

SAFETY DATA SHEET

Section 1 – Identification

1.1 Product identifier

Product Name : GIBRALTAR® CONCENTRATE FUSCHIA
ANTIFREEZE & COOLANT

1.2 Product usage

Recommended Usage : Heavy Duty Engine Coolant (Not intended for any other usage)

1.3 Emergency support

Emergency Support : CHEMTREC
United States +1(800) 424-9300
International +01(703) 527-3887

1.4 Supplier Information

David Weber Oil Co.
601 Industrial Road
Carlstadt, NJ 07072
Manufactured By David Weber Oil Co.

Section 2- Composition / Information on Ingredients

2.1 Classification of substance mixture

GHS-US Classification
Acute Tox.4(Oral) H302
STOT RE2 H373

2.2 Label Elements

Name	Product identifier	% by wt	GHS-US classification
ethylene glycol	(CAS No) 107-21-1	90 - 97	Acute Tox. 4 (Oral), H302
diethylene glycol	(CAS No) 111-46-6	< 5	Acute Tox. 4 (Oral), H302 STOT RE 2, H373
water	(CAS No) 7732-18-5	< 4	Not classified
denatonium benzoate	(CAS No) 3734-33-6	30 - 50 ppm	Acute Tox. 4 (Oral), H302

GHS-US labelling Hazard pictograms (GHS-US)



Signal Word (GHS-US) : **WARNING**

Hazard statements (GHS-US)

- : H302 - Harmful if swallowed
- : H373 -May cause damage to organs(kidneys)through prolonged or repeated exposure(oral)

Precautionary statements (GHS-US)

- : P201 - Obtain special instructions before use
- : P202- Do not handle until all safety precautions have been read and understood
- : P260- Do not breathe mist, spray or vapors
- : P264- Wash affected areas thoroughly after handling
- : P270- Do not eat, drink or smoke when using this product
- : P280- Wear personal protective equipment as required
- : P301+ P310- If swallowed: Immediately call doctor/physician or poison center
- : P301+ P330+P331- If swallowed: rinse mouth. DO NOT induce vomiting
- : P304+ P340- If inhaled: Remove person to fresh air and keep comfortable for breathing
- : P308+ P313- If exposed or concerned: Get medical advice/attention
- : P405- Store locked up
- : P501- Dispose of contents/container, in a safe manner, to appropriate waste disposal facility, In accordance with local/ regional/national/international regulations

Section 3 - Hazards Identification

3.1 Substance details

Name	Product identifier	% by wt	GHS-US classification
ethylene glycol	(CAS No) 107-21-1	90 - 97	Acute Tox. 4 (Oral), H302
diethylene glycol	(CAS No) 111-46-6	< 5	Acute Tox. 4 (Oral), H302 STOT RE 2, H373
water	(CAS No) 7732-18-5	< 4	Not classified
denatonium benzoate	(CAS No) 3734-33-6	30 - 50 ppm	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 3, H335

Section 4 – First aid Measures

4.1 First aid measures

First-aid measures general	: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation	: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Seek immediate medical advice. Allow the victim to rest. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.
First-aid measures after skin contact	: Remove contaminated clothing. Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation occurs: Rinse immediately with plenty of water (for at least 15 minutes). Get medical advice/attention. Specific treatment (see supplemental first aid instructions on this label).
First-aid measures after eye contact	: Remove contact lenses, if present and easy to do. Continue rinsing. Rinse immediately with plenty of water for 15 minutes, lifting lower and upper lids. If eye irritation persists: Rinse immediately with plenty of water. Get medical advice/attention.
First-aid measures after ingestion	: Obtain emergency medical attention. Rinse mouth. If the person is fully conscious, make him/her drink two glasses of water. Never give an unconscious person anything to drink. Do NOT induce vomiting. Call a POISON CENTER/doctor/physician if you feel unwell. If medical advice is delayed, and if the person has swallowed a moderate volume of material (a few ounces), then give three to four ounces of hard liquor, such as whiskey. For children, give proportionally less liquor according to weight.

4.2 Symptoms & Effects

Symptoms/injuries	: Causes damage to organs (kidneys) (oral).
Symptoms/injuries after skin contact	: Causes skin irritation.
Symptoms/injuries after eye contact	: Causes serious eye damage.
Symptoms/injuries after ingestion	: Swallowing a small quantity of this material will result in serious health hazard. The lethal dose in humans is estimated to be 100 mL (3 oz).

4.3 Indication of any immediate medical attention and special treatment needed:

A more effective intravenous antidote for physician uses is 4-methylpyrazaole, a potent inhibitor of alcohol dehydrogenases, which effectively blocks the formation of toxic metabolites of ethylene glycol. It has been used to decrease the metabolic consequences of ethylene glycol poisoning before metabolic acidosis coma, seizures, and renal failure have occurred.

