

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Revision date: 01/01/2024

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SECTION 1: Identification of the sub	stance/mixture and of the company/undertaking			
1.1. Product identifier				
Product form	: Mixture			
Product name	: Final Charge Global Yellow Concentrate Antifreeze and Coolant			
SDS ID	: 515024			
1.2. Relevant identified uses of the subs	tance or mixture and uses advised against			
Use of the substance/mixture	: Heavy Duty Engine Coolant			
1.3. Details of the supplier of the safety	1.3. Details of the supplier of the safety data sheet			
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 m	ixture			

GHS-US (classif	ication
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Acute toxicity (oral), Category 4	H302	Harmful if swallowed.
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)



Signal word (GHS-US) Hazard statements (GHS-US)

Precautionary statements (GHS-US)

: Warning

Harmful if swallowed.
Suspected of damaging fertility or the unborn child.
May cause damage to organs (kidneys) through prolonged or repeated exposure (oral).
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Do not breathe mist, spray, vapors
Wash affected areas thoroughly after handling.
Do not eat, drink or smoke when using this product.
Wear personal protective equipment as required.
If swallowed: Immediately call doctor/physician or poison center
If swallowed: rinse mouth. Do NOT induce vomiting
If inhaled: Remove person to fresh air and keep comfortable for breathing
If exposed or concerned: Get medical advice/attention.
Store locked up.
Dispose of contents/container to appropriate waste disposal facility, in accordance with

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local/regional/national/international regulations

2.3. Other hazards

No additional information available

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 (antifreezing agent)	(CAS-No.) 107-21-1	90 - 97	Acute Tox. 4 (Oral), H302	
diethylene glycol (antifreezing agent)	(CAS-No.) 111-46-6	< 5	Acute Tox. 4 (Oral), H302 STOT RE 2, H373	
water (solvent)	(CAS-No.) 7732-18-5	< 4	Not classified	
potassium p-tert-butylbenzoate (corrosion inhibitor)	(CAS-No.) 16518-26-6	< 3	Repr. 2, H361	
denatonium benzoate (embittering agent)	(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 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. If not breathing, give artificial respiration. If you feel unwell, seek medical advice.
First-aid measures after skin contact	: Wash skin with plenty of water. Remove contaminated clothing. 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 ef	ffects, both acute and delayed
Symptoms/effects Symptoms/effects after skin contact	: Causes damage to organs (kidneys) Oral. Suspected of damaging fertility or the unborn child. : May cause moderate irritation.
Symptoms/effects after eye contact	: Direct contact with the eyes is likely to be irritating.
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 med	ical attention and special treatment needed

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.

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5.2. Special hazards arising from the substance 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.	
Reactivity	: No dangerous reactions known under normal conditions of use.	
5.3. Special protective equipment and precautions for fire-fighters		
Firefighting 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.	
Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection.	

SECTIO	SECTION 6: Accidental release measures				
6.1.	Personal precautions, protective equi	pment and emergency procedures			
6.1.1.	For non-emergency personnel				
Emergen	cy procedures	: Evacuate unnecessary personnel.			
6.1.2.	For emergency responders				
Protective	e equipment	: Equip cleanup crew with proper protection. Refer to section 8.2.			
Emergen	cy procedures	: Ventilate area.			
6.2.	Environmental precautions				
Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.					

6.3.	Methods a	nd material	for cor	tainmer	nt a	and cleaning up
Methods	for cleaning	up			:	Soak up spills with in

: 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 stora	age			
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. Direct Sunlight. 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)				
Ne edditional infermation exclude				

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters		
ethylene glycol (107-21-1)		
ACGIH	Local name	Ethylene glycol
ACGIH	ACGIH TWA (mg/m³)	10 mg/m ³
ACGIH	ACGIH TWA (ppm)	25 ppm (Vapor fraction)
ACGIH	ACGIH STEL (mg/m ³)	10 mg/m ³ (Inhalable fraction, Aerosol only)
ACGIH	ACGIH STEL (ppm)	50 ppm (Vapor fraction)

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ethylene glycol (107-21-1)			
ACGIH	Remark (ACGIH)	Upper respiratory tract & eye irritant	
ACGIH	Regulatory reference	ACGIH 2018	
denatonium benzoate	(3734-33-6)		
Not applicable			
diethylene glycol (111-46-6)			
Not applicable			
water (7732-18-5)			
Not applicable			
potassium p-tert-butylbenzoate (16518-26-6)			
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	: Yellow
Odor	: mild
Odor threshold	: No data available
pH 50% water solution	: 8.6
Relative evaporation rate (butylacetate=1)	: Nil
Freezing point	: -18 °C (0 °F)
Boiling point	: 158 °C (242 °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

