

Safety Data Sheet - GHS

According to OSHA HCS 2012 (29 CFR 1910.1200)



Section 1 - Chemical Product and Company Identification

PRODUCT NAME: RUGGED UNIVERSAL ANTIFREEZE CONCENTRATE
SDS NUMBER: RGAFU
TRADE NAME:
SYNONYMS:

RELEVANT IDENTIFIED USE: Automotive Coolant
RESTRICTIONS:
24 HOUR EMERGENCY PHONE NUMBER: (CHEMTREC)1-800-424-9300

Manufacturer/Supplier

COLORADO **PETROLEUM**

5590 High St.
Denver, CO. 80216
303-294-0302
WWW.COLOPETRO.COM

DATE PREPARED: 12-22-2020
DATE REVISED: 12-22-2020
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Section 2 – Hazard Identification

Classified Hazards: Acute toxicity (oral) – Category 4
Specific target organ toxicity (repeated exposure) (kidneys) – Category 2

Target Organs: Kidneys

LABEL ELEMENTS

NO CLASSIFIED HAZARDS



Signal Word: WARNING

Hazard Statement: Harmful if swallowed. May cause damage to organs through prolonged or repeated exposure. (kidneys)

Other Hazard(s): Defatting of the skin.

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Precaution(s): Do not breathe vapor. Do not eat, drink or smoke when using this product. Wash hands thoroughly after use.

Disposal: Keep out of waterways. Check local, national and international regulations for proper disposal.

Section 3 – Composition Information on Ingredients

CHEMICAL NAME	PERCENT	CAS NUMBER
Ethylene Glycol	>95	107-21-1
Diethylene Glycol	>0	111-46-6
2-Ethyl Hexanoic Acid, Sodium Salt	>0	19766-89-3

Section 4 - First Aid Measures

Inhalation: Remove exposed person to fresh air immediately. Restore or assist breathing, if necessary. Get medical attention immediately – symptoms of exposure may include giddiness, intoxication, CNS depression or coma.

Eye Contact: Remove contact lenses, if worn. Rinse with running water for at least 15 minutes, lifting upper and lower eyelids occasionally. Seek medical attention

Skin Contact: Remove affected clothing and launder before reuse. Wash affected area for at least 15 minutes with soap and running water. Prolonged or repeated exposure may cause defatting of the skin – symptoms include redness, dryness and cracking.

Ingestion: Contact Poison Control Center. Seek medical attention IMMEDIATELY! Informing the doctor that a product containing ethylene glycol has been ingested and specific treatment may be required. Transport casualty together with the product container, its label, or the safety data sheet urgently to hospital. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately.

Additional Information: Note to physician: Treat for ethylene glycol poisoning

Specific Treatments: Ethylene Glycol: Gastric irrigation, ethanol or fomepizole may have value in treatment. Consult physician.

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Section 5 – Fire-Fighting Measures

NFPA 704 HAZARD CLASS

Health: 1 Flammability: 1 Instability: 0

0 (Minimal)
1 (Slight)
2 (Moderate)
3 (Serious)
4 (Severe)

Health	1
Flammability	1
Reactivity	0
Personal Protection	

Flash Point (F): 246 °F / > 119 °C

Flash Point Method: Test Method: Pensky-Martens Closed Cup (PMCC) ASTM D93, EPA 1010

Auto Ignition Temperature: N/A

Extinguishing Media: CO₂, Dry chemical, foam (alcohol resistant), or water spray is recommended. Water or foam can cause frothing of materials heated above 212 °F / 100°C. Carbon dioxide can displace oxygen. Use Caution when applying carbon dioxide in confined spaces. Simultaneous use of foam and water on the same surface is to be avoided as water destroys the foam.

Unusual Fire/Explosion Hazard: N/A

Fire Fighting Instructions: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Fire Fighting Equipment: Fire-fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear.

Section 6 – Accidental Release Measures

Personal Precautions: Do not walk through spilled material. Keep unnecessary personnel away. Wear appropriate protective gear for emergency. Eliminate sources of ignition.

Environmental Precautions: Avoid releasing into the environment. Prevent entering into soil, ditches, sewers, waterways and groundwater.

Methods of Removal: Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Contain and collect spillage with non-combustible, absorbent material

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e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Contaminated absorbent material may pose the same hazard as the spilled product. Dispose of via a licensed waste disposal contractor.

Regulatory Requirements: Follow All OSHA Regulations and Standards (29 CFR 1910.120)

Section 7 – Handling and Storage

Handling Precautions: Use in well ventilated areas. Avoid breathing vapors. Keep away from heat, sparks and flame. Wash thoroughly after handling. Use good personal hygiene practices and wear appropriate personal protective equipment (see section 8).

Storage Requirements: Keep container(s) tightly closed and properly labeled. Use and store this material in cool, dry, well-ventilated area away from heat and all sources of ignition. Store only in approved containers. Keep away from any incompatible material (see Section 10). Protect container(s) against physical damage.

