

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations And According To The Hazardous Products Regulation (February 11, 2015).

Revision Date: 11/03/2022 Date of Issue: 03/02/2017 Supersedes Date: 06/25/2020 Version: 1.0

SECTION 1: IDENTIFICATION

Product Identifier 1.1. Product Form: Mixture

Product Name: Performance Plus Fully Formulated Conventional (Green) Antifreeze/Coolant – Concentrate

Product Code: 640052, 6452

SDS No: 820295

1.2. **Intended Use of the Product**

Antifreeze. Inorganic additive technology (IAT) formulation for older car/light duty truck and heavy duty diesel applications. Dilute before use. Fully formulated – do not add supplemental coolant additives (SCAs) at initial fill. When diluted with deionized water at 50%, meets the performance requirements of ASTM D3306 and D6210. If this product is used in combination with other products, refer to the Safety Data Sheet for those products.

1.3. Name, Address, and Telephone of the Responsible Party

Manufacturer

Safety-Kleen Systems, Inc. 42 Longwater Drive Norwell, MA 02061-9149 1-800-669-5740

www.safety-kleen.com

Supplier (in Canada)

Safety-Kleen Canada, Inc.

25 Regan Road

Brampton, Ontario, Canada L7A 1B2

Emergency Telephone Number Emergency Number : 1-800-468-1760

SECTION 2: HAZARDS IDENTIFICATION

Classification of the Substance or Mixture 2.1.

GHS-US/CA Classification

Acute toxicity (oral) Category 4 H302 Skin sensitization, Category 1 H317 Reproductive toxicity Category 1B H360 Specific target organ toxicity (repeated exposure) Category 2 H373

2.2. **Label Elements**

GHS-US/CA Labeling

Hazard Pictograms (GHS-US/CA)





Signal Word (GHS-US/CA)

Hazard Statements (GHS-US/CA)

: H302 - Harmful if swallowed.

H317 - May cause an allergic skin reaction.

H360 - May damage fertility or the unborn child (oral).

H373 - May cause damage to organs (kidneys) through prolonged or repeated exposure

Precautionary Statements (GHS-US/CA): P201 - Obtain special instructions before use.

P202 - Do not handle until all safety precautions have been read and understood.

P260 - Do not breathe vapors, mist, or spray.

P263 - Avoid contact during pregnancy/while nursing.

P264 - Wash hands, forearms, and other exposed areas thoroughly after handling.

P270 - Do not eat, drink or smoke when using this product.

P272 - Contaminated work clothing should not be allowed out of the workplace.

1/11

P280 - Wear protective gloves, protective clothing, and eye protection.

P301+P312 - IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell. 11/03/2022 EN (English US) SDS#: 820295

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations And According To The Hazardous Products Regulation (February 11, 2015).

P302+P352 - IF ON SKIN: Wash with plenty of water.

P308+P313 - If exposed or concerned: Get medical advice/attention.

P314 - Get medical advice/attention if you feel unwell.

P321 - Specific treatment (see section 4 on this SDS).

P330 - Rinse mouth.

P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.

P362+P364 - Take off contaminated clothing and wash it before reuse.

P405 - Store locked up.

P501 - Dispose of contents/container in accordance with local, regional, national, territorial, provincial, and international regulations.

2.3. Other Hazards

Exposure may aggravate pre-existing eye, skin, or respiratory conditions.