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Vapor pressure	: < 0.1 mm Hg @ 20 °C
Relative vapor density at 20 °C	: No data available
Specific Gravity	: 1.14
Density	: 1.14 kg/l (9.47 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 limits	: 3.2 - 15.3 vol %
Explosive properties	: Not applicable.
Oxidizing properties	: Not applicable.
9.2. Other information	
VOC content	: 0%
Voc coment	
SECTION 10: Stability and react	ivity
10.1. Reactivity	
No dangerous reactions known under norn	nal conditions of use.
10.2. Chemical stability	
Stable.	
10.3. Possibility of hazardous reacti	ons
No dangerous reactions known under norn	
ç	
10.4. Conditions to avoid	fan en fan en die en een die eerste die eerst
Extremely high or low temperatures. Keep	away from any flames or sparking source.
10.5. Incompatible materials	
Keep away from strong acids, strong bases	s and oxidizing agents.
10.6. Hazardous decomposition pro	ducts
Alcohols. Aldehydes. Carbon dioxide. Carb	oon monoxide. Ethers. Fume.
SECTION 11: Toxicological info	rmation
11.1. Information on toxicological et	
, i i i i i i i i i i i i i i i i i i i	: Not classified
Acute toxicity	
Final Charge Global Yellow Concentra	te Antifreeze and Coolant
ATE US (oral)	500.099 mg/kg bodyweight
ethylene glycol (107-21-1)	
LD50 oral rat	7712 mg/kg bodyweight (according to BASF-internal standards, Rat, Male / female, Experimental value, Aqueous solution, Oral, 7 day(s))
LC50 inhalation rat (mg/l)	> 2.5 mg/l (6 h, Rat, Male / female, Experimental value, Inhalation (aerosol))
ATE US (oral)	500 mg/kg bodyweight
denatonium benzoate (3734-33-6)	
LD50 oral rat	584 mg/kg (Rat, Literature study, Oral)
LD50 dermal rabbit	> 2000 mg/kg (Rabbit, Literature study, Dermal)
ATE US (oral)	584 mg/kg bodyweight
diethylene glycol (111-46-6)	
LD50 oral rat	19600 mg/kg bodyweight (OECD 401: Acute Oral Toxicity, Rat, Male, Experimental value, Oral)
LD50 dermal rabbit	11890 mg/kg (Rabbit, Dermal)
LC50 inhalation rat (mg/l)	 > 4.6 mg/l/4h (Other, 4 h, Rat, Weight of evidence)
ATE US (oral)	500 mg/kg bodyweight
ATE US (dermal)	11890 mg/kg bodyweight
Skin corrosion/irritation	: Not classified

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-
: Not classified
: Not classified
: Not classified
: Suspected of damaging fertility or the unborn child.
: Not classified
: May cause damage to organs (kidneys) through prolonged or repeated exposure (oral).
: Not classified
: Based on available data, the classification criteria are not met.
: Causes damage to organs (kidneys) Oral. Suspected of damaging fertility or the unborn child.
: May cause moderate irritation.
: Direct contact with the eyes is likely to be irritating.
: 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	40,761.00 mg/l (96 h, Salmo gairdneri, Static system)	
EC50 Daphnia 1	> 10,000.00 mg/l (24 h, Daphnia magna)	
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)	
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

ethylene glycol (107-21-1)		
Persistence and degradability	Biodegradable in the soil. Readily biodegradable in water.	
Biochemical oxygen demand (BOD)	$0.47 \text{ g O}_2/\text{g substance}$	
Chemical oxygen demand (COD)	1.24 g O ₂ /g substance	
ThOD	1.29 g O ₂ /g substance	
BOD (% of ThOD) 0.36		
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	Biodegradable in the soil. Biodegradable in water.	
Biochemical oxygen demand (BOD)	$0.02 \text{ g O}_2/\text{g substance}$	
Chemical oxygen demand (COD)	1.51 g O ₂ /g substance	
ThOD	1.51 g O ₂ /g substance	
BOD (% of ThOD)	0.02	

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12.3. Bioaccumulative potential		
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.	
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)		
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.	

Mobility in soil 12.4.

ethylene glycol (107-21-1)		
Surface tension	48.00 mN/m (20 °C)	
Ecology - soil	No (test)data on mobility of the substance available.	
denatonium benzoate (3734-33-6)		
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/F	ackaging 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

Bulk (in quantities 5,000 lbs or over in any one inner package):

Transport document description	: UN3082 Environmentally hazardous substances, liquid, n.o.s. (Ethylene Glycol), 9, III
UN-No.(DOT)	: UN3082
Proper Shipping Name (DOT)	: Environmentally hazardous substances, liquid, n.o.s.
	Ethylene Glycol
Class (DOT)	: 9 - Class 9 - Miscellaneous hazardous material 49 CFR 173.140

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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)	:	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 Dangarous Goods		

Transportation of Dangerous Goods

Refer to current TDG Canada for further Canadian 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	

Final Charge Global Yellow Concentrate Antifreeze and 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 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.				
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					
water (7732-18-5)					
Listed on the United States TSCA (Toxic Substances Control Act) inventory					

15.2. International regulations

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CANADA					
Final Charge Global Yellow Concentrate 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.				

potassium p-tert-butylbenzoate (16518-26-6) Listed on the Canadian NDSL (Non-Domestic Substances List)

15.3. US State regulations

🗥 WARNING:

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

: 01/01/2024

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

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

NFPA fire hazard NFPA reactivity

- 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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