"Empty" containers retain residue and may be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, or other sources of ignition. They may explode and cause injury or death. "Empty" drums should be completely drained, properly bunged, and promptly shipped to the supplier or a drum reconditioner. All containers should be disposed of in an environmentally safe manner and in accordance with governmental regulations. Before working on or in tanks which contain or have contained this material, refer to OSHA regulations, ANSI Z49.1, and other references pertaining to cleaning, repairing, welding, or other contemplated operations.

Regulatory Requirements: Follow All OSHA Regulations and Standards (29 CFR 1910.120)

Section 8 – Exposure Controls / Personal Protection

Chemical Name	ACGIH	OSHA	Other
Ethylene Glycol	C: 100 mg/m ³ Issued/Revised: 5/1995 Form: Aerosol	

Note: State, local or other agencies or advisory groups may have established more stringent limits. Consult an industrial hygienist or similar professional, or your local agencies, for further information.

Personal Protective Equipment

Respiratory: In case of insufficient ventilation, wear suitable respiratory equipment. The correct choice of respiratory protection depends upon the chemicals being handled, the conditions of work and use, and the condition of the respiratory equipment. Safety procedures should be developed for each intended application. Respiratory protection equipment should therefore be chosen in consultation with the supplier/manufacturer and with a full assessment of the working conditions.

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Engineering controls: If current ventilation practices are not adequate to maintain airborne concentrations below the established exposure limits, additional engineering controls may be required.

Eye/Face Protection: Face shield or chemical splash goggles when splashing may occur. If possible, remove contact lenses before handling.

Skin/Hand Protection: Suggested protective materials: Butly Rubber or Nitrile rubber gloves

Respiratory Protection: Where there is potential for airborne exposure above the exposure limit a NIOSH certified air purifying respirator equipped with R or P95 filters may be used.

A respiratory protection program that meets or is equivalent to OSHA 29 CFR 1910.134 and ANSI Z88.2 should be followed whenever workplace conditions warrant a respirator's use. Air purifying respirators provide limited protection and cannot be used in atmospheres that exceed the maximum use concentration (as directed by regulation or the manufacturer's instructions), in oxygen deficient (less than 19.5 percent oxygen) situations, or under conditions that are immediately dangerous to life and health (IDLH).

Suggestions provided in this section for exposure control and specific types of protective equipment are based on readily available information. Users should consult with the specific manufacturer to confirm the performance of their protective equipment. Specific situations may require consultation with industrial hygiene, safety, or engineering professionals.

Section 9 – Physical and Chemical Properties

Note: Unless otherwise stated, values are determined at 20°C (68°F) and 760 mm Hg (1 atm). Data represent typical values and are not intended to be specifications.

Appearance: Green

Physical Form: Liquid

Odor: Mild

Odor Threshold: No data

pH: 10.5 to 11 [Conc. (% w/w): 50%]

Vapor Density (air=1): >1

Upper Explosive Limits (vol % in air): No data

Lower Explosive Limits (vol % in air): No data

Evaporation Rate (nBuAc=1): No data

Particle Size: Not applicable

Percent Volatile: No data

Flammability (solid, gas): Not applicable

Flash Point: > 119 °C / 246 °F

Test Method: Pensky-Martens Closed Cup (PMCC), ASTM D93, EPA 1010

Initial Boiling Point/Range: >100 °C / 212 °F

Vapor Pressure: <1 mm Hg

Partition Coefficient (n-octanol/water) (Kow): No data

Melting/Freezing Point: -15°C/ 5 °F

Auto-ignition Temperature: 748 °F

Decomposition Temperature: No data

Specific Gravity (water=1):

Bulk Density: 9.3 lbs/gallon

Viscosity: Not determined

Solubility in Water: Negligible

Section 10 – Stability and Reactivity

Reactivity:

Not chemically reactive.

Chemical stability:

Stable under normal ambient and anticipated conditions of use.

Possibility of hazardous reactions:

Hazardous reactions not anticipated.

Conditions to avoid:

Keep away from heat/sparks/open flames/hot surfaces.

Incompatible materials:

Avoid contact with strong oxidizing agents

Hazardous decomposition products:

Primarily oxidizers to carbon dioxide in normal combustion conditions. In lower oxygen environments carbon monoxide, formaldehyde, or formic acid may be formed.

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Section 11- Toxicological Information

-ACCUTE EXPOSURE-

Eye Irritation:	No known significant effects or critical hazards.
Skin Irritation:	No known significant effects or critical hazards.
Respiratory Irritation:	Vapor inhalation under ambient conditions is not normally a problem due to low vapor pressure.
Oral Toxicity:	Harmful if swallowed. Ethylene glycol: Ingestion of ethylene glycol can cause metabolic acidosis, kidney damage, central nervous system depression, and convulsions. The estimated human lethal dose is approximately 100 ml (3.4 ounces for an adult). Diethylene glycol: Ingestion of diethylene glycol can cause metabolic acidosis, kidney damage, central nervous system depression, and convulsions. The estimated human lethal dose is approximately 100 ml (3.4 ounces for an adult).