2.4. Unknown Acute Toxicity (GHS-US/CA)

No additional information available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substance

Not applicable

3.2. Mixture

Name	Synonyms	Product Identifier	% *	GHS Ingredient Classification
Ethylene glycol	1,2-Dihydroxyethane / Ethane-1,2-diol / 1,2- Ethanediol / Ethanediol / GLYCOL	(CAS-No.) 107-21-1	≤ 97.3	Acute Tox. 4 (Oral), H302 STOT RE 2, H373
Diethylene glycol	2,2'-Oxybisethanol / Ethanol, 2,2'-oxybis- / 2,2'- Dihydroxyethyl ether / Dihydroxydiethyl ether / Diglycol	(CAS-No.) 111-46-6	≤5	Acute Tox. 4 (Oral), H302 STOT RE 2, H373
Disodium tetraborate	Anhydrous borax / Boric acid (H2B4O7), disodium salt / Boric acid, disodium salt / Boron sodium oxide / Boron sodium oxide (B4Na2O7)	(CAS-No.) 1330-43-4	0.13 - 0.26	Eye Irrit. 2, H319 Repr. 1B, H360
Sodium mercaptobenzothiazole	2(3H)-Benzothiazolethione, sodium salt / 2- Mercaptobenzothiazole, sodium salt / Sodium benzothiazol-2-yl sulphide / Sodium 2- mercaptobenzothiazole / Mercaptobenzothiazole sodium salt	(CAS-No.) 2492-26-4	0.03 – 0.13	Met. Corr. 1, H290 Acute Tox. 4 (Oral), H302 Skin Corr. 1C, H314 Eye Dam. 1, H318 Skin Sens. 1, H317

Product contains 60 to 100 ppm denotonium benzoate bittering agent (3723-33-6) which has been added to help prevent ingestion by humans and animals.

Full text of H-statements: see section 16

*Percentages are listed in weight by weight percentage (w/w%) for liquid and solid ingredients. Gas ingredients are listed in volume by volume percentage (v/v%). Composition is variable.

SECTION 4: FIRST AID MEASURES

4.1. Description of 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).

Inhalation: When symptoms occur: go into open air and ventilate suspected area. Obtain medical attention if breathing difficulty persists.

Skin Contact: Remove contaminated clothing. Wash affected area with soap and water for at least 15 minutes. Obtain medical attention if irritation/rash develops or persists. If exposed or concerned: Get medical advice/attention.

11/03/2022 EN (English US) SDS#: 820295 2/11

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations And According To The Hazardous Products Regulation (February 11, 2015).

Eye Contact: Remove contact lenses, if present and easy to do. Continue rinsing. Rinse cautiously with water for at least 15 minutes. Obtain medical attention.

Ingestion: Rinse mouth. Do NOT induce vomiting. Obtain medical attention.

4.2. Most Important Symptoms and Effects Both Acute and Delayed

General: May cause damage to organs (kidney) through prolonged or repeated exposure (oral). Skin sensitization. May damage fertility or the unborn child (oral). Harmful if swallowed.

Inhalation: Prolonged exposure may cause irritation. **Skin Contact:** May cause an allergic skin reaction. **Eye Contact:** May cause slight irritation to eyes.

Ingestion: This material is harmful orally and can cause adverse health effects or death in significant amounts.

Chronic Symptoms: May cause damage to organs (kidneys) through prolonged or repeated exposure (Oral). May damage fertility or the unborn child (Oral).

4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

Ethylene glycol is rapidly absorbed after oral ingestion, and is metabolized by alcohol dehydrogenase to various metabolites including glycoaldehyde, glycolic acid, and oxalic acid. The signs and symptoms in ethylene glycol poisoning are those of metabolic acidosis, central nervous system depression, and kidney damage. Some symptoms may be delayed in appearance; therefore, prompt pre-hospital and hospital treatment is of great importance. The currently recommended medical management of ethylene glycol poisoning includes elimination of ethylene glycol and metabolites, correction of metabolic acidosis, and prevention of kidney injury. As a competitive substrate for alcohol dehydrogenase, ethanol is antidotal when given in the early stages of intoxication because it blocks the formation of nephrotoxic metabolites. A more effective intravenous antidote is 4-methylpyrazole, a potent inhibitor of alcohol dehydrogenase, which effectively blocks the formation of toxic metabolites. Pyridoxine and thiamine may be of value as supporting therapy. Hemodialysis may be of benefit for treating metabolic acidosis, or in presentations of renal insufficiency. Use of activated charcoal is generally of no benefit in Ethylene glycol poisoning given the rapid absorption of the substance. Pulmonary edema with hypoxia has been described in a number of patients following ethylene glycol poisoning. Respiratory support with mechanical ventilation and positive end expiratory pressure may be required. There may be cranial nerve involvement in the later stages of toxicity from swallowing ethylene glycol. Effects have been reported presenting bilateral facial paralysis, diminished hearing, and dysphagia. Consultation with a nephrologist and/or medical toxicologist is highly recommended in all cases of ethylene glycol ingestion.

