

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 1: Identification of the	substance/mixture and of the company/undertaking
1.1. Product identifier	
Product form	: Mixture
Product name	: NAPA Heavy Duty Concentrate Antifreeze & Coolant
1.2. Relevant identified uses of the	substance or mixture and uses advised against
Use of the substance/mixture	: Heavy Duty Engine Coolant
1.3. Details of the supplier of the sa	fety data sheet
Old World Industries, LLC 4065 Commercial Ave. Northbrook, IL 60062 - USA T (847) 559-2000 www.oldworldind.com	
1.4. Emergency telephone number	
Emergency number	: (800) 424-9300; (703) 527 3887 (International) Chemtrec
SECTION 2: Hazards identification	on de la constante de la const
2.1. Classification of the substance	or mixture
GHS-US classification	
Acute Tox. 4 (Oral) H302 STOT RE 2 H373	
Full text of H-phrases: see section 16	
2.2. Label elements	
GHS-US labelling	
Hazard pictograms (GHS-US)	: GHS07 GHS08
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, 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

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

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS-US)

No data available

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SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

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. Description of 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. Most important symptoms and e	ffects, both acute and delayed
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

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 occured.

in humans is estimated to be 100 mL (3 oz).

SECTION 5: Firefighting measures	
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.
5.2. Special hazards arising from the sub	ostance or mixture
Fire hazard	: 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. Carbon dioxide.
Reactivity	: No dangerous reactions known under normal conditions of use.
5.3. Advice for firefighters	
Firefighting instructions	: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.
Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection.

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Special protective equipment for fire fighters : Wear positive pressure self-contained breathing apparatus (SCBA). Protective fire fighting clothing (includes fire-fighting helmet, coat, pants, boots and gloves).

SECT	ION 6: Accidental release mea	asures
6.1.	Personal precautions, protective equipment and emergency procedures	
6.1.1.	For non-emergency personnel	
Emerg	ency procedures	: Evacuate unnecessary personnel.
6.1.2.	For emergency responders	
Protect	tive equipment	: Equip cleanup crew with proper protection. Refer to section 8.2.
Emerg	ency procedures	: Ventilate area.
6.2.	Environmental precautions	
Preven	t entry to sewers and public waters. Noti	fy authorities if liquid enters sewers or public waters.
6.3.	Methods and material for containm	nent and cleaning up
Method	ds 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.
6.4.	Reference to other sections	
See He	eading 8. Exposure controls and persona	al protection.
SECT	ION 7: Handling and storage	
7.1.	Precautions for safe handling	
Precau	itions 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.
Hygien	e measures	: Do not eat, drink or smoke when using this product. Wash affected areas thoroughly after handling.
7.2.	Conditions for safe storage, includ	ing any incompatibilities
Storag	e conditions	: Keep only in the original container in a cool, well ventilated place away from : Heat sources.

Storage conditions	Keep only in the original container in a cool, well ventilated place away from t 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 a blowtorch on, etc. containers even when empty.	
Incompatible products	: Keep away from strong acids, strong bases and oxidizing agents.	
Incompatible materials	: Sources of ignition.	

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection			
8.1. Control parameters			
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	
8.2. Exposure co	ontrols		

Personal protective equipment

: Avoid all unnecessary exposure. Gloves. Safety glasses.



Hand protection	: Wear protective gloves.
Eye protection	: Chemical goggles or safety glasses.
Respiratory protection	: If exposed to levels above exposure limits wear appropriate respiratory protection.
Other information	: Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties 9.1. Information on basic physical and chemical properties Physical state : Liquid

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Color	: Pink	
Odor	: Mild	
Odor threshold	: No data available	
pH 50% water solution	: 10.5 - 11	
Relative evaporation rate (butylacetate=1)	: Nil	
Freezing point	: -18 °C (0 °F)	
Boiling point	: 158 °C (317 °F)	
Flash point	: 116 °C (241 °F) [100% Ethylene Glycol] ASTM D56	
Auto-ignition temperature	: 400 °C (752 °F) [100% Ethylene Glycol] Literature	
Decomposition temperature	: No data available	
Flammability (solid, gas)	: No data available	
Vapor pressure	: < 0.1 mm Hg @ 20 ℃	
Relative vapor density at 20 °C	: No data available	
Specific Gravity	: 1.12	
Density	: 1.12 kg/l (9.3 lbs/gal)	
Solubility	: Water: Complete	
Log Pow	: No data available	
Log Kow	: No data available	
Viscosity, kinematic	: No data available	
Viscosity, dynamic	: No data available	
Explosive properties	: No data available	
Oxidizing properties	: No data available	
Explosive limits	: 3.2 - 15.3 vol %	
9.2. Other information		
VOC content	: 0.00 %	
SECTION 10: Stability and reactivity	tv	
10.1. Reactivity		
No dangerous reactions known under normal conditions of use.		
Stable.		
10.3. Possibility of hazardous reactions		
Hazardous polymerization will not occur.		
10.4. Conditions to avoid		
Keep away from any flames or sparking source. Extremely high or low temperatures.		
10.5. Incompatible materials		
Keep away from strong acids, strong bases and oxidizing agents.		
10.6. Hazardous decomposition products		
Carbon dioxide. Carbon monoxide. Fume. Alco		
SECTION 11: Toxicological information	ation	
11.1. Information on toxicological effec		

