

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Revision date: 05/01/2019

### SECTION 1: Identification of the substance/mixture and of the company/undertaking **Product identifier** 1.1. Product form : Mixture : Super Tech Heavy Duty Nitrite-Free 50/50 Prediluted Antifreeze and Coolant Product name Relevant identified uses of the substance or mixture and uses advised against 1.2. Use of the substance/mixture : Antifreeze & Coolant Details of the supplier of the safety data sheet 1.3. Old World Industries, LLC 3100 Sanders Road Northbrook, IL 60062 - USA T (847) 559-2000 www.oldworldind.com 1.4. **Emergency telephone number** Emergency number : 800 424 9300 (United States); 00 1 703 527 3887 (International) Chemtrec **SECTION 2: Hazards identification** 2.1. **Classification of the substance or mixture GHS-US classification**

H302 Harmful if swallowed. Acute toxicity (oral), Category 4 Reproductive toxicity, H361 Suspected of damaging fertility or the unborn child. Category 2 Specific target organ H373 May cause damage to organs (kidneys) through prolonged or repeated exposure (oral). toxicity - Repeated exposure, Category 2

Full text of H statements : 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)	<ul> <li>H302 - Harmful if swallowed.</li> <li>H361 - Suspected of damaging fertility or the unborn child.</li> <li>H373 - May cause damage to organs (kidneys) through prolonged or repeated exposure (oral).</li> </ul>
Precautionary statements (GHS-US)	<ul> <li>P201 - Obtain special instructions before use.</li> <li>P202 - Do not handle until all safety precautions have been read and understood.</li> <li>P260 - Do not breathe mist, spray, vapors</li> <li>P264 - Wash affected areas thoroughly after handling.</li> <li>P270 - Do not eat, drink or smoke when using this product.</li> <li>P280 - Wear personal protective equipment as required.</li> <li>P301+P310 - If swallowed: Immediately call doctor/physician or poison center</li> <li>P301+P330+P331 - If swallowed: rinse mouth. Do NOT induce vomiting</li> <li>P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing</li> <li>P308+P313 - If exposed or concerned: Get medical advice/attention.</li> <li>P405 - Store locked up.</li> <li>P501 - Dispose of contents/container to appropriate waste disposal facility, in accordance with local/regional/national/international regulations</li> </ul>
2.3. Other hazards	
No additional information available	

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## 2.4. Unknown acute toxicity (GHS US)

## No data available

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

## Not applicable

## 3.2. Mixtures

Name	Product identifier	% by wt	GHS-US classification
ethylene glycol	(CAS-No.) 107-21-1	<= 50	Not classified
water	(CAS-No.) 7732-18-5	< 50	Not classified
diethylene glycol	(CAS-No.) 111-46-6	< 3	Acute Tox. 4 (Oral), H302 STOT RE 2, H373
potassium 2-ethylhexanoate	(CAS-No.) 3164-85-0	< 3	Repr. 2, H361
denatonium benzoate	(CAS-No.) 3734-33-6	0.003 - 0.005 [30 - 50 ppm]	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 3, H335

Full text of hazard classes and H-statements : see section 16

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 exposed or concerned: Get medical advice/attention.
First-aid measures after inhalation	<ul> <li>If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. If you feel unwell, seek medical advice.</li> </ul>
First-aid measures after skin contact	: Remove contaminated clothing. Wash with plenty of 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.
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: Get medical advice and 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	cts, both acute and delayed
Symptoms/effects	: Causes damage to organs (kidneys) Oral. Suspected of damaging fertility or the unborn child.
Symptoms/effects after skin contact	: Causes skin irritation.
Symptoms/effects after eye contact	: Causes serious eye damage.
Symptoms/effects 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. 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-	stance 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. Product is not flammable or combustible but may burn under fire conditions.

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Reactivi	ity	: No dangerous reactions known under normal conditions of use.
5.3.	Special protective equipment and	precautions for fire-fighters
Firefight	ting instructions	: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment.
Protecti	on during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection.