SECTION 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing Media

Suitable Extinguishing Media: Water spray, fog, carbon dioxide (CO₂), alcohol-resistant foam, or dry chemical. **Unsuitable Extinguishing Media:** Do not use a heavy water stream. Use of heavy stream of water may spread fire.

5.2. Special Hazards Arising From the Substance or Mixture

Fire Hazard: Not considered flammable but may burn at high temperatures.

Explosion Hazard: Product is not explosive.

Reactivity: Hazardous reactions will not occur under normal conditions.

5.3. Advice for Firefighters

Precautionary Measures Fire: Exercise caution when fighting any chemical fire.

Firefighting Instructions: Use water spray or fog for cooling exposed containers.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection. **Hazardous Combustion Products**: Carbon Monoxide, Carbon Dioxide and Oxides of Nitrogen (NOx). Sodium oxides. Unidentified organic compounds. Oxides of boron.

Other Information: Do not allow run-off from fire fighting to enter drains or water courses.

5.4. Reference to Other Sections

Refer to Section 9 for flammability properties.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Do not get in eyes, on skin, or on clothing. Do not breathe vapor, mist or spray.

6.1.1. For Non-Emergency Personnel

Protective Equipment: Use appropriate personal protective equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel.

11/03/2022 EN (English US) SDS#: 820295 3/11

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations And According To The Hazardous Products Regulation (February 11, 2015).

6.1.2. For Emergency Personnel

Protective Equipment: Equip cleanup crew with proper protection.

Emergency Procedures: Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit. Ventilate area.

6.2. Environmental Precautions

Prevent entry to sewers and public waters. Avoid release to the environment.

6.3. Methods and Materials for Containment and Cleaning Up

For Containment: Stop leak, if possible without risk. Do not touch or walk on the spilled product. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

Methods for Cleaning Up: Clean up spills immediately and dispose of waste safely. Absorb and/or contain spill with inert material. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill.

6.4. Reference to Other Sections

See Section 8 for exposure controls and personal protection and Section 13 for disposal considerations.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for Safe Handling

Precautions for Safe Handling: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe vapors, spray, mist. Handle empty containers with care because they may still present a hazard. Do not get in eyes, on skin, or on clothing. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures.

7.2. Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Comply with applicable regulations.

Storage Conditions: Keep container closed when not in use. Store in a dry, cool place. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials. Store locked up/in a secure area.

Incompatible Materials: Strong acids, strong bases, strong oxidizers.

7.3. Specific End Use(s)

Antifreeze. Inorganic additive technology (IAT) formulation for older car/light duty truck and heavy duty diesel applications. Dilute before use. Fully formulate – do not add supplemental coolant additives (SCAs) at initial fill. When diluted with deionized water at 50%, meets the performance requirements of ASTM D3306 and D6210. If this product is used in combination with other products, refer to the Safety Data Sheet for those products.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control Parameters

For substances listed in section 3 that are not listed here, there are no established exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), AIHA (WEEL), NIOSH (REL), OSHA (PEL), or Canadian provincial governments.

