HOOD
CHEMICAL

SAFETY DATA SHEET

HD 6805/6845 50%

EG 50/50 INHIBITED

Preparation Date: 28/Sep/2020 Version: 1

1. IDENTIFICATION

Product identifier

Product Name EG 50/50 INHIBITED

Other means of identification

SDS Number HD6805 50%

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended Use Used as antifreeze, heat transfer fluid, solvent, and raw material in polyester fiber manufacturing.

Restricted Uses No information available

Initial Supplier Identifier
Hood Chemical.
295 Alliance Rd. #14
Milton, On. L9T 4W8
Telephone: 1-800-567-9791

Emergency telephone number

24 Hour Emergency Phone Number (CANUTEC): 1-888-226-8832 (1-888-CAN-UTEC)

2. HAZARD IDENTIFICATION

Hazardous Classification of the substance or mixture

Acute toxicity - Oral	Category 4
Specific target organ toxicity (repeated exposure)	Category 2

Label elements

Hazard pictograms

Signal Word: Warning

Hazard statements
Harmful if swallowed
May cause damage to organs through prolonged or repeated exposure

Precautionary Statements

Prevention
Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Do not breathe dust/fume/gas/mist/vapors/spray

Response

IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell
Rinse mouth

Storage
Store locked up
Store in a well-ventilated place. Keep container tightly closed

Disposal
Dispose of contents/container to an approved waste disposal plant

Unknown acute toxicity No information available

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

Not applicable.

Mixture

Chemical Name	CAS No	Weight-% (W/W)	Synonyms
Water	7732-18-5	45-70	Water
Ethylene Glycol	107-21-1	45-70	Ethylene Glycol
Dipotassium phosphate	7758-11-4	1-5	Dipotassium phosphate

Notes:
The actual percentage concentration has been withheld as a trade secret.

4. FIRST-AID MEASURES

Description of first aid measures

General advice
Show this safety data sheet to the doctor in attendance.

Inhalation
Remove to fresh air.

Eye contact
Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.

Skin contact
Wash skin with soap and water.

Ingestion
Do NOT induce vomiting. Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Call a physician.

Most important symptoms and effects, both acute and delayed:
Harmful if swallowed Massive contact with damaged skin or if material sufficiently hot to burn skin may result in absorption of potential lethal amounts. At room temperature, exposure to vapor is minimal due to low volatility. Repeated skin exposure to large quantities may result in absorption of harmful amounts. Brief contact is essentially non-irritating to skin. Vapors or mists may cause eye irritation. Cardiac failure, pulmonary edema, and severe kidney damage may develop. Prolonged contact may cause skin irritation with local redness. May cause slight eye irritation May cause abdominal discomfort or pain, nausea, vomiting, dizziness, drowsiness, malaise, blurring of vision, irritability, lumbar pain, oliguria, uremia, and central nervous system effects, including irregular eye movements, convulsions and coma. With good ventilation, single exposure is not expected to cause adverse effects. If material is heated or areas are poorly ventilated, vapor/mist may accumulate and cause respiratory irritation and symptoms such as headache and nausea. Repeated contact may cause skin irritation with local redness. Corneal injury is unlikely.

Indication of any immediate medical attention and special treatment needed:

Note to physicians
It is estimated that the oral dose to adults is of the order of 1.0 ml/kg. Ethylene glycol is metabolized by alcohol dehydrogenate to various metabolites including glyceraldehydes, glycolic acid and oxalic acid which cause an elevated anion-gap metabolic acidosis and renal tubular injury. The signs and symptoms in ethylene glycol poisoning are those of metabolic acidosis, CNS depression and kidney injury. Urinalysis may show albuminuria, hematuria and oxaluria. Clinical chemistry may reveal anion-gap metabolic acidosis and uremia. 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. It is essential to have immediate and follow up urinalysis and clinical chemistry. There should be particular emphasis on acid-base balance and renal function tests. A continuous infusion of 5% sodium bicarbonate with frequent monitoring of electrolytes and fluid balance is used to achieve correction of metabolic acidosis and forced diuresis. As a competitive substrate for alcohol dehydrogenase, ethanol is antidotal. Given in the early stages of intoxication, it blocks the formulation of nephrotoxic metabolites. A therapeutically effective blood concentration of ethanol is in the range 100 - 150 mg/dl and should be achieved by a rapid loading dose and maintained by intravenous infusion. For severe and /or deteriorating cases, hemodialysis may be required. Dialysis should be considered for patients who are symptomatic, have severe metabolic acidosis, a blood ethylene glycol concentration greater than 25 mg/dl, or compromise of renal functions.

A more effective intravenous antidote for physician use in 4-methylpyrazole, 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 occurred. A generally recommended protocol is a loading dose of 15 mg/kg followed by 10 mg/kg every 12 hours for 4 doses and the 15 mg/kg every 12 hours until the ethylene glycol concentrations are below 20

mg/100ml.Slow intravenous infusion is required. Since 4-methylpyrazole is dialyzable, increased dosage may be necessary during hemodialysis. Additional therapeutic measures may include the administration of cofactors involved in the metabolism of ethylene glycol. Thiamine (100 mg) and pyridoxine (50 mg) should be given every six hours.

Pulmonary edema with hypoxemia has been described in a number of patients following poisoning with ethylene glycol. The mechanism of production has not been elucidated, but it appears to be non-cardiogenic in origin in several cases. Respiratory support with mechanical ventilation and positive end expiratory pressure may be required. There may be cranial nerve involvement in the late stages of toxicity from swallowed ethylene glycol. In particular, effects have been reported involving the seventh, eighth and ninth cranial nerves, presenting with bilateral facial paralysis, diminished hearing, and dysphagia.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Specific hazards arising from the substance or mixture
Use water spray to cool fire-exposed containers and structures. Do not direct a solid stream of water or foam into hot, burning pools; this may cause frothing and increase fire intensity. During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and/or irritating. Container may rupture from gas generation in a fire situation. Carbon monoxide, carbon dioxide, and other oxides may be generated as products of combustion.

Hazardous combustion products
Decomposition products can include and are not limited to:. Alcohols. Ethers. Aldehydes. Hazardous decomposition products depend upon temperature, air supply, and the presence of other materials.

Special protective equipment and precautions for fire-fighters
Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation.

Environmental precautions

See Section 12 for additional Ecological Information.

Methods and materials for containment and cleaning up

Prevent further leakage or spillage if safe to do so.

7. HANDLING AND STORAGE

Precautions for safe handling

Avoid breathing mist or vapor. Spills of these organic materials on hot fibrous insulations may lead to lowering of the autoignition temperature possibly resulting in spontaneous combustion. Use good personal hygiene. Do not swallow.

Keep the containers closed when not in use. Avoid contact with eyes, skin and clothing. Use with adequate ventilation.

Conditions for safe storage, including any incompatibilities

Keep containers tightly closed. Keep in a cool, well-ventilated place. Avoid storage with incompatible materials. Do not store near food, foodstuffs, drugs or potable water supplies.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Limits .

Chemical Name	Alberta OEL	British Columbia OEL	Ontario	Quebec OEL	Exposure Limit - ACGIH	Immediately Dangerous to Life or Health - IDLH
Water 7732-18-5	Not available	Not available	Not available	Not available	Not available	Not available
Ethylene Glycol 107-21-1	Ceiling: 100 mg/m^3	TWA: 10 mg/m^3 STEL: 20 mg/m^3 Ceiling: 100 mg/m^3 Ceiling: 50 ppm	CEV: 100 mg/m^3	Ceiling: 50 ppm Ceiling: 127 mg/m^3	50 ppm STEL 10 mg/m^3 STEL 25 ppm TLV-TWA	Not available
Dipotassium phosphate 7758-11-4	Not available	Not available	Not available	Not available	Not available	Not available

Consult local authorities for recommended exposure limits

Appropriate engineering controls

Engineering controls
Local ventilation recommended where mechanical ventilation is ineffective in controlling airborne concentrations below the recommended occupational exposure limit. General (mechanical) room ventilation is expected to be satisfactory.