6.1.	Personal precautions, protective	equipment and emergency procedures
6.1.1.	For non-emergency personnel	
Emerge	ncy procedures	: Evacuate unnecessary personnel.
6.1.2.	For emergency responders	
Protecti	ve equipment	: Equip cleanup crew with proper protection. Refer to section 8.2.
Emerge	ncy procedures	: Ventilate area.
6.2.	Environmental precautions	
Prevent	entry to sewers and public waters. No	otify authorities if liquid enters sewers or public waters.
6.3.	Methods and material for contain	ment and cleaning up
Method	s for cleaning up	: Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Small quantities of liquid spill: take up in non-combustible absorbent material and shovel into container for disposal. Store away from other materials.
6.4.	Reference to other sections	
For further information refer to section 13. For further information refer to section 8: "Exposure controls/personal 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. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.
Hygiene measures :	Do not eat, drink or smoke when using this product. Wash affected areas thoroughly after handling.
7.2. Conditions for safe storage, including	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 -37 °C (-34 °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

denatonium benzoate (3734-33-6)		
Not applicable		
ethylene glycol (107-21-1)		
ACGIH	Local name	Ethylene glycol
ACGIH	ACGIH TWA (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup>
ACGIH	ACGIH TWA (ppm)	25 ppm (Vapor fraction)
ACGIH	ACGIH STEL (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup> (Inhalable fraction, Aerosol only)
ACGIH	ACGIH STEL (ppm)	50 ppm (Vapor fraction)
ACGIH Remark (ACGIH) Upper respiratory tract & eye irritant		

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ethylene glycol (107-21-1)			
ACGIH	Regulatory reference	ACGIH 2018	
diethylene glycol (111-46-6)	diethylene glycol (111-46-6)		
Not applicable			
water (7732-18-5)			
Not applicable			
potassium 2-ethylhexanoate (3164-85-0)			
Not applicable			

## 8.2. Appropriate engineering controls

### No additional information available

### 8.3. Individual protection measures/Personal protective equipment

## Personal protective equipment:

Avoid all unnecessary exposure. Gloves. Safety glasses.

### Hand protection:

Wear protective gloves.

## Eye protection:

Chemical goggles or safety glasses

## **Respiratory protection:**

Respiratory protection not required in normal conditions. 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 Molecular mass : 62.07 g/mol Ethylene Glycol Color : Red Odor : mild : No data available Odor threshold pН : 8 Relative evaporation rate (butylacetate=1) : Nil : -37 °C (-34 °F) Freezing point : 107 °C (224 °F) Boiling point : 116 °C (241 °F) [100% Ethylene Glycol] ASTM D56 Flash point : 400 °C (752 °F) [100% Ethylene Glycol] Literature Auto-ignition temperature Decomposition temperature : No data available Flammability (solid, gas) : No data available Vapor pressure : < 0.1 @ 20 °C Relative vapor density at 20 °C : No data available