Ethylene glycol (107-21	l-1)	
USA ACGIH	ACGIH OEL TWA [ppm]	25 ppm (vapor fraction)
USA ACGIH	ACGIH OEL STEL	10 mg/m³ (inhalable particulate matter, aerosol only)
USA ACGIH	ACGIH OEL STEL [ppm]	50 ppm (vapor fraction)
USA ACGIH	ACGIH chemical category	Not Classifiable as a Human Carcinogen
Alberta	OEL C	100 mg/m³
British Columbia	OEL C	100 mg/m³ (aerosol)
British Columbia	OEL Ceiling [ppm]	50 ppm (vapour)
British Columbia	OEL STEL	20 mg/m³ (particulate)
British Columbia	OEL TWA	10 mg/m³ (particulate)
Manitoba	OEL STEL	10 mg/m³ (inhalable particulate matter, aerosol only)
Manitoba	OEL STEL [ppm]	50 ppm (vapor fraction)
Manitoba	OEL TWA [ppm]	25 ppm (vapor fraction)
New Brunswick	OEL C	100 mg/m³ (aerosol)

11/03/2022 EN (English US) SDS#: 820295 4/11

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations And According To The Hazardous Products Regulation (February 11, 2015).

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Newfoundland & Labrador	OEL STEL	10 mg/m³ (inhalable particulate matter, aerosol only)
Newfoundland & Labrador	OEL STEL [ppm]	50 ppm (vapor fraction)
Newfoundland & Labrador	OEL TWA [ppm]	25 ppm (vapor fraction)
Nova Scotia	OEL STEL	10 mg/m³ (inhalable particulate matter, aerosol only)
Nova Scotia	OEL STEL [ppm]	50 ppm (vapor fraction)
Nova Scotia	OEL TWA [ppm]	25 ppm (vapor fraction)
Nunavut	OEL C	100 mg/m³ (aerosol)
Northwest Territories	OEL C	100 mg/m³ (aerosol)
Ontario	OEL STEL .	10 mg/m³ (inhalable particulate matter, aerosol only)
Ontario	OEL STEL [ppm]	50 ppm (vapor fraction)
Ontario	OEL TWA [ppm]	25 ppm (vapor fraction)
Prince Edward Island	OEL STEL	10 mg/m³ (inhalable particulate matter, aerosol only)
Prince Edward Island	OEL STEL [ppm]	50 ppm (vapor fraction)
Prince Edward Island	OEL TWA [ppm]	25 ppm (vapor fraction)
Québec	Plafond (OEL Ceiling)	127 mg/m³ (mist and vapour)
Québec	Plafond (OEL Ceiling) [ppm]	50 ppm (mist and vapour)
Saskatchewan	OEL C	100 mg/m³ (aerosol)
Yukon	OEL STEL	20 mg/m³ (particulate)
		325 mg/m³ (vapour)
Yukon	OEL STEL [ppm]	10 ppm (particulate)
		125 ppm (vapour)
Yukon	OEL TWA	10 mg/m³ (particulate)
		250 mg/m³ (vapour)
Yukon	OEL TWA [ppm]	100 ppm (vapour)
Disodium tetraborate (1330	-43-4)	
USA ACGIH	ACGIH OEL TWA	2 mg/m³ (inhalable particulate matter (Borate compounds,
		inorganic)
USA ACGIH	ACGIH OEL STEL	6 mg/m³ (inhalable particulate matter (Borate compounds,
		inorganic)
USA ACGIH	ACGIH chemical category	Not Classifiable as a Human Carcinogen
USA NIOSH	NIOSH REL (TWA)	1 mg/m³
Alberta	OEL STEL [ppm]	3 ppm (Borates, tetra, sodium salts)
Alberta	OEL TWA	1 mg/m³ (Borates, tetra, sodium salts)
British Columbia	OEL STEL	6 mg/m³ (inhalable (Borate compounds, inorganic)
British Columbia	OEL TWA	2 mg/m³ (inhalable (Borate compounds, inorganic)
Manitoba	OEL STEL	6 mg/m³ (inhalable particulate matter (Borate compounds,
		inorganic)
Manitoba	OEL TWA	2 mg/m³ (inhalable particulate matter (Borate compounds,
		inorganic)
New Brunswick	OEL TWA	1 mg/m³
Newfoundland & Labrador	OEL STEL	6 mg/m³ (inhalable particulate matter (Borate compounds,
		inorganic)
Newfoundland & Labrador	OEL TWA	2 mg/m³ (inhalable particulate matter (Borate compounds,
		inorganic)
Nova Scotia	OEL STEL	6 mg/m³ (inhalable particulate matter (Borate compounds,
		inorganic)
Nova Scotia	OEL TWA	2 mg/m³ (inhalable particulate matter (Borate compounds,
		inorganic)
Nunavut	OEL STEL	6 mg/m³ (inhalable fraction (Borate compounds, inorganic)
Nunavut	OELTWA	2 mg/m³ (inhalable fraction (Borate compounds, inorganic)
Northwest Territories	OEL STEL	6 mg/m³ (inhalable fraction (Borate compounds, inorganic)
11/02/2022	EN (English US)	

