

**1. Identification**

<b>Product identifier</b>	<b>PHOTOVOLT AQUATEST GENERATOR SOLUTION</b>	
<b>Other means of identification</b>		
<b>Product code</b>	2791003	
<b>Recommended use</b>	Laboratory reagent for water determination using the Karl Fischer method.	
<b>Recommended restrictions</b>	None known.	
<b>Manufacturer/Importer/Supplier/Distributor information</b>		
<b>Company name</b>	Photovolt Instruments, Inc.	
<b>Address</b>	6323 Cambridge St. Minneapolis MN 55416 US	
<b>Telephone</b>	952-848-2000	800-222-5711
<b>Website</b>	www.photovolt.com	
<b>E-mail</b>	sales@photovolt.com	
<b>Emergency phone number</b>	800-451-8346	Contract #7612

**2. Hazard(s) identification**

<b>Physical hazards</b>	Flammable liquids	Category 3
<b>Health hazards</b>	Acute toxicity, dermal	Category 4
	Skin corrosion/irritation	Category 2
	Serious eye damage/eye irritation	Category 2
	Sensitization, skin	Category 1
	Reproductive toxicity	Category 1
	Specific target organ toxicity, single exposure	Category 1 (central nervous system, kidney, liver, respiratory system, testes)
	Specific target organ toxicity, repeated exposure	Category 1 (central nervous system, hematopoietic system, respiratory system, testes, thyroid gland)
<b>OSHA hazard(s)</b>	Not classified.	

**Label elements**



<b>Signal word</b>	Danger
<b>Hazard statement</b>	Flammable liquid and vapor. Harmful in contact with skin. Causes severe skin burns and eye damage. May cause an allergic skin reaction. Causes serious eye damage. May damage fertility or the unborn child. Causes damage to organs (central nervous system, kidney, liver, respiratory system, testes). Causes damage to organs (central nervous system, hematopoietic system, respiratory system, testes, thyroid gland) through prolonged or repeated exposure.
<b>Precautionary statement</b>	
<b>Prevention</b>	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Keep container tightly closed. Use explosion-proof electrical/ventilating/lighting equipment. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Do not breathe the mist or vapor. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Contaminated work clothing must not be allowed out of the workplace. Wear protective gloves/protective clothing/eye protection/face protection.

<b>Response</b>	If swallowed: Rinse mouth. Do NOT induce vomiting. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If exposed or concerned: Get medical advice/attention. In case of fire: Use appropriate media for extinction.
<b>Storage</b>	Store in a well-ventilated place. Keep cool. Store locked up.
<b>Disposal</b>	Dispose of contents/container to an approved waste disposal plant.
<b>Hazard(s) not otherwise classified (HNOC)</b>	Not classified.
<b>Environmental hazards</b>	Hazardous to the aquatic environment, acute hazard Category 1 Hazardous to the aquatic environment, long-term hazard Category 3
<b>Supplemental information</b>	
<b>Hazard statement</b>	Very toxic to aquatic life. Harmful to aquatic life with long lasting effects.
<b>Precautionary statement</b>	
<b>Prevention</b>	Avoid release to the environment.
<b>Response</b>	Collect spillage.
<b>Disposal</b>	Dispose of contents/container in accordance with local/regional/national/international regulations.
	24% of the mixture consists of component(s) of unknown acute dermal toxicity. 33% of the mixture consists of component(s) of unknown acute hazards to the aquatic environment. 33% of the mixture consists of component(s) of unknown long-term hazards to the aquatic environment.

### 3. Composition/information on ingredients

#### Mixtures

Hazardous components Chemical name	CAS number	%
ETHYLENEGLYCOLMONOMETHYL ETHER	109-86-4	70 - < 80*
SULFUR DIOXIDE	7446-09-5	10 - < 20*
TRADE SECRET*	Proprietary*	10 - < 20*
IODINE	7553-56-2	<2.2