-Chronic Exposure-

Chronic Toxicity:	May cause damage to organs through prolonged or repeated exposure. (kidney)
Carcinogenicity:	No known significant effects or critical hazards.
Mutagenicity:	No known significant effects or critical hazards.
Reproductive Toxicity:	Birth defects and decreased fetal weight have been observed in laboratory animals fed ethylene glycol in large amounts repeatedly during pregnancy. Birth defects and decreased fetal weight have been observed in laboratory animals fed diethylene glycol in large amounts repeatedly during pregnancy.
Teratogenicity:	No known significant effects or critical hazards.

Section 12 – Ecological Information

-Environmental Toxicity-

Freshwater Fish:	Not Determined
Freshwater Invertebrates:	Not Determined
Algae:	Not Determined
Saltwater Fish:	Not Determined
Saltwater Invertebrates:	Not Determined
Bacteria:	See Miscellaneous
Miscellaneous:	Study of methanol on sewage sludge bacteria reported a retardation of bacteria digestion at concentrations of 0.5%.

-Environmental Fate-

Biodegradation:	This product is expected to be biodegradable.
Bioaccumulation:	This product is not expected to bioaccumulate through food chains in the environment.

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Soil Mobility: May penetrate soil causing ground water contamination.
Other Effects: Not Determined

Section 13 – Disposal Considerations

Disposal Considerations:

All disposal practices must be in accordance with local, regional, national and international regulations. Store material for disposal as indicated in Section 7. Disposal by controlled incineration or by secure land fill may be acceptable – review applicable regulations or regulatory bodies before making disposal decisions.

Contaminated Containers or Packaging

Empty containers are likely to contain flammable vapors or explosive mixtures of vapor and air. Do NOT weld, cut, or grind empty containers. Rinse empty containers with water and dispose of in accordance with local, regional, national and international regulations.

Section 14 - Transportation Information

Description shown may not apply to all shipping situations. Consult applicable shipping codes to determine additional shipping requirements.

DOT Transportation Data

US DOT : Not Regulated
UN No : None
UN Proper Name : None
UN Class : None
Packing Group : None
Marine Pollutant : No

IMDG :

ICAO/IATA :

Section 15 – Regulatory Information

-Global Chemical Inventories/Regulations-

USA: All components of this material are listed or exempted.
Other TSCA Reg.: None known
EU: Components of this product and similar mixtures are registered under REACH.

Consult the European Chemicals Agency regarding REACH registration,

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reporting and other legal requirements for methanol solutions before importing to the EU.

New Zealand: All components of this material are listed or exempted.
Canada: All components of this material are listed or exempted.
Canada WHMIS: All components of this material are listed or exempted.

-OTHER U.S. FEDERAL REGULATIONS-

SARA Ext. Haz. Subst: No chemicals in this product are listed on the SARA 302 Extremely Hazardous Substance list
SARA Sect. 313: This product contains ethylene glycol (CAS# 107-21-1)
SARA 311/312 Class:
Acute Hazard -YES
Chronic Hazard -YES
Fire Hazard -NO
Reactivity Hazard -NO

CERCLA Haz. Subst.:

-STATE REGULATIONS-

CA Prop 65: CALIFORNIA PROPOSITION 65: This product contains the following chemicals known to the State of California to cause cancer or reproductive toxicity (birth defects):

Ethylene Glycol 107-21-1 75-95%

Right to Know Component: Ethylene Glycol (CAS# 107-21-1)
Right to Know States: NJ, PA, MA

Section 16 – Other Information

Date of issue:	Previous Date of issue:	SDS Number:	Status:
12-22-2020	11-18-2015	RGAFU	FINAL

Disclaimer

The information presented in this Safety Data Sheet is based on data believed to be accurate as of the date this Safety Data Sheet was prepared. 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

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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. In addition, no authorization is given nor implied to practice any patented invention without a license.

Guide to Abbreviations:

ACGIH = American Conference of Governmental Industrial Hygienists; CASRN = Chemical Abstracts Service Registry Number; CEILING = Ceiling Limit (15 minutes); CERCLA = The Comprehensive Environmental Response, Compensation, and Liability Act; EPA = Environmental Protection Agency; GHS = Globally Harmonized System; IARC = International Agency for Research on Cancer; INSHT = National Institute for Health and Safety at Work; IOPC = International Oil Pollution Compensation; LEL = Lower Explosive Limit; NE = Not Established; NFPA = National Fire Protection Association; NTP = National Toxicology Program; OSHA = Occupational Safety and Health Administration; PEL = Permissible Exposure Limit (OSHA); SARA = Superfund Amendments and Reauthorization Act; STEL = Short Term Exposure Limit (15 minutes); TLV = Threshold Limit Value (ACGIH); TWA = Time Weighted Average (8 hours); UEL = Upper Explosive Limit; WHMIS = Worker Hazardous Materials Information System (Canada)