11/03/2022 EN (English US) SDS#: 820295 5/11

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations And According To The Hazardous Products Regulation (February 11, 2015).

Northwest Territories	OEL TWA	2 mg/m³ (inhalable fraction (Borate compounds, inorganic)
Ontario	OEL STEL	6 mg/m³ (inhalable particulate matter (Borate compounds,
		inorganic)
Ontario	OEL TWA	2 mg/m³ (inhalable particulate matter (Borate compounds,
		inorganic)
Prince Edward Island	OEL STEL	6 mg/m³ (inhalable particulate matter (Borate compounds,
		inorganic)
Prince Edward Island	OEL TWA	2 mg/m³ (inhalable particulate matter (Borate compounds,
		inorganic)
Québec	VECD (OEL STEL)	6 mg/m³ (inhalable dust (Borate, inorganic compounds)
Québec	VEMP (OEL TWA)	2 mg/m³ (inhalable dust (Borate, inorganic compounds)
Saskatchewan	OEL STEL	6 mg/m³ (inhalable fraction (Borate compounds, inorganic)
Saskatchewan	OEL TWA	2 mg/m³ (inhalable fraction (Borate compounds, inorganic)
Diethylene glycol (111-46-6)		
USA AIHA	WEEL TWA	10 mg/m³

8.2. Exposure Controls

Appropriate Engineering Controls: Suitable eye/body wash equipment should be available in the vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed.

Personal Protective Equipment: Safety glasses with side-shields. Gloves. Protective clothing. Insufficient ventilation: wear respiratory protection.









Materials for Protective Clothing: Chemically resistant materials and fabrics.

Hand Protection: Wear protective gloves.

Eye and Face Protection: Safety glasses with side-shields. **Skin and Body Protection:** Wear suitable protective clothing.

Respiratory Protection: If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn. In case of inadequate ventilation, oxygen deficient atmosphere, or where exposure levels are not known wear approved respiratory protection.

Other Information: When using, do not eat, drink or smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on Basic Physical and Chemical Properties

Physical State: LiquidAppearance: GreenOdor: Sweet

Odor Threshold : No data available

pH : 10 – 11

Evaporation Rate: No data availableMelting Point: No data available

Freezing Point : -11.2 °C (11.84 °F) (Ethylene glycol)

Boiling Point : 197.4 °C (387.32 °F) (Ethylene glycol)

FI (Ethylene glycol)ash Point : 111 °C (231.8 °F) (Ethylene glycol)

Auto-ignition Temperature : 398 °C (748.4 °F) (Ethylene glycol)

Decomposition Temperature: No data availableFlammability: Not applicableLower Flammable Limit: 3.2 % (Ethylene glycol)Upper Flammable Limit: 15.3 % (Ethylene glycol)

Vapor Pressure : 0.067 hPa at 20 °C (68 °F) (Ethylene glycol)

Relative Vapor Density at 20°C : No data available

11/03/2022 EN (English US) SDS#: 820295 6/11

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations And According To The Hazardous Products Regulation (February 11, 2015).