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Specific Gravity	: 1.06
Density	: 1.06 kg/l (8.84 lbs/gal)
Solubility	: Water: Complete
log Pow	: No data available
Log Kow	: No data available
/iscosity, kinematic	: No data available
/iscosity, dynamic	: No data available
Explosive limits	: Not applicable
Explosive properties	: Not applicable.
Dxidizing properties	: Not applicable.
0.2. Other information	
/OC content	: 0%
	. 0 /0
SECTION 10: Stability and reactive	vity
0.1. Reactivity	
No dangerous reactions known under norma	al conditions of use.
0.2. Chemical stability	
Stable.	
0.3. Possibility of hazardous reactio	ns
lazardous polymerization will not occur.	
0.4. Conditions to avoid	
Extremely high or low temperatures. Keep a	way from any flames or sparking source
	and evidizing agents
Keep away from strong acids, strong bases	
Keep away from strong acids, strong bases 0.6. Hazardous decomposition prod	ucts
Keep away from strong acids, strong bases 0.6. Hazardous decomposition prod	ucts
Keep away from strong acids, strong bases <b>0.6.</b> Hazardous decomposition prod Carbon dioxide. Carbon monoxide. Fume. a	ucts Icohols. Aldehydes. Ethers.
Keep away from strong acids, strong bases           0.6.         Hazardous decomposition prod           Carbon dioxide.         Carbon monoxide. Fume. a           SECTION 11: Toxicological information	ucts Icohols. Aldehydes. Ethers. mation
Keep away from strong acids, strong bases0.6.Hazardous decomposition prodCarbon dioxide.Carbon monoxide.Fume. aSECTION 11: Toxicological inform1.1.Information on toxicological effect	ucts Icohols. Aldehydes. Ethers. mation
Keep away from strong acids, strong bases0.6.Hazardous decomposition prodCarbon dioxide.Carbon monoxide.Fume. aSECTION 11: Toxicological inform1.1.Information on toxicological effect	ucts Icohols. Aldehydes. Ethers. mation ects : Not classified
<ul> <li>Keep away from strong acids, strong bases</li> <li>0.6. Hazardous decomposition prod</li> <li>Carbon dioxide. Carbon monoxide. Fume. a</li> <li>SECTION 11: Toxicological information on toxicological efformation on toxicolog</li></ul>	ucts Icohols. Aldehydes. Ethers. mation ects : Not classified
Keep away from strong acids, strong bases         0.6.       Hazardous decomposition prod         Carbon dioxide. Carbon monoxide. Fume. a         SECTION 11: Toxicological information         1.1.       Information on toxicological effective         Acute toxicity         Super Tech Heavy Duty Nitrite-Free 50/5	ucts Icohols. Aldehydes. Ethers. mation ects : Not classified 50 Prediluted Antifreeze and Coolant
Keep away from strong acids, strong bases         0.6.       Hazardous decomposition prod         Carbon dioxide.       Carbon monoxide. Fume. a         SECTION 11: Toxicological information on toxicological efformation on toxicological efformation on toxicological efformation         Nucle toxicity         Super Tech Heavy Duty Nitrite-Free 50/5         ATE US (oral)	ucts Icohols. Aldehydes. Ethers. mation ects : Not classified 50 Prediluted Antifreeze and Coolant
Geep away from strong acids, strong bases         0.6.       Hazardous decomposition prod         Carbon dioxide. Carbon monoxide. Fume. a         SECTION 11: Toxicological inform         1.1.       Information on toxicological effectuate toxicity         Super Tech Heavy Duty Nitrite-Free 50/5         ATE US (oral)         denatonium benzoate (3734-33-6)	ucts Icohols. Aldehydes. Ethers. mation ects : Not classified 50 Prediluted Antifreeze and Coolant 943.396 mg/kg bodyweight
Keep away from strong acids, strong bases <b>0.6.</b> Hazardous decomposition prod Carbon dioxide. Carbon monoxide. Fume. a <b>SECTION 11: Toxicological inform</b> <b>1.1.</b> Information on toxicological effect Acute toxicity <b>Super Tech Heavy Duty Nitrite-Free 50/5</b> ATE US (oral) <b>denatonium benzoate (3734-33-6)</b> LD50 oral rat	ucts Icohols. Aldehydes. Ethers. mation ects : Not classified 50 Prediluted Antifreeze and Coolant 943.396 mg/kg bodyweight 584 mg/kg (Rat, Literature study, Oral)
Keep away from strong acids, strong bases         0.6.       Hazardous decomposition prod         Carbon dioxide. Carbon monoxide. Fume. a         SECTION 11: Toxicological information on toxicological effectuate toxicity         Super Tech Heavy Duty Nitrite-Free 50/5         ATE US (oral)         denatonium benzoate (3734-33-6)         LD50 oral rat         LD50 dermal rabbit	ucts Icohols. Aldehydes. Ethers. mation ects : Not classified 50 Prediluted Antifreeze and Coolant 943.396 mg/kg bodyweight 584 mg/kg (Rat, Literature study, Oral) > 2000 mg/kg (Rabbit, Literature study, Dermal)
Keep away from strong acids, strong bases         0.6.       Hazardous decomposition prod         Carbon dioxide. Carbon monoxide. Fume. a         SECTION 11: Toxicological information         1.1.       Information on toxicological effective         Acute toxicity         Super Tech Heavy Duty Nitrite-Free 50/5         ATE US (oral)         denatonium benzoate (3734-33-6)         LD50 oral rat         LD50 dermal rabbit         ATE US (oral)	ucts Icohols. Aldehydes. Ethers. mation ects : Not classified 50 Prediluted Antifreeze and Coolant 943.396 mg/kg bodyweight 584 mg/kg (Rat, Literature study, Oral) > 2000 mg/kg (Rabbit, Literature study, Dermal)
Keep away from strong acids, strong bases         0.6.       Hazardous decomposition prod         Carbon dioxide. Carbon monoxide. Fume. a         SECTION 11: Toxicological information on toxicological effective         1.1.       Information on toxicological effective         Super Tech Heavy Duty Nitrite-Free 50/5         ATE US (oral)         denatonium benzoate (3734-33-6)         LD50 oral rat         LD50 dermal rabbit         ATE US (oral)         ethylene glycol (107-21-1)	ucts         lcohols. Aldehydes. Ethers.         mation         ects         : Not classified         50 Prediluted Antifreeze and Coolant         943.396 mg/kg bodyweight         584 mg/kg (Rat, Literature study, Oral)         > 2000 mg/kg (Rabbit, Literature study, Dermal)         584 mg/kg bodyweight         7712 mg/kg bodyweight (according to BASF-internal standards, Rat, Male / female,