Section 5 – Fire Fighting

5.1 Extinguishing Media

- Suitable Extinguishing Media** : Water fog. Fine water spray. Alcohol-Resistant foam. Foam. Carbon dioxide. Dry chemical powder. Sand.
- Unsuitable Extinguishing Media** : Do not use a heavy water stream. May spread fire.
- Special hazards arising from the substance mixture** : During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and/or irritating.
- Combustion products may include and are not limited to** : Carbon monoxide & dioxide.
- Reactivity** : No dangerous reactions known under normal conditions

5.2 Firefighters Advice

- Protective Equipment and Precautions for Firefighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6 - Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

- For Non-Emergency Personnel:**
- Emergency Procedures** : Evacuate unnecessary personnel
- For Emergency Responders:**
- Protective Equipment** : Equip clean-up crew with proper protection. Refer to section 8.2.
- Emergency Procedures** : Ventilate area.

6.2 Environmental Precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers and public waters.

6.2 Materials & Methods to Contain and Cleanup

- Methods for cleaning up** : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.
- Reference to other sections** : See Heading 8. Exposure controls and personal protection

Section 7 - Handling & Storage

7.1 Safe Handling

- Precautions for safe Handling** : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking. And when leaving work. Provide good ventilation in process area to prevent formation of vapor.
- Hygiene measures** : Do not eat, drink or smoke when using this product. Wash affected areas thoroughly after handling.

7.2 Shipping and Storage

- Storage conditions** : Keep only in the original container in a cool, well ventilated place away from
: Heat sources. Keep container closed when not in use.
: Product may become solid at temperatures below -18 °C (0 °F).
: Do not store near food, foodstuffs, drugs or potable water supplies.
: Do not cut, drill, weld, use blowtorch on, etc. containers even when empty.

Incompatible products : Keep away from strong acids, strong bases and oxidizing agents

Incompatible materials : Sources of ignition.

Section 8 - Exposure Control

8.1 United States Exposure Limits

Chemical Name	Occupational Exposure limits	Value
ethylene glycol (107-21-1)		
USA ACGIH	ACGIH Ceiling (mg/m ³)	100.00 mg/m ³
USA ACGIH	Remark (ACGIH)	Upper Respiratory Tract (URT) & Eye irritant

8.1 Exposure Controls

Personal Protective Equipment : Avoid all unnecessary exposure. Gloves, Safety glasses.



Hygiene Measures : Do not eat, drink or smoke during use.

Eye / Face Protection : Chemical goggles or safety glasses.

Skin / Hand Protection : Wear protective gloves.

Section 9 - Physical & Chemical Properties

9.1 Information On Basic Physical and Chemical Properties

Physical state	: Liquid
Color	: Fuschia/Pink
Odor	: Mild
Odor threshold	: No Data Available
pH 50% water solution	: 10.5 - 11
Freezing Point	: -18 ° C (0°F)
Boiling Point	: 158 ° C (317 °F)
Flash Point	: 116 °C (241 °F) [100% Ethylene Glycol] ASTM D56
Evaporation rate (butylacetate=1)	: Nil
Explosive Limits	: 3.2 - 15.3 vol%
Log Pow	: No Data Available
Log Kow	: No Data Available
Flammability (solid, gas)	: No Data Available
Vapor pressure	: <0.1 mm Hg @ 20° C
Relative vapor density @ 20°C	: No Data Available
Density	: 1.12kg/l (9.3 lbs/gal)
Auto-ignition temperature	: 400°C (752 °F) [100% Ethylene Glycol] <i>Literature</i>
Decomposition temperature	: No Data Available
Solubility	: Water: Complete
Oxidizing Properties	: No Data Available
Specific Gravity	: 1.12
VOC content	: 0.00%

Section 10 - Stability & Reactivity

10.1 Material Analysis

Reactivity	: No Dangerous reactions known under normal conditions of use
Chemical stability	: Stable
Possibility of hazardous reactions:	Hazardous polymerization will not occur.

10.2 Material Analysis

Conditions to avoid	: Keep away from any flames or sparking source. Extremely high or low temperatures.
Incompatible materials	: Keep away from strong acids, strong bases and oxidizing agents
Hazardous decomposition products:	Carbon dioxide. Carbon monoxide. Fume. Alcohols. Aldehydes. Ethers.

