

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

	substance/mixture and of the company/undertaking
1.1. Product identifier	
Product form	: Mixture
Product name	: NAPA Concentrate Antifreeze & Coolant
1.2. Relevant identified uses of the s	substance or mixture and uses advised against
Use of the substance/mixture	: Automotive Engine Antifreeze & Coolant
1.3. Details of the supplier of the saf	ety 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 identificatio	n
2.1. Classification of the substance	
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)	
nazaru pictograms (GHS-03)	
Circul word (CLIC LIC)	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
	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-U	S)
No data available	

No data available

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

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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 effe	ects, 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 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 occured.

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 su	bstance 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.
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).

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SECTION 6: Accidental release measures		
6.1. Personal precautions, protective equipment and emergency procedures		
6.1.1. For non-emergency personnel		
Emergency procedures	: Evacuate unnecessary personnel.	
6.1.2. For emergency responders		
Protective equipment	: Equip cleanup crew with proper protection. Refer to section 8.2.	
Emergency procedures	: Ventilate area.	
6.2. Environmental precautions		
Prevent entry to sewers and public waters. N	otify authorities if liquid enters sewers or public waters.	
6.3. Methods and material for contain	nment and cleaning up	
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.	
6.4. Reference to other sections		
See Heading 8. Exposure controls and perso	onal protection.	
SECTION 7: Handling and storage	•	
7.1. Precautions for 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. Conditions for safe storage, incl	uding any incompatibilities	
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 ^oC (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		

SECT	ON 8: Exposure controls/personal protection	
8.1.	Control parameters	

ethylene glycol (107	/-21-1)	
USA ACGIH	ACGIH Ceiling (mg/m ³)	100.00 mg/m³
USA ACGIH	Remark (ACGIH)	Upper Respiratory Tract (URT) & Eye irritant
8.2. Exposure c	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 basi	ic physical and chemical properties	
Physical state	: Liquid	
Color	: Green	
Odor	: Mild	

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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 ⁰C
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	
10.1. Reactivity	
No dangerous reactions known under normal co	nditions of use
10.2. Chemical stability Stable. 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	3
Carbon dioxide. Carbon monoxide. Fume. Alcoh	ols. Aldehydes. Ethers.
SECTION 11: Toxicological informat	ion
11.1. Information on toxicological effects	
Acute toxicity	: Oral: Harmful if swallowed.
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ethylene glycol (107-21-1)	5 000 m m // m //D = 1)

ethylene glycol (107-21-1)		
LD50 oral rat	> 5,000 mg/kg (Rat)	
ATE US (oral)	500 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	
denatonium benzoate (3734-33-6)		
LD50 oral rat	584 mg/kg (Rat)	

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ethylene glycol (107-21-1)	
LD50 dermal rabbit	> 2,000 mg/kg (Rabbit)
ATE US (oral)	584 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

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)	
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)	
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)	

12.2. Persistence and degradability

ethylene glycol (107-21-1)		
Persistence and degradability	Readily biodegradable in water. Biodegradable in the soil.	
Biochemical oxygen demand (BOD)	0.47 g O ₂ /g substance	
Chemical oxygen demand (COD)	1.24 g O ₂ /g substance	
ThOD	1.29 g O ₂ /g substance	
BOD (% of ThOD)	0.36 % ThOD	
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	

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ethylene glycol (107-21-1)		
BOD (% of ThOD)	0.015 % ThOD	
denatonium benzoate (3734-33-6)		
Persistence and degradability	Biodegradability in water: no data available. No (test) data on mobility of the substance available.	

12.3. **Bioaccumulative potential**

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).	
diethylene glycol (111-46-6)		
Log Pow	-1.98	
Bioaccumulative potential	Bioaccumulation: not applicable.	
denatonium benzoate (3734-33-6)		
Log Pow	1.78 (Estimated value)	
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).	
12.4 Mobility in soil		

Mobility in soil 12.4.

othylono glycol (107-21-1)	
ethylene glycol (107-21-1) Surface tension	0.048 N/m (20 °C / 68 °F)
diethylene glycol (111-46-6)	
Surface tension	0.0485 N/m
	0.0403 Will
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 consideration	S
13.1. Waste treatment methods	
Naste 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	
n accordance with DOT	
Fransport document description	: UN3082 Environmentally hazardous substances, liquid, n.o.s., 9, III
JN-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
Packing group (DOT) DOT Packaging Exceptions (49 CFR 173.xxx) DOT Packaging Non Bulk (49 CFR 173.xxx)	: III - Minor Danger : 155 : 203

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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 Concentrate Antifreeze & Coolant	
EPA TSCA Regulatory Flag	Toxic Substances Control Act (TSCA): The intentional ingredients of this product are listed
ethylene glycol (107-21-1)	
Listed on the United States TSCA (Toxic Substan 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.
diethylene glycol (111-46-6)	
Listed on the United States TSCA (Toxic Substan	nces Control Act) inventory
denatonium benzoate (3734-33-6)	
Listed on the United States TSCA (Toxic Substan	nces Control Act) inventory

15.2. International regulations

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

WHMIS Classification



EU-Regulations No additional information available

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

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD] Not classified

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15.2.2. National regulations NAPA 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

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	
diethylene glycol (111-46-6)	
U.S Pennsylvania - RTK (Right to Know) - Environmental Hazard 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

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.

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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.