Individual protection measures, such as personal protective equipment

Eye/face protection
If exposure causes eye discomfort, use a full-face respirator. Safety glasses with side shields or chemical goggles.

Hand protection
Polyvinylchloride (PVC) gloves.

Skin and body protection
Skin contact should be prevented through the use of suitable protective clothing, gloves and footwear, selected for conditions of use and exposure potential. Consideration must be given both to durability as well as permeation resistance.

Respiratory protection
Atmospheric levels should be maintained below the exposure guideline. For most conditions, no respiratory protection is needed; however, if handling at elevated temperatures without sufficient ventilation, use an approved air-purifying respirator.

General hygiene considerations
Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance

Physical state	Liquid
Color	Colorless
Odor	Sweet
Odor threshold	No information available

PROPERTIES	**Values**	**Remarks • Method**
pH	9	
Melting point / freezing point	-13 °C / 9 °F	
Initial boiling point/boiling range	> 197 °C / 387 °F	None known
Flash point	116 °C / 241 °F	Tag Closed Cup Product not tested - using lowest flashing component.
Evaporation rate	0.01	
Flammability (solid, gas)	No data available	None known
Flammability Limit in Air		
Upper flammability limit:	15.3	
Lower flammability limit:	3.2	
Vapor pressure	0.06 mmHg @ 20°C	
Relative vapor density	2.1	
Specific Gravity	1.068	
Water solubility	1000 (RBT)	
Solubility in other solvents	No data available	
Partition coefficient	No data available	
Autoignition temperature	427 °C / 801 °F	
Decomposition temperature	No data available	None known
Kinematic viscosity	No data available	None known
Dynamic viscosity	No data available	None known
Explosive properties	No information available.	
Oxidizing properties	No information available.	
Molecular weight	62 g/mol	
VOC Percentage Volatility	No information available	
Liquid Density	No information available	
Bulk density	No information available	

10. STABILITY AND REACTIVITY

Reactivity/Chemical Stability
Stable

Possibility of hazardous reactions
Avoid contamination with strong oxidizing agents and materials reactive with hydroxyl compounds.

Hazardous polymerization
Will not occur.

Conditions to avoid
Product can decompose at elevated temperatures. Generation of gas during decomposition can cause pressure in

closed systems. Avoid excessive heat, open flames and all ignition sources.

Incompatible materials
Strong oxidizers. Strong acids and bases.

Hazardous decomposition products
Decomposition products can include and are not limited to:. Alcohols. Ethers. Aldehydes. Hazardous decomposition products depend upon temperature, air supply, and the presence of other materials.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Inhalation
With good ventilation, single exposure is not expected to cause adverse effects. If material is heated or areas are poorly ventilated, vapor/mist may accumulate and cause respiratory irritation and symptoms such as headache and nausea. At room temperature, exposure to vapor is minimal due to low volatility.

Eye contact
May cause slight eye irritation. Corneal injury is unlikely. Vapors or mists may cause eye irritation.

Skin contact
Brief contact is essentially non-irritating to skin. Repeated contact may cause skin irritation with local redness. Repeated skin exposure to large quantities may result in absorption of harmful amounts. Massive contact with damaged skin or if material sufficiently hot to burn skin may result in absorption of potential lethal amounts. Prolonged contact may cause skin irritation with local redness.

Ingestion
Harmful if swallowed. Cardiac failure, pulmonary edema, and severe kidney damage may develop. May cause abdominal discomfort or pain, nausea, vomiting, dizziness, drowsiness, malaise, blurring of vision, irritability, lumbar pain, oliguria, uremia, and central nervous system effects, including irregular eye movements, convulsions and coma.