Section 11- Toxicological Information

11.1 Toxicological Effects

Acute Toxicity : Oral: Harmful if swallowed

denatonium benzoate (3734-33-6)	
LD50 oral rat	584 mg/kg (Rat)
LD50 dermal rabbit	> 2,000 mg/kg (Rabbit)
ATE US (oral)	584 mg/kg bodyweight
diethylene glycol (111-46-6)	
LD50 oral rat	12,565 mg/kg (Rat)
LD50 dermal rabbit	11,890 mg/kg (Rabbit)
ATE US (oral)	500 mg/kg bodyweight
ATE US (dermal)	11,890 mg/kg bodyweight
ethylene glycol (107-21-1)	
LD50 oral rat	> 5,000 mg/kg (Rat)
ATE US (oral)	500 mg/kg bodyweight

Skin corrosion/ irritation	Not classified
Serious eye damage/irritation	Not classified
Respiratory or skin sensitisation	Not classified
Germ cell mutagenicity	Not classified
Carcinogenicity	Not classified
Reproductive toxicity	Not classified
Specific target organ toxicity (single exposure)	Not classified

Specific target organ toxicity (repeated exposure)	May cause damage to organs (kidneys) through prolonged or repeated exposure (oral).
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Aspiration hazard	Not classified
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Potential adverse human health effects and symptoms	Based on available data, the classification criteria are not met. Harmful if swallowed.
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Symptoms/injuries after skin contact	Causes skin irritation.
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Symptoms/injuries after eye contact	Causes serious eye damage.
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Symptoms/injuries after ingestion	Swallowing a small quantity of this material will result in serious health hazard. The lethal dose in humans is estimated to be 100ml. (3oz.)
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Section 12 - Ecological Information

denatonium benzoate (3734-33-6)

LC50 fish 1 > 1,000 mg/l 96 h; *Salmo gairdneri* (*Oncorhynchus mykiss*)
 EC50 Daphnia 1 13 mg/l (48 h; *Daphnia magna*)

diethylene glycol (111-46-6)

LC50 fish 1 > 5,000 ppm (24 h; *Carassius auratus*)
 LC50 other aquatic organisms 1 1,174 mg/l (*Xenopus laevis*)
 EC50 Daphnia 1 > 10,000 mg/l (24 h; *Daphnia magna*)
 LC50 fish 2 61,072 ppm (168 h; *Poecilia reticulata*)
 TLM fish 1 > 32,000 mg/l (96 h; *Gambusia affinis*)
 TLM other aquatic organisms 1 > 1,000 ppm (96 h)
 Threshold limit other aquatic organisms 1 1,174 mg/l (72 h; *Xenopus laevis*; Toxicity test)
 Threshold limit other aquatic organisms 2 10,745 mg/l (16 h; Protozoa; Toxicity test)
 Threshold limit algae 1 2,700 mg/l (168 h; *Scenedesmus quadricauda*)
 Threshold limit algae 2 100 mg/l (*Selenastrum capricornutum*)

ethylene glycol (107-21-1)

LC50 fish 1 53,000 mg/l (96 h; *Pimephales promelas*; Static system)
 EC50 Daphnia 1 > 10,000 mg/l (24 h; *Daphnia magna*)
 LC50 fish 2 40,761 mg/l (96 h; *Salmo gairdneri* (*Oncorhynchus mykiss*); Static system)
 Threshold limit algae 1 > 10,000 mg/l (168 h; *Scenedesmus quadricauda*)
 Threshold limit algae 2 2,000 mg/l (192 h; *Microcystis aeruginosa*)

denatonium benzoate (3734-33-6)

Persistence and degradability Biodegradability in water: no data available. No (test) data on mobility of the substance available.

diethylene glycol (111-46-6)

Persistence and degradability Readily biodegradable in water. Biodegradable in the soil. Photolysis in the air.

Biochemical oxygen demand (BOD) 0.02 g O₂/g substance
 Chemical oxygen demand (COD) 1.51 g O₂/g substance
 ThOD 1.51 g O₂/g substance
 BOD (% of ThOD) 0.015 % ThOD

ethylene glycol (107-21-1)

Persistence and degradability Readily biodegradable in water. Biodegradable in the soil. Not established.