Keep away from strong acids, strong bases         0.6.       Hazardous decomposition prod         Carbon dioxide. Carbon monoxide. Fume. a         SECTION 11: Toxicological information on toxicological effectuation         1.1.       Information on toxicological effectuation         Acute toxicity         Super Tech Heavy Duty Nitrite-Free 50/5         ATE US (oral)         denatonium benzoate (3734-33-6)         LD50 oral rat         LD50 dermal rabbit         ATE US (oral)         ethylene glycol (107-21-1)         LD50 oral rat	ucts         lcohols. Aldehydes. Ethers.         mation         ects         : Not classified         50 Prediluted Antifreeze and Coolant         943.396 mg/kg bodyweight         584 mg/kg (Rat, Literature study, Oral)         > 2000 mg/kg (Rabbit, Literature study, Dermal)         584 mg/kg bodyweight         7712 mg/kg bodyweight (according to BASF-internal standards, Rat, Male / female, Experimental value, Aqueous solution, Oral, 7 day(s))
Keep away from strong acids, strong bases         0.6.       Hazardous decomposition prod         Carbon dioxide. Carbon monoxide. Fume. a         SECTION 11: Toxicological information on toxicological effective         1.1.       Information on toxicological effective         Acute toxicity         Super Tech Heavy Duty Nitrite-Free 50/5         ATE US (oral)         denatonium benzoate (3734-33-6)         LD50 oral rat         LD50 dermal rabbit         ATE US (oral)         ethylene glycol (107-21-1)         LD50 oral rat	ucts         lcohols. Aldehydes. Ethers.         mation         ects         : Not classified         50 Prediluted Antifreeze and Coolant         943.396 mg/kg bodyweight         584 mg/kg (Rat, Literature study, Oral)         > 2000 mg/kg (Rabbit, Literature study, Dermal)         584 mg/kg bodyweight         7712 mg/kg bodyweight         7712 mg/kg bodyweight (according to BASF-internal standards, Rat, Male / female, Experimental value, Aqueous solution, Oral, 7 day(s))         > 2.5 mg/l (6 h, Rat, Male / female, Experimental value, Inhalation (aerosol))
Geep away from strong acids, strong bases         0.6.       Hazardous decomposition prod         Carbon dioxide. Carbon monoxide. Fume. a         SECTION 11: Toxicological information         1.1.       Information on toxicological effective         Super Tech Heavy Duty Nitrite-Free 50/S         ATE US (oral)         denatonium benzoate (3734-33-6)         LD50 oral rat         LD50 dermal rabbit         ATE US (oral)         ethylene glycol (107-21-1)         LD50 oral rat         ATE US (oral)         ethylene glycol (107-21-1)         LD50 oral rat         LC50 inhalation rat (mg/l)         ATE US (oral)	ucts         lcohols. Aldehydes. Ethers.         mation         ects         : Not classified         50 Prediluted Antifreeze and Coolant         943.396 mg/kg bodyweight         584 mg/kg (Rat, Literature study, Oral)         > 2000 mg/kg (Rabbit, Literature study, Dermal)         584 mg/kg bodyweight         7712 mg/kg bodyweight         7712 mg/kg bodyweight (according to BASF-internal standards, Rat, Male / female, Experimental value, Aqueous solution, Oral, 7 day(s))         > 2.5 mg/l (6 h, Rat, Male / female, Experimental value, Inhalation (aerosol))
Keep away from strong acids, strong bases         0.6.       Hazardous decomposition prod         Carbon dioxide. Carbon monoxide. Fume. a         SECTION 11: Toxicological information         1.1.       Information on toxicological effective         Super Tech Heavy Duty Nitrite-Free 50/S         ATE US (oral)         denatonium benzoate (3734-33-6)         LD50 oral rat         LD50 dermal rabbit         ATE US (oral)         ethylene glycol (107-21-1)         LD50 oral rat         LC50 inhalation rat (mg/l)         ATE US (oral)	ucts lcohols. Aldehydes. Ethers. mation ects : Not classified 50 Prediluted Antifreeze and Coolant 943.396 mg/kg bodyweight 584 mg/kg (Rat, Literature study, Oral) > 2000 mg/kg (Rabbit, Literature study, Dermal) 584 mg/kg bodyweight 7712 mg/kg bodyweight (according to BASF-internal standards, Rat, Male / female, Experimental value, Aqueous solution, Oral, 7 day(s)) > 2.5 mg/l (6 h, Rat, Male / female, Experimental value, Inhalation (aerosol)) 7712 mg/kg bodyweight 19600 mg/kg bodyweight (OECD 401: Acute Oral Toxicity, Rat, Male, Experimental value,
Keep away from strong acids, strong bases         0.6.       Hazardous decomposition prod         Carbon dioxide. Carbon monoxide. Fume. a         SECTION 11: Toxicological information         1.1.       Information on toxicological effective         Super Tech Heavy Duty Nitrite-Free 50/S         ATE US (oral)         denatonium benzoate (3734-33-6)         LD50 oral rat         LD50 dermal rabbit         ATE US (oral)         ethylene glycol (107-21-1)         LD50 oral rat         LC50 inhalation rat (mg/l)         ATE US (oral)         diethylene glycol (111-46-6)         LD50 oral rat	ucts lcohols. Aldehydes. Ethers. mation ects : Not classified 50 Prediluted Antifreeze and Coolant 943.396 mg/kg bodyweight 584 mg/kg (Rat, Literature study, Oral) > 2000 mg/kg (Rabbit, Literature study, Dermal) 584 mg/kg bodyweight 7712 mg/kg bodyweight (according to BASF-internal standards, Rat, Male / female, Experimental value, Aqueous solution, Oral, 7 day(s)) > 2.5 mg/l (6 h, Rat, Male / female, Experimental value, Inhalation (aerosol)) 7712 mg/kg bodyweight 19600 mg/kg bodyweight (OECD 401: Acute Oral Toxicity, Rat, Male, Experimental value, Oral)
Keep away from strong acids, strong bases         10.6.       Hazardous decomposition prod         Carbon dioxide. Carbon monoxide. Fume. a         SECTION 11: Toxicological information         11.1.       Information on toxicological effective         Acute toxicity         Super Tech Heavy Duty Nitrite-Free 50/5         ATE US (oral)         denatonium benzoate (3734-33-6)         LD50 oral rat         LD50 dermal rabbit         ATE US (oral)         ethylene glycol (107-21-1)         LD50 oral rat         LC50 inhalation rat (mg/l)         ATE US (oral)         diethylene glycol (111-46-6)         LD50 oral rat	ucts         Icohols. Aldehydes. Ethers.         mation         ects         : Not classified         50 Prediluted Antifreeze and Coolant         943.396 mg/kg bodyweight         584 mg/kg (Rat, Literature study, Oral)         > 2000 mg/kg (Rabbit, Literature study, Dermal)         584 mg/kg bodyweight         7712 mg/kg bodyweight         7712 mg/kg bodyweight (according to BASF-internal standards, Rat, Male / female, Experimental value, Aqueous solution, Oral, 7 day(s))         > 2.5 mg/l (6 h, Rat, Male / female, Experimental value, Inhalation (aerosol))         7712 mg/kg bodyweight         19600 mg/kg bodyweight (OECD 401: Acute Oral Toxicity, Rat, Male, Experimental value, Oral)         11890 mg/kg (Rabbit, Dermal)