Information on toxicological effects

Symptoms
Repeated inhalation of ethylene glycol may produce signs of central nervous system involvement, particularly dizziness and nystagmus (involuntary eye movement). Exposure may place individuals with existing heart problems at added risk of potential cardiac irregularities and heart failure. In animals , effects have been reported on the following organs: Kidney, liver. Repeated skin contact with ethylene glycol may, in a very small proportion of cases, cause sensitization with the development of allergic contact dermatitis. The incidence is significantly less than 1% with the undiluted material.

Numerical measures of toxicity

Acute toxicity

The following values are calculated based on chapter 3.1 of the GHS document .

ATEmix (oral)	1,000.00 mg/kg
ATEmix (dermal)	21,200.00 mg/kg

Unknown acute toxicity No information available

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Water 7732-18-5	> 90 mL/kg (Rat)	Not available	Not available

Ethylene Glycol 107-21-1	= 4700 mg/kg (Rat)	= 10600 mg/kg (Rat) = 9530 µL/kg (Rabbit)	Not available
Dipotassium phosphate 7758-11-4	Not available	Not available	Not available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation
Repeated skin exposure to large quantities may result in absorption of harmful amounts. Repeated contact may cause skin irritation with local redness. Prolonged contact may cause skin irritation with local redness. Massive contact with damaged skin or if material sufficiently hot to burn skin may result in absorption of potential lethal amounts. Brief contact is essentially non-irritating to skin.

Serious eye damage/eye irritation
Corneal injury is unlikely. Vapors or mists may cause eye irritation. May cause slight eye irritation.

Respiratory or skin sensitization
No information available.

Germ cell mutagenicity
No information available.

Carcinogenicity
No information available.

Chemical Name	ACGIH	IARC	NTP	OSHA
Water 7732-18-5	Not available	Not available	Not available	Not available
Ethylene Glycol 107-21-1	Not available	Not available	Not available	Not available
Dipotassium phosphate 7758-11-4	Not available	Not available	Not available	Not available

Reproductive toxicity
Ethylene glycol has been shown to produce dose-related teratogenic effects in rats and mice when given by gavage or in drinking water at high concentrations or doses. The no-effect doses for developmental toxicity for ethylene glycol given by gavage over the period of organogenesis has been shown to be 150 mg/kg/day for the mouse and 500 mg/kg/day for the rat. Also, in a preliminary study to assess the effects of exposure of pregnant rats and mice to aerosols at concentrations of 150, 1000 and 2500 mg/m^3 for 6 hours a day throughout the period of organogenesis, teratogenic effects were produced at the highest concentration, but only in mice. The conditions of these latter experiments did not allow a conclusion as to whether the developmental toxicity was mediated by inhalation of aerosol, percutaneous absorption of ethylene glycol from contaminated skin, or swallowing of ethylene glycol as a result of grooming the wetted coat. In a further study, comparing effects from high aerosol concentration by whole-body or nose-only exposure, it was shown that nose-only exposure resulted in maternal toxicity (1000 and 2500 mg/m^3) and developmental toxicity with minimal evidence of teratogenicity (2500 mg/m^3). The no-effects concentration (based on maternal toxicity) was 500 mg/m^3. In a further study in mice, no teratogenic effects could be produced when ethylene glycol was applied to the skin of pregnant mice over the period of organogenesis. The above observations suggest that ethylene glycol is to be regarded as an animal teratogen. There is currently no available information to suggest that ethylene glycol has caused birth defects in humans. Cutaneous application of ethylene glycol is ineffective in producing developmental toxicity. Exposure to high aerosol concentrations is only minimally effective in producing developmental toxicity. Ingestion of large amounts of ethylene glycol has been shown to interfere with reproduction in animals. Specifically, growth retardation and decreased litter size in rats and mice and decreased mating frequency in mice were observed.