\*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

### 4. First-aid measures

<b>Inhalation</b>	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a physician or poison control center immediately.
<b>Skin contact</b>	Take off immediately all contaminated clothing. Wash off with soap and plenty of water. Call a physician or poison control center immediately. Call a POISON CENTER or doctor/physician if you feel unwell. For minor skin contact, avoid spreading material on unaffected skin. If skin irritation or rash occurs: Get medical advice/attention.
<b>Eye contact</b>	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician or poison control center immediately. Get medical attention if irritation develops and persists.
<b>Ingestion</b>	Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.
<b>Most important symptoms/effects, acute and delayed</b>	Irritation of eyes and mucous membranes. May cause temporary blindness and severe eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause allergic skin reaction. Unconsciousness. Narcosis. Cyanosis (blue tissue condition, nails, lips, and/or skin). Decrease in motor functions. Behavioral changes. Edema. Liver enlargement. Jaundice. Proteinuria. Prolonged exposure may cause chronic effects.
<b>Indication of immediate medical attention and special treatment needed</b>	In case of shortness of breath, give oxygen. Keep victim warm. Keep victim under observation. Symptoms may be delayed. Provide general supportive measures and treat symptomatically.
<b>General information</b>	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. IF exposed or concerned: Get medical advice/attention. Wash contaminated clothing before reuse.

### 5. Fire-fighting measures

**Suitable extinguishing media** Water fog. Dry chemical powder. Carbon dioxide (CO<sub>2</sub>). Alcohol resistant foam. Powder.

<b>Unsuitable extinguishing media</b>	Do not use water jet as an extinguisher, as this will spread the fire.
<b>Specific hazards arising from the chemical</b>	By heating and fire, harmful vapors/gases may be formed.
<b>Special protective equipment and precautions for firefighters</b>	Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA. Structural firefighters protective clothing will only provide limited protection.
<b>Fire-fighting equipment/instructions</b>	In case of fire and/or explosion do not breathe fumes. Use standard firefighting procedures and consider the hazards of other involved materials. Move containers from fire area if you can do so without risk. Water runoff can cause environmental damage.
<b>Specific methods</b>	In the event of fire and/or explosion do not breathe fumes. Self-contained breathing apparatus and full protective clothing must be worn in case of fire. Use standard firefighting procedures and consider the hazards of other involved materials. Move container from fire area if it can be done without risk.

## 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Keep unnecessary personnel away. Local authorities should be advised if significant spillages cannot be contained. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep people away from and upwind of spill/leak. Keep upwind. Keep out of low areas. Ventilate closed spaces before entering them. Avoid inhalation of vapors or mists. Wear appropriate personal protective equipment.
<b>Methods and materials for containment and cleaning up</b>	Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. Should not be released into the environment. This product is miscible in water. Prevent entry into waterways, sewers, basements or confined areas.  Large Spills: Stop leak if you can do so without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Clean contaminated surface thoroughly. Use water spray to reduce vapors or divert vapor cloud drift. After removal flush contaminated area thoroughly with water. This material and its container must be disposed of as hazardous waste. Following product recovery, flush area with water. Clean up in accordance with all applicable regulations.  Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. This material is classified as a water pollutant under the Clean Water Act and should be prevented from contaminating soil or from entering sewage and drainage systems which lead to waterways.  Never return spills in original containers for re-use. For waste disposal, see section 13 of the MSDS.
<b>Environmental precautions</b>	Contact local authorities in case of spillage to drain/aquatic environment. Avoid discharge into drains, water courses or onto the ground. Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Do not contaminate water.

## 7. Handling and storage

<b>Precautions for safe handling</b>	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. DO NOT handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Use non-sparking tools and explosion-proof equipment. Do not breathe the mist or vapor. Do not get this material in contact with eyes. Do not get this material in contact with skin. Do not taste or swallow. Avoid contact during pregnancy/while nursing. Do not get this material on clothing. Use personal protective equipment as required. When using, do not eat, drink or smoke. Wash hands thoroughly after handling. Avoid release to the environment. Do not empty into drains.
<b>Conditions for safe storage, including any incompatibilities</b>	Store locked up. Keep away from heat, sparks and open flame. Prevent electrostatic charge build-up by using common bonding and grounding techniques. Store in cool place. Store in a well-ventilated place. Keep container tightly closed. Keep in an area equipped with sprinklers. Keep out of the reach of children. Store in a cool, dry place out of direct sunlight.

## 8. Exposure controls/personal protection