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Serious eye damage/irritation	: Not classified
	pH: 8
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Suspected of damaging fertility or the unborn child.
STOT-single exposure	: Not classified
STOT-repeated exposure	: May cause damage to organs (kidneys) through prolonged or repeated exposure (oral).
Aspiration hazard	: Not classified
Potential adverse human health effects and	. Deced on quailable data, the eleccification aritaria are not mat
symptoms	: Based on available data, the classification criteria are not met.
Symptoms/effects	: Causes damage to organs (kidneys) Oral. Suspected of damaging fertility or the unborn child.
Symptoms/effects after skin contact	: Causes skin irritation.
Symptoms/effects after eye contact	: Causes serious eve damage.
Symptoms/effects after ingestion	: Swallowing a small quantity of this material will result in serious health hazard. The lethal dose
Symptoms/enects and ingestion	in humans is estimated to be 100 mL (3 oz).

<b>SECTION 12: Ecological information</b>	
12.1. Toxicity	
Ecology - general	: No data available.
denatonium benzoate (3734-33-6)	
LC50 fish 1	> 1,000.00 mg/l (96 h, Salmo gairdneri, Literature study)
EC50 Daphnia 1	13.00 mg/l (48 h, Daphnia magna, Literature study)
ethylene glycol (107-21-1)	
LC50 fish 1	40,761.00 mg/l (96 h, Salmo gairdneri, Static system)
EC50 Daphnia 1	> 10,000.00 mg/l (24 h, Daphnia magna)
diethylene glycol (111-46-6)	
LC50 fish 1	> 5,000.00 ppm (24 h, Carassius auratus)
EC50 Daphnia 1	> 10,000.00 mg/l (24 h, Daphnia magna)
LC50 fish 2	75,200.00 mg/l (Other, 96 h, Pimephales promelas, Flow-through system, Experimental value)
EC50 Daphnia 2	> 10,000.00 mg/l (DIN 38412-11, 24 h, Daphnia magna, Static system, Fresh water, Experimental value)