Relative Density : 1.103 – 1.133 (water =1) **Density** : 9.2 – 9.4 lb/gal at 20 °C (68 °F)

Specific Gravity: No data availableSolubility: Water: CompletePartition Coefficient: N-Octanol/Water: No data availableViscosity: No data available

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity:

Hazardous reactions will not occur under normal conditions.

10.2. Chemical Stability:

Stable under recommended handling and storage conditions (see section 7).

10.3. Possibility of Hazardous Reactions:

Hazardous polymerization will not occur.

10.4. Conditions to Avoid:

Direct sunlight, extremely high or low temperatures, and incompatible materials.

10.5. Incompatible Materials:

Strong acids, strong bases, strong oxidizers.

10.6. Hazardous Decomposition Products:

Thermal decomposition may produce: Carbon oxides, Nitrogen oxides. Sodium oxides. Unidentified organic compounds.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on Toxicological Effects - Product

Acute Toxicity (Oral): Harmful if swallowed.
Acute Toxicity (Dermal): Not classified
Acute Toxicity (Inhalation): Not classified.

LD50 and LC50 Data:

Performance Plus Fully Formulated Conventional (Green) Antifreeze/Coolant – Concentrate	
ATE US/CA (oral)	466.22 mg/kg body weight

Skin Corrosion/Irritation: Not classified

pH: 10 - 11

Eye Damage/Irritation: Not classified

pH: 10 - 11

Respiratory or Skin Sensitization: May cause an allergic skin reaction.

Germ Cell Mutagenicity: Not classified

Carcinogenicity: Not classified

Specific Target Organ Toxicity (Repeated Exposure): May cause damage to organs (kidneys) through prolonged or repeated exposure

(oral).

Reproductive Toxicity: May damage fertility or the unborn child (oral).

Specific Target Organ Toxicity (Single Exposure): Not classified

Aspiration Hazard: Not classified

Symptoms/Injuries After Inhalation: Prolonged exposure may cause irritation. Symptoms/Injuries After Skin Contact: May cause an allergic skin reaction. Symptoms/Injuries After Eye Contact: May cause slight irritation to eyes.

Symptoms/Injuries After Ingestion: This material is harmful orally and can cause adverse health effects or death in significant amounts.

Chronic Symptoms: May cause damage to organs (kidneys) through prolonged or repeated exposure (Oral). May damage fertility or the unborn child (Oral).

11.2. Information on Toxicological Effects - Ingredient(s)

LD50 and LC50 Data:

Ethylene glycol (107-21-1)	
LD50 Oral Rat	4700 mg/kg

11/03/2022 EN (English US) SDS#: 820295 7/11

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations And According To The Hazardous Products Regulation (February 11, 2015).

LD50 Dermal Rat	10600 mg/kg	
LC50 Inhalation Rat	> 2.5 mg/L (Exposure time: 6 h)	
Disodium tetraborate (1330-43-4)		
LD50 Oral Rat	2660 mg/kg	
LD50 Dermal Rabbit	> 2000 mg/kg	
LC50 Inhalation Rat	> 2 mg/m³ (Exposure time: 4 h)	
Sodium mercaptobenzothiazole (2492-26-4)		
LD50 Oral Rat	1476 mg/kg	
LD50 Dermal Rabbit	> 7940 mg/kg	
LC50 Inhalation Rat	> 8.2 mg/L (Exposure time: 6 h)	
Diethylene glycol (111-46-6)		
LD50 Oral Rat	12565 mg/kg	
LD50 Dermal Rabbit	11890 mg/kg	
LC50 Inhalation Rat	> 4600 mg/m³ (Exposure time: 4 h)	

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Ecology - General: Harmful to aquatic life.