Specific target organ systemic toxicity - single exposure
No information available.

Specific target organ systemic toxicity - repeated exposure

Causes damage to organs through prolonged or repeated exposure.

Aspiration hazard
No information available.

12. ECOLOGICAL INFORMATION

Ecotoxicity
.

Chemical Name	Ecotoxicity - Freshwater Algae Data	Ecotoxicity - Fish Species Data	Toxicity to microorganisms	Crustacea
Water 7732-18-5	Not available	Not available	Not available	Not available
Ethylene Glycol 107-21-1	6500 - 13000 mg/L EC50 Pseudokirchneriella subcapitata 96 h	14 - 18 mL/L LC50 (Oncorhynchus mykiss) 96 h static 40000 - 60000 mg/L LC50 (Pimephales promelas) 96 h static 16000 mg/L LC50 (Poecilia reticulata) 96 h static 27540 mg/L LC50 (Lepomis macrochirus) 96 h static 40761 mg/L LC50 (Oncorhynchus mykiss) 96 h static 41000 mg/L LC50 (Oncorhynchus mykiss) 96 h	Not available	EC50: =46300mg/L (48h, Daphnia magna)
Dipotassium phosphate 7758-11-4	Not available	Not available	Not available	Not available

Persistence and degradability No information available.

Bioaccumulation No information available.

Component Information

Chemical Name	Partition coefficient
Water 7732-18-5	Not available
Ethylene Glycol 107-21-1	-1.93
Dipotassium phosphate 7758-11-4	Not available

Other adverse effects No information available.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Waste materials must be disposed of in accordance with your municipal, state, provincial and federal regulations.

14. TRANSPORT INFORMATION

TDG (Canada):

UN Number	Not applicable
Shipping name	Not regulated
Class	Not applicable
Packing Group	Not applicable
Marine pollutant	Not available.

DOT (U.S.)

UN Number	Not applicable
Shipping name	Not regulated
Class	Not applicable
Packing Group	Not applicable
Marine pollutant	Not available

15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture

U.S. Regulatory Rules

Chemical Name	CERCLA/SARA - Section 302:	SARA (311, 312) Hazard Class:	CERCLA/SARA - Section 313:
Water - 7732-18-5	Not Listed	Not Listed	Not Listed
Ethylene Glycol - 107-21-1	Not Listed	Listed	Listed
Dipotassium phosphate - 7758-11-4	Not Listed	Not Listed	Not Listed

International Inventories

TSCA	All components of this product are either on the Toxic Substances Control Act (TSCA) Inventory List or exempt.
DSL/NDSL	All components of this product are either on the Domestic Substances List (DSL), the Non-Domestic Substances List (NDSL) or exempt.

Legend:
TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

16. OTHER INFORMATION

NFPA:	**Health hazards**	1	**Flammability**	1	**Instability**	0		**Physical and chemical properties**	-
HMIS:	**Health hazards**	2	**Flammability**	1	**Physical hazards**	0		**Personal protection**	X

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation

Prepared By: The Environment, Health and Safety Department of Univar Canada Ltd.

Preparation Date: 28/Sep/2020
Revision Date: 28/Sep/2020

Disclaimer

NOTICE TO READER:

Univar expressly disclaims all express or implied warranties of merchantability and fitness for a particular purpose, with respect to the product or information provided herein, and shall under no circumstances be liable for incidental or consequential damages.

Do not use ingredient information and/or ingredient percentages in this SDS as a product specification. For product specification information refer to a Product Specification Sheet and/or a Certificate of Analysis. These can be obtained from your local Univar Sales Office.

