# Safety Data Sheet - GHS According to OSHA HCS 2012 (29 CFR 1910.1200)



S	ection 1 - Chemica	I Product and Company Identification	on	
PRODUCT NAME: SDS NUMBER: TRADE NAME: SYNONYMS:	RUGGED GOLD RGAFGOLDD	ANTIFREEZE 50/50 PRE-MIX		
RELEVANT IDENTIFIED USE: RESTRICTIONS:		Automotive Coolant		
24 HOUR EMERGENCY PHONE	NUMBER:	(CHEMTREC)1-800-424-9300		
	Ma	nufacturer/Supplier		
COLORADO DETROLEUM				
5590 High St. Denver, CO. 80216 303-294-0302 WWW.COLOPETRO.COM		DATE PREPARED: DATE REVISED: PREPARED BY:	12-22-2020 <b>12-22-2020</b> Jack Snavely	
	Section	a 2 – Hazard Identification		
Classified Hazards:	Acute toxicity ( Specific target	oral) – Category 4 organ toxicity (repeated exposure	e) (kidneys) – Category 2	
Target Organs:	Kidneys			
LABEL ELEMENTS				
Signal Word:	WARNING			
Hazard Statement:	Harmful if swal repeated expos	lowed. May cause damage to org sure. (kidneys)	gans through prolonged or	
Other Hazard(s):	Defatting of the	e skin.		

According to OSHA HCS 2012 (29 CFR 1910.1200)



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	40-60	107-21-1
Diethylene Glycol	0-5	111-46-6

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:	<b>R</b> emove 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.	

# Section 5 – Fire-Fighting Measures

NFPA 704 HAZARD CLASS

According to OSHA HCS 2012 (29 CFR 1910.1200)



# Health: 1 Flammability: 1 Instability: 0

0 (Minimal) 1 (Slight) 2 (Moderate) 3 (Serious) 4 (Severe)							
()	Health		1				
	Flammability		1				
Flash Point	Reactivity		0	(F):	246 °F	= / > 119 °C	
	Personal Prot	ection		(. /.		,,	
Flash Point	sh Point Cup (PMCC		C) ASTM D93	<b>Meth</b> , EPA 10:	<b>10d:</b> 10	Test Method: Pensky-Martens Closed	
Auto Ignition Ten	nperature:	N/A					
Extinguishing Media: CO <sub>2</sub> , Dry ch Water or fo Carbon dio in confined to be avoid		nemical, foar oam can cau xide can dis l spaces. Sim led as water	n (alcoho se frothi olace oxy ultaneou destroys	ol resist ng of m /gen. Us us use o s the foa	tant), or water spray is recommended. naterials heated above 212 °F / 100°C. Ise Caution when applying carbon dioxide of foam and water on the same surface is pam.	I.	
Unusual Fire/Exp	losion Hazard	<b>I:</b> N/A					
Fire Fighting Instructions: Promptly there is a training.		Promptly iso there is a fire training.	late the scene e. No action s	e by remo hall be tal	ving all p ken invol	persons from the vicinity of the incident if lving any personal risk or without suitable	
Fire Fighting Equipment: Fire-fighters and full turn		Fire-fighters and full turne	should wear out gear.	positive p	ressure	self-contained breathing apparatus (SCBA)	
		Section	<mark>n 6 – Acciden</mark>	al Releas	<mark>e Meas</mark> i	sures	
Personal Precaut	ions:	Do not wal appropriate	k through sp e protective	illed ma gear for	terial. K emerge	Keep unnecessary personnel away. Wear ency. Eliminate sources of ignition.	-
Environmental Pr	ecautions:	Avoid relea sewers, wa	ising into the terways and	e enviror I groundv	ıment. l water.	Prevent entering into soil, ditches,	
Methods of Remo	oval:	Stop leak if from upwir areas. Cont e.g. sand, e disposal ac	without risl nd. Prevent o tain and coll earth, vermic cording to lo	c. Move o entry into ect spilla culite or o ocal regu	containe o sewer ge with diatoma lations.	ners from spill area. Approach release rs, water courses, basements or confined h non-combustible, absorbent material naceous earth and place in container for c. Contaminated absorbent material may	

According to OSHA HCS 2012 (29 CFR 1910.1200)



	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 <sup>3</sup> 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.

According to OSHA HCS 2012 (29 CFR 1910.1200)



**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: Light Golden Yellow 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 Boiling Point: >100 °C / 212 °F Vapor Pressure: <1 mm Hg Partition Coefficient (n-octanol/water) (Kow): No data Melting/Freezing Point: -37 °C/ -35 °F Auto-ignition Temperature: 398 °C/ 748 °F [Concentrate] Decomposition Temperature: No data Specific Gravity (water=1): Bulk Density: 8.6 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.

According to OSHA HCS 2012 (29 CFR 1910.1200)

# RUGGED

# 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 fedethylene 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.

According to OSHA HCS 2012 (29 CFR 1910.1200)



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.			
Ither TSCA Reg.: None known				
EU:	Components of this product and similar mixtures are registered under REACH.			

Consult the European Chemicals Agency regarding REACH registration,

According to OSHA HCS 2012 (29 CFR 1910.1200)



	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. FE	DERAL REGULATIONS-			
SARA Ext. Haz. Subst:	ARA Ext. Haz. Subst: No chemicals in this product are listed on the SARA 3				
	Substance list				
SARA Sect. 313:	This product contains ethlylene glycol (CAS# 107-21-1)				
SARA 311/312 Class:	Acute Hazard	-YES			
	Chronic Hazard	-YES			
	Fire Hazard	-NO			
	Reacivity 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	40-60%	
Right to Know Component Right to Know States:	Ethylene Glycol (CAS# 107-21-1) NJ, PA, MA		

## Section 16 – Other Information

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

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According to OSHA HCS 2012 (29 CFR 1910.1200)



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#### **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)