Ethylene glycol (107-21-1)		
LC50 Fish 1	41000 mg/L (Exposure time: 96 h - Species: Oncorhynchus mykiss)	
EC50 - Crustacea [1]	46300 mg/L (Exposure time: 48 h - Species: Daphnia magna)	
LC50 Fish 2	14 – 18 ml/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])	
Disodium tetraborate (1330-43-4)		
LC50 Fish 1	340 mg/L (Exposure time: 96 h - Species: Limanda limanda)	
EC50 - Crustacea [1]	1085 – 1402 mg/L (Exposure time: 48 h - Species: Daphnia magna)	
Sodium mercaptobenzothiazole (2492-2	26-4)	
LC50 Fish 1	0.3 – 1.1 mg/L (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])	
EC50 - Crustacea [1]	1.9 – 5.1 mg/L (Exposure time: 48 h - Species: Daphnia magna [Static])	
LC50 Fish 2	3.8 mg/L (Exposure time: 96 h - Species: Lepomis macrochirus [static])	
Diethylene glycol (111-46-6)		
LC50 Fish 1	75200 mg/L (Exposure time: 96 h - Species: Pimephales promelas [flow-through])	
EC50 - Crustacea [1]	84000 mg/L (Exposure time: 48 h - Species: Daphnia magna)	

12.2. Persistence and Degradability

Performance Plus Fully Formulated Conventional (Green) Antifreeze/Coolant – Concentrate		
Persistence and Degradability	Not established.	

12.3. Bioaccumulative Potential

Performance Plus Fully Formulated Conventional (Green) Antifreeze/Coolant – Concentrate			
Bioaccumulative Potential	Not established.		
Ethylene glycol (107-21-1)			
Partition coefficient n-octanol/water	-1.36		
(Log Pow)			
Disodium tetraborate (1330-43-4)	Disodium tetraborate (1330-43-4)		
BCF Fish 1	(no evidence of bioaccumulation)		
Partition coefficient n-octanol/water	ol/water -1.53 at 22 °C (71.6 °F) (at pH 7.5)		
(Log Pow)			
Sodium mercaptobenzothiazole (2492-26-4)			
Partition coefficient n-octanol/water	-0.46		
(Log Pow)			
Diethylene glycol (111-46-6)			

11/03/2022 EN (English US) SDS#: 820295 8/11

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations And According To The Hazardous Products Regulation (February 11, 2015).

BCF Fish 1	100 – 180
Partition coefficient n-octanol/water	-1.98 (at 25 °C) (77 °F)
(Log Pow)	

12.4. Mobility in Soil

No additional information available

12.5. Other Adverse Effects

Other Information: Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste Treatment Methods: Material should be recycled if possible. Incineration is also an acceptable method for disposal.

Sewage Disposal Recommendations: Do not dispose of waste into sewer. Do not empty into drains.

Waste Disposal Recommendations: Dispose of contents/container in accordance with local, regional, national, territorial, provincial, and international regulations.

Ecology - Waste Materials: Avoid release to the environment. This material is hazardous to the aquatic environment. Keep out of sewers and waterways.

SECTION 14: TRANSPORT INFORMATION

The shipping description(s) stated herein were prepared in accordance with certain assumptions at the time the SDS was authored, and can vary based on a number of variables that may or may not have been known at the time the SDS was issued.

14.1. In Accordance with DOT

Shipments of less than 546 US gallons (2069 Liters):

Not regulated for transport

Shipments of greater than or equal to 546 US gallons (2069 Liters):

Proper Shipping Name : ENVIRONMENTALLY HAZARDOUS SUBSTANCES, LIQUID, N.O.S. (Ethylene Glycol)