All information appearing herein is based upon data obtained from the manufacturer and/or recognized technical sources. While the information is believed to be accurate, Univar makes no representations as to its accuracy or sufficiency. Conditions of use are beyond Univar's control and therefore users are responsible to verify this data under their own operating conditions to determine whether the product is suitable for their particular purposes and they assume all risks of their use, handling, and disposal of the product, or from the publication or use of, or reliance upon, information contained herein. This information relates only to the product designated herein, and does not relate to its use in combination with any other material or in any other process.

End of Safety Data Sheet

Region	The following sections have been revised:	Canada
Template name HGHS	Revision Note 2.0	

Inhalation Statement	Liquid or Aerosol
Inhalation	At room temperature, exposure to vapor is minimal due to low volatility. With good ventilation, single exposure is not expected to cause adverse effects. If material is heated or areas are poorly ventilated, vapor/mist may accumulate and cause respiratory irritation and symptoms such as headache and nausea.
Contaminated packaging	Waste materials must be disposed of in accordance with your municipal, state, provincial and federal regulations.
Conditions to avoid	Avoid excessive heat, open flames and all ignition sources. None anticipated Avoid contact with metals such as: zinc, magnesium, aluminum and galvanized metals.
Possibility of hazardous reactions	Contact with strong alkaline or caustic will produce heat.
Chemical stability	Stable.
Symptoms	Overexposure (prolonged or repeated exposure) may cause: injury to the eyes, digestive tract damage, respiratory tract damage, skin damage. Persons with pre-existing eye, skin, respiratory tract, kidney or liver disorders may be more susceptible to the effects of this product.
Note to physicians	Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
Advice on safe handling	Use with adequate ventilation. Vapors form from this product and may travel or be moved by air currents and ignited by pilot lights, other flames, smoking, sparks, heaters, electrical equipment, static discharges or other ignition sources at locations distant from product handling point and may flash back explosively. Keep the containers closed when not in use. Containers which have been exposed to heat may be under internal pressure. These should be cooled and carefully vented before opening. For industrial use only. Handle and open containers with care. Avoid contact with eyes, skin and clothing. Do not ingest. Avoid inhalation of chemical. Empty containers may contain hazardous product residues. Keep the containers closed when not in use. Protect against physical damage. Use appropriate personnel protective equipment. Avoid prolonged contact with natural, butyl or nitrile rubbers. Keep in original container.
Storage Conditions	Avoid storage with incompatible materials. Keep in a cool, well-ventilated place. A flammable mixture of methanol vapor and air is possible inside a storage tank or transportation tank, and handlers should

	take appropriate precautions to reduce the risk of ignition. Handlers must eliminate ignition sources or purge the tank with an inert gas such as nitrogen. All equipment must be grounded - bonded when transferring product in order to avoid static discharge from the equipment, and subsequent possible fire. Anhydrous methanol is non-corrosive to most metals at ambient temperatures except for lead, nickel, money, cast iron and high silicon iron. Coatings of copper (or copper alloys), zinc (including galvanized steel), or aluminum are unsuitable for storage. These materials may be attacked slowly by the methanol. Storage tanks of welded construction are normally satisfactory. They should be designed and built in conformance with good engineering practice for the material being stored. While plastics can be used for short term storage, they are generally not recommended for long-term storage due to deterioration effects and the subsequent risk of contamination. Par Corrosion rates for several construction materials: <0.508 mm/year: Cast iron, money, lead, nickel <0.051 mm/year: High silicon iron Some attack: Polyethylene Satisfactory: Neoprene, phenolic resins, polyesters, natural rubber, butyl rubber Resistant: Polyvinyl chloride, unplasticized Do not store in aluminum, copper, brass or iron.
Engineering controls	General (mechanical) room ventilation is expected to be satisfactory. Local ventilation recommended where mechanical ventilation is ineffective in controlling airborne concentrations below the recommended occupational exposure limit.
Eye/face protection	Safety glasses (with side shields). Face shield.
Hand protection	Substantial leather work gloves.
Respiratory protection	Use a NIOSH-approved chemical cartridge respirator with organic vapor cartridges or use a NIOSH-approved supplied-air respirator.