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

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denatonium benzoate (3734-33-6)		
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).	
Aspiration hazard	: Not classified	
Potential adverse human health effects and symptoms	: Based on available data, the classification criteria are not met. Harmful if swallowed.	
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).	

SECTION 12: Ecological information

12.1. Toxicity

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)	
2.2 Persistence and degradability		

Persistence and degradability 12.2.

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 O ₂ /g substance
Chemical oxygen demand (COD)	1.51 g O ₂ /g substance
ThOD	1.51 g O ₂ /g substance
BOD (% of ThOD)	0.015 % ThOD

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Readily biodegradable in water. Biodegradable in the soil.		
0.47 g O ₂ /g substance		
1.24 g O ₂ /g substance		
1.29 g O ₂ /g substance		
0.36 % ThOD		
12.3. Bioaccumulative potential		
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).	

Mobility in soil 12.4.

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)	
12.5. Other adverse effects		
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 consideratio	ns		
13.1. Waste treatment methods			
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: Transport 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		

: Environmentally hazardous substances, liquid, n.o.s.

: G - Identifies PSN requiring a technical name

Department of Transportation (DOT) Hazard : 9 - Class 9 - Miscellaneous hazardous material 49 CFR 173.140 : 9 - Class 9 (Miscellaneous dangerous materials) Hazard labels (DOT)

: III - Minor Danger

DOT Symbols Packing group (DOT) DOT Packaging Exceptions (49 CFR 173.xxx) DOT Packaging Non Bulk (49 CFR 173.xxx)

Proper Shipping Name (DOT)

: 203

: 155

Classes

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-			
	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 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).
	ADR		
	No additional information available		
	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		
5.1. US Federal regulations		
NAPA Heavy Duty Concentrate Antifreeze & C	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 Substa	nces 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 Substa Listed on United States SARA Section 313	nces Control Act) inventory	
RQ (Reportable quantity, section 304 of EPA's List of Lists)	5000 lb(s)	
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard Delayed (chronic) health hazard Ethylene glycol is subject to Tier I and/or Tier II annual inventory reporting.	
SARA Section 313 - Emission Reporting	Ethylene glycol is subject to Form R Reporting requirements.	

15.2. International regulations

CANADA

NAPA Heavy Duty Concentrate Antifreeze & Coolant	
WHMIS Classification	Class D Division 2 Subdivision A - Very toxic material causing other toxic effects

WHMIS Classification



Class D Division 2 Subdivision A - Very toxic material causing other toxic effects

EU-Regulations

No additional information available

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Classification according to Regulation (EC) No. 1272/2008 [CLP]

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

Not classified

15.2.2. National regulations

NAPA Heavy Duty Concentrate Antifreeze & Coolant

DSL (Canada): The intentional ingredients of this product are listed ECL (South Korea): The intentional ingredients of this product are listed. EINECS (Europe): The intentional ingredients of this product are listed ENCS (Japan): The intentional ingredients of this product are listed

15.3. US State regulations

diethylene glycol (111-46-6)

U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List

ethylene glycol (107-21-1)

U.S. - Massachusetts - Right To Know List

U.S. - New Jersey - Right to Know Hazardous Substance List

U.S. - Pennsylvania - RTK (Right to Know) List

SECTION 16: Other information

Full text of H-phrases:

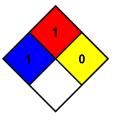
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Eye Irrit. 2A	Serious eye damage/eye irritation, Category 2A
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT RE 2	Specific target organ toxicity — Repeated exposure, Category 2
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3,
	Respiratory tract irritation
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 or repeated
	exposure

: 1 - Exposure could cause irritation but only minor residual

injury even if no treatment is given

NFPA health hazard

	injury even in 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

SDS GHS US (GHS HazCom 2012) OWI

Old World Industries, LLC makes no warranty, representation or guarantee as to the accuracy, sufficiency or completeness of the material set forth herein. It is the user's responsibility to determine the safety, toxicity and suitability of his own use, handling and disposal of this product. Since actual use by others is beyond our control, no warranty, expressed or implied, is made by Old World Industries, LLC as to the effects of such use, the results to be obtained or the safety and toxicity of this product, nor does Old World Industries, LLC assume liability arising out of the use by others of this product referred to herein. The data in this SDS relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process.

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