Biochemical oxygen demand (BOD) 0.47 g O₂/g substance

denatonium benzoate (3734-33-6)

Chemical oxygen demand (COD) 1.24 g O₂/g substance
 ThOD 1.29 g O₂/g substance
 BOD (% of ThOD) 0.36 % ThOD

denatonium benzoate (3734-33-6)

Log Pow 1.78 (Estimated value)
 Bioaccumulative potential Low potential for bioaccumulation (Log Kow < 4).

diethylene glycol (111-46-6)

Log Pow -1.98
 Bioaccumulative potential Bioaccumulation: not applicable.

ethylene glycol (107-21-1)

BCF fish 1 10 (72 h; *Leuciscus idus*)
 BCF other aquatic organisms 1 0.21 - 0.6 (*Procambarus* sp.; Chronic)
 BCF other aquatic organisms 2 190 (24 h; Algae)
 Log Pow -1.34 (Experimental value)
 Bioaccumulative potential Low potential for bioaccumulation (BCF < 500). Not established.

diethylene glycol (111-46-6)

Surface tension 0.0485 N/m

ethylene glycol (107-21-1)

Surface tension 0.048 N/m (20 °C / 68 °F)
 Effect on ozone layer No known effect on the ozone layer
 Effect on global warming No known ecological damage caused by this product.
 Other information Avoid release to the environment

Section 13 - Disposal Considerations

13.1 Waste treatment

Waste Disposal Recommendations : Dispose of contents/container, in a safe manner, to appropriate waste disposal facility, in accordance with local/regional/national/international regulations,
Ecology-waste materials : Avoid release to the environment.

Section – 14 Transportation Information

In accordance with DOT Transport document description	UN3082 Environmentally hazardous substances, liquid, n.o.s., 9, III
UN-No.(DOT)	3082
DOT NA no.	UN3082
Proper Shipping Name (DOT)	Environmentally hazardous substances, liquid, n.o.s.
Department of Transportation (DOT) Hazard Classes	9 - Class 9 - Miscellaneous hazardous material 49 CFR 173.140
Hazard labels (DOT)	9 - Class 9 (Miscellaneous dangerous materials)
DOT Symbols	G - Identifies PSN requiring a technical name
Packing group (DOT)	III - Minor Danger
DOT Packaging Exceptions (49 CFR 173.xxx)	155
DOT Packaging Non Bulk (49 CFR 173.xxx)	203
DOT Packaging Bulk (49 CFR 173.xxx)	241
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27)	No limit
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)	No limit
DOT Vessel Stowage Location	A - The material may be stowed "on deck" or "under deck" on a cargo vessel vessel and on a passenger vessel.
Other information	Non Bulk: Not regulated by the US D.O.T. (in quantities under 5,000 lbs in any one inner package).
Transport by sea UN-No. (IMDG)	Not regulated by IMDG (in quantities under 5,000 lbs in any one inner package)
Air transport UN-No.(IATA)	Not regulated by IATA (in quantities under 5,000 lbs in any one inner package)



Section 15 - Regulatory Information

Fleet Charge Concentrate Antifreeze & Coolant

EPA TSCA Regulatory Flag

Toxic Substances Control Act (TSCA): The intentional ingredients of this product are listed

denatonium benzoate (3734-33-6)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

diethylene glycol (111-46-6)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

ethylene glycol (107-21-1)

Listed on the United States TSCA (Toxic Substances Control Act) inventory Listed on United States SARA Section 313

RQ (Reportable quantity, section 304 of EPA's 5000 lb(s)

List of Lists)

SARA Section 311/312 Hazard Classes

Immediate (acute) health hazard Delayed (chronic) health hazard Ethylene glycol is subject to Tier 1 and/or Tier II annual inventory reporting.

SARA Section 313 - Emission Reporting

Ethylene glycol is subject to Form R Reporting req

Section 16 - Other Information

Full text of H-phrases:

Acute Tox.4

: Acute toxicity (oral), Category4

Eye Irrit.2A

: Serious eye damage/eye irritation, Category2A

Skin Irrit.2

: Skin corrosion/irritation, Category2

STOT RE2

: Specific target organ toxicity-Repeated exposure,Cat.2

SSTOT SE3

: Specific target organ toxicity-Single expos

H302

: Harmful if swallowed

H315

: Causes skin irritation

H319

: Causes serious eye irritation

H335

: May cause respiratory irritation

H373

: May cause damage to organs through prolonged and Repeated exposure

NFPA health hazard

: 1-Exposure could cause irritation but only minor residual injury even If no treatment is given

NFPA fire hazard

: 1- Must be preheated before ignition can occur

NFPA reactivity

: 0- Normally stable, even under fire exposure conditions, and are not Reactive with water.

HMIS III Rating

Health

: 2 moderate hazard-temporary or minor injury may occur

Flammability

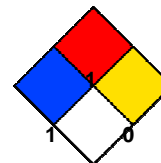
: 1 slight hazard

Physical

: 0 minimal hazard

Personal Protection

: B



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Health and safety precautions in this data sheet may not be adequate for all individuals and/or situations. It is the user's obligation to evaluate and use this product in a safe manner and to comply with all applicable laws and regulations. No statement made in this data sheet shall be construed as permission or recommendation for the use of any product in a manner that might infringe existing patents. No warranty is made, either expressed or implied.