## 12.2. Persistence and degradability

denatonium benzoate (3734-33-6)				
Persistence and degradability	Biodegradability in water: no data available. No (test) data on mobility of the substance available.			
ethylene glycol (107-21-1)				
Persistence and degradability	Biodegradable in the soil. Readily biodegradable in water.			
Biochemical oxygen demand (BOD)	0.47 g O <sub>2</sub> /g substance			
Chemical oxygen demand (COD)	1.24 g O <sub>2</sub> /g substance			
ThOD	1.29 g O <sub>2</sub> /g substance			
BOD (% of ThOD)	0.36			
diethylene glycol (111-46-6)				
Persistence and degradability	Biodegradable in the soil. Biodegradable in water.			
Biochemical oxygen demand (BOD)	0.02 g O <sub>2</sub> /g substance			
Chemical oxygen demand (COD)	1.51 g O <sub>2</sub> /g substance			

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diethylene glycol (111-46-6)			
ThOD 1.51 g O <sub>2</sub> /g substance			
BOD (% of ThOD)	0.02		

## 12.3. Bioaccumulative potential

denatonium benzoate (3734-33-6)				
Log Pow	1.78 (Estimated value)			
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).			
ethylene glycol (107-21-1)				
BCF fish 1	10.00 (72 h, Leuciscus idus)			
BCF other aquatic organisms 1	0.21 - 0.6 (Procambarus sp., Chronic)			
BCF other aquatic organisms 2	190.00 (24 h, Algae)			
Log Pow	-1.34 (Experimental value)			
Bioaccumulative potential	Not bioaccumulative.			
diethylene glycol (111-46-6)				
BCF fish 1	100.00 (Other, 3 day(s), Leuciscus melanotus, Static system, Fresh water, Experimental value)			
Log Pow	-1.98 (Calculated, Other)			
Bioaccumulative potential	Not bioaccumulative.			