Hazard Class : 9
Identification Number : UN3082
Label Codes : 9

Packing Group : |||
ERG Number : 171

14.2. In Accordance with IMDG

Not regulated for transport

14.3. In Accordance with IATA

Not regulated for transport

14.4. In Accordance with TDG

Not regulated for transport

SECTION 15: REGULATORY INFORMATION

15.1. US Federal Regulations

Performance Plus Fully Formulated Conventional (Green) Antifreeze/Coolant – Concentrate	
SARA Section 311/312 Hazard Classes	Health hazard - Specific target organ toxicity (single or repeated exposure) Health hazard - Respiratory or skin sensitization Health hazard - Reproductive toxicity Health hazard - Acute toxicity (any route of exposure)	
Ethylene glycol (107-21-1)		
Listed on the United States TSCA (Toxic Substances	Control Act) inventory - Status: Active	
CERCLA RQ 5000 lb		
SARA Section 313 - Emission Reporting 1 %		
Disodium tetraborate (1330-43-4)		
Listed on the United States TSCA (Toxic Substances	Control Act) inventory - Status: Active	
Sodium mercaptobenzothiazole (2492-26-4)		
Listed on the United States TSCA (Toxic Substances	Control Act) inventory - Status: Active	

11/03/2022 EN (English US) SDS#: 820295 9/11

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations And According To The Hazardous Products Regulation (February 11, 2015).

Diethylene glycol (111-46-6)

Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active

Chemical(s) subject to the reporting requirements of Section 313 or Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372.

CAS-No.	Name	Percent by Weight
107-21-1	Ethylene glycol	≤ 97.25%

15.2. US State Regulations

California Proposition 65



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.

Chemical Name (CAS No.)	Carcinogenicity	Developmental Toxicity	Female Reproductive Toxicity	Male Reproductive Toxicity
Ethylene glycol (107-21-1)		X		

Ethylene glycol (107-21-1)

- U.S. New Jersey Right to Know Hazardous Substance List
- U.S. Pennsylvania RTK (Right to Know) List
- U.S. Massachusetts Right To Know List
- U.S. Pennsylvania RTK (Right to Know) Environmental Hazard List

Disodium tetraborate (1330-43-4)

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

Diethylene glycol (111-46-6)

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

15.3. Canadian Regulations

Ethylene glycol (107-21-1)

Listed on the Canadian DSL (Domestic Substances List)

Disodium tetraborate (1330-43-4)

Listed on the Canadian DSL (Domestic Substances List)

Sodium mercaptobenzothiazole (2492-26-4)

Listed on the Canadian DSL (Domestic Substances List)

Diethylene glycol (111-46-6)

Listed on the Canadian DSL (Domestic Substances List)

SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Date of Preparation or Latest

: 11/03/2022

Revision

: Review of data. Language modified.

Indication of Changes Other Information

: This document has been prepared in accordance with the SDS requirements of the OSHA

Hazard Communication Standard 29 CFR 1910.1200 and Canada's Hazardous Products

Regulations (HPR) SOR/2015-17.

GHS Full Text Phrases:

H290	May be corrosive to metals
H302	Harmful if swallowed
H314	Causes severe skin burns and eye damage
H317	May cause an allergic skin reaction
H318	Causes serious eye damage
H319	Causes serious eye irritation
H360	May damage fertility or the unborn child
H373	May cause damage to organs through prolonged or repeated exposure

11/03/2022 EN (English US) SDS#: 820295 10/11

Safety Data Sheet

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NFPA Health Hazard : 2 - Materials that, under emergency conditions, can cause temporary incapacitation or residual injury.

NFPA Fire Hazard : 1 - Materials that must be preheated before ignition can

occur.

NFPA Reactivity Hazard : 0 - Material that in themselves are normally stable, even

under fire conditions.



The information contained herein is correct to the best of our knowledge, information, and belief and is designed only as guidance for the handling, use, processing, storage, transportation, disposal, and release of the product. User assumes all risks incident to use of this product and shall determine the quality and suitability of the product for its use. Supplier offers no warranty, express or implied, whatsoever, including warranties of merchantability or fitness for a particular purpose or otherwise, and specifically disclaims any and all liability for incidental, consequential, or other damages arising out the use or misuse of the product. The information provided relates only to the specific material provided and may not be valid if used in combination with any other materials or process, unless specified herein.

NA GHS SDS 2015 (Can. US)

11/03/2022 EN (English US) SDS#: 820295 11/11