pH	9
Physical state	Liquid
Flash point °C - VALUE 1	116
Boiling point / boiling range °C - VALUE 1	197
Flash Point:	&116.1&241&&&

GHS Classification

Precautionary Statements	P264 - Wash face, hands and any exposed skin thoroughly after handling P270 - Do not eat, drink or smoke when using this product P301 + P312 - IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell P330 - Rinse mouth P501 - Dispose of contents/ container to an approved waste disposal plant
Signal Word:	Warning
Acute toxicity - Oral	Category 4
Hazard statements	Harmful if swallowed
Signal word	Warning
Specific target organ toxicity (repeated exposure)	Category 2
Acute toxicity - Oral	- (H302)

Component	Exclude this non-hazardous chemical from toxicity and ecotoxicity calculations for LD/LC/EC50	mg/kg oral LD50 (rat)	LD50 (Dermal, Rat, mg/kg)	Inhalation LC50 - 4 hour - dust/mist - mg/L	Inhalation LC50 - 4 hour - gas - ppm	Inhalation LC50 - 4 hour - vapor - mg/L	Inhalation LC50 - 4 hour - vapor - mg/L
Water 7732-18-5 (45-70)	-	-	-	-	-	-	-
Ethylene Glycol 107-21-1 (45-70)	-	-	-	-	-	-	-
Dipotassium phosphate 7758-11-4 (1-5)	-	-	-	-	-	-	-

Graphic

Hazard statements	Harmful if swallowed May cause damage to organs through prolonged or repeated exposure
Hazard statements	H302 - Harmful if swallowed H303 - May be harmful if swallowed
Precautionary Statements	Do not eat, drink or smoke when using this product IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell Call a POISON CENTER or doctor Call a POISON CENTER or doctor if you feel unwell IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell Rinse mouth
Precautionary Statements	P264 - Wash face, hands and any exposed skin thoroughly after handling P270 - Do not eat, drink or smoke when using this product P301 + P312 - IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell P330 - Rinse mouth P501 - Dispose of contents/ container to an approved waste disposal plant
Prevention	Wash face, hands and any exposed skin thoroughly after handling Do not eat, drink or smoke when using this product Do not breathe dust/fume/gas/mist/vapors/spray
Response	
Ingestion	IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell Rinse mouth
Storage	Store locked up Store in a well-ventilated place. Keep container tightly closed
Disposal	Dispose of contents/container to an approved waste disposal plant
The following values are calculated based on chapter 3.1 of the GHS document	
ATEmix (oral)	1,000.00
Units	mg/kg
ATEmix (dermal)	21,200.00
Units	mg/kg
Unknown acute toxicity	2 % of the mixture consists of component(s) of unknown hazards to the aquatic environment
Unknown Acute Aquatic Toxicity	2
Unknown Chronic Aquatic Toxicity	2
Product ATE Oral Status	1
Product ATE Dermal Status	1
Product ATE Inhalation - Gas Status	1
Product ATE Inhalation - Vapor Status	1
Product ATE Inhalation - Dust/Mist Status	1
Product Skin Corrosion Status	1
Product Eye Damage Status	1
Product Respiratory Sens. Status	1
Product Skin Sensitization Status	1
Product Mutagenic Status	1
Product Carcinogenic Status	1
Product Reproductive Toxicity Status	1
Product STOT Single Status	1
Product STOT Repeated Status	1
Product Aquatic Toxicity Status	1
Product Aspiration Toxicity Status	1
Product Ozone Status	1
Product and Component Overall Classification Status	1
Unknown acute toxicity	No information available
Unknown acute toxicity	98.16

2 % of the mixture consists of ingredient(s) of unknown acute oral toxicity

2 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity

52 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)

52 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)

52 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

Symbols/Pictograms

Health hazards	Exclamation mark