## 12.4. Mobility in soil

denatonium benzoate (3734-33-6)			
Ecology - soil No (test)data on mobility of the substance available.			
ethylene glycol (107-21-1)			
Surface tension 48.00 mN/m (20 °C)			
Ecology - soil	No (test)data on mobility of the substance available.		
diethylene glycol (111-46-6)			
Surface tension	0.05 N/m		
Log Koc	0.00 (log Koc, SRC PCKOCWIN v1.66, Calculated value)		
Ecology - soil	Highly mobile in soil.		

12.5. Other adverse effects				
Effect on the ozone layer	: No known effect on the ozone layer			
Other information	: Avoid release to the environment.			
SECTION 13: Disposal considerations				

13.1.	Waste treatment methods	
Product/	Packaging disposal recommendations	: Dispose of contents/container 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**

## **Department of Transportation (DOT)**

In accordance with DOT

## Non Bulk (in quantities under 5,000 lbs in any one inner package):

Not regulated by the US DOT

Transport document description	: UN3082 Environmentally hazardous substances, liquid, n.o.s., 9, III			
UN-No.(DOT)	: UN3082			
Proper Shipping Name (DOT)	: Environmentally hazardous substances, liquid, n.o.s.			

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Class (DOT)	: 9 - Class 9 - Miscellaneous hazardous material 49 CFR 173.140				
Packing group (DOT)	: III - Minor Danger				
Hazard labels (DOT)	: 9 - Class 9 (Miscellaneous dangerous materials)				
DOT Packaging Non Bulk (49 CFR 173.xxx)	: 203				
DOT Packaging Bulk (49 CFR 173.xxx)	: 241				
DOT Symbols	: G - Identifies PSN requiring a technical name				
DOT Packaging Exceptions (49 CFR 173.xxx)	: 155				
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27)	ail : 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	No supplementary information available.				
Transportation of Dangerous Goods					
Refer to current TDG Canada for further Cana	dian regulations				
Transport by sea In accordance with IMDG / IMO					
Proper Shipping Name (IMDG)	: Not regulated by IMDG (in quantites under 5,000 lbs in any one inner package)				
Air transport					
In accordance with IATA / ICAO					
Proper Shipping Name (IATA)	: Not regulated by IATA (in quantites under 5,000 lbs in any one inner package)				

## SECTION 15: Regulatory information

15.1. US Federal regulations

Super Tech Heavy Duty Nitrite-Free 50/50 Prediluted Antifreeze and 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				
ethylene glycol (107-21-1)				
Listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313				
EPA TSCA Regulatory Flag	T - T - indicates a substance that is the subject of a Section 4 test rule under TSCA.			
CERCLA RQ	5000 lb(s)			
SARA Section 311/312 Hazard Classes	Refer to Section 2 for the OSHA hazard classification 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 Substances Control Act) inventory				
water (7732-18-5)				
Listed on the United States TSCA (Toxic Substances Control Act) inventory				
potassium 2-ethylhexanoate (3164-85-0)				
Listed on the United States TSCA (Toxic Substances Control Act) inventory				

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## 15.2. International regulations

## CANADA

Super Tech Heavy Duty Nitrite-Free 50/50 Prediluted Antifreeze and Coolant		
WHMIS Classification	This SDS has been prepared according to the criteria of the Hazardous Products Regulations (HPR) (WHMIS 2015) and the SDS contains all of the information required by the HPR. Applicable GHS information is listed in section 2.2 of this SDS.	

## 15.3. US State regulations

This product can expose you to ethylene glycol, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

ethylene glycol (107-21-1)					
U.S California - Proposition 65 - Carcinogens List	U.S California - Proposition 65 - Developmental Toxicity	U.S California - Proposition 65 - Reproductive Toxicity - Female	U.S California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)	Maximum allowable dose level (MADL)
No	Yes	No	No		(ingested) 8,700 (oral) µg/day

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**

Revision date

: 05/01/2019

Full text of H-statements:

H302	Harmful if swallowed.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H361	Suspected of damaging fertility or the unborn child.
H373	May cause damage to organs through prolonged or repeated exposure.

## NFPA health hazard

NFPA fire hazard

NFPA reactivity

: 1 - Materials that, under emergency conditions, can cause significant irritation.

- : 1 Materials that must be preheated before ignition can occur.
- : 0 Material that in themselves are normally stable, even under fire conditions.



### 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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