER: Non Hazardous;
ETHYLENEDIAMINETETRAACETICACID SODIUM SALT: Non Hazardous;
MONOETHANOLAMINE: LD50 1001-2000 mg/kg;
ALKYL ETHER SURFACTANT: ; 2-HYDROXYPROPANE-1,2,3-TRICARBOXYLIC ACID: Non Hazardous

Acute Toxicity Inhalation:
DISTILLED WATER: Non Hazardous;
ETHYLENEDIAMINETETRAACETICACID SODIUM SALT: LD50 May cause damage to the upper respiratory tract. mg/Kg;
MONOETHANOLAMINE: LD50 10=20mg/l;
ALKYL ETHER SURFACTANT: ; 2-HYDROXYPROPANE-1,2,3-TRICARBOXYLIC ACID: No Data Available

Skin corrosion/irritation
DISTILLED WATER: Non Irritating;
ETHYLENEDIAMINETETRAACETICACID SODIUM SALT: Non Irritating;
MONOETHANOLAMINE: Cat 1 Corrosive;
ALKYL ETHER SURFACTANT: ; 2-HYDROXYPROPANE-1,2,3-TRICARBOXYLIC ACID: Cat 1 Corrosive

Serious eye damage/irritation
DISTILLED WATER: Non-Categorized, Suspected Eye Irritant;
ETHYLENEDIAMINETETRAACETICACID SODIUM SALT: Cat 2A Serious Irritation;
MONOETHANOLAMINE: Non-Categorized, Suspected Eye Irritant;
ALKYL ETHER SURFACTANT: Cat 2A Serious Irritation;
2-HYDROXYPROPANE-1,2,3-TRICARBOXYLIC ACID: Cat 1 Serious Damage

Respiratory or skin sensitization
Respiratory Sensitization:
DISTILLED WATER: Non Sensitizing;
ETHYLENEDIAMINETETRAACETICACID SODIUM SALT: No Data Available;
MONOETHANOLAMINE: ; ALKYL ETHER SURFACTANT: ; 2-HYDROXYPROPANE-1,2,3-TRICARBOXYLIC ACID: Non Sensitizing

Skin Sensitization:

DISTILLED WATER: Non Sensitizing;
ETHYLENEDIAMINETETRAACETICACID SODIUM SALT: No Data Available;
MONOETHANOLAMINE: ; ALKYL ETHER SURFACTANT: ; 2-HYDROXYPROPANE-1,2,3-TRICARBOXYLIC ACID: Non Sensitizing

Germ cell mutagenicity
DISTILLED WATER: No Hazard; ETHYLENEDIAMINETETRAACETICACID SODIUM SALT: No Data Available;
MONOETHANOLAMINE:
; ALKYL ETHER SURFACTANT: ; 2-HYDROXYPROPANE-1,2,3-TRICARBOXYLIC ACID: No Hazard

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

Reproductive toxicity
DISTILLED WATER: No Hazard;
ETHYLENEDIAMINETETRAACETICACID SODIUM SALT: No Data Available;
MONOETHANOLAMINE: ; ALKYL ETHER SURFACTANT: ; 2-HYDROXYPROPANE-1,2,3-TRICARBOXYLIC ACID: No Hazard

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.

SECTION 12: Ecological information

Toxicity
DISTILLED WATER: Non Toxic;
ETHYLENEDIAMINETETRAACETICACID SODIUM SALT: No Data Available;
MONOETHANOLAMINE: ; ALKYL ETHER SURFACTANT: ; 2-HYDROXYPROPANE-1,2,3-TRICARBOXYLIC ACID: Non Toxic

Persistence and degradability
Alkaline or Acid cleaners have good biodegradability and are not persistent in the environment.

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
No data available

Results of PBT and vPvB assessment
No data available

Other adverse effects
None

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 Non-Domestic Substances List (NDSL)

SECTION 16: Other information

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16.2 Preparation information

Prepared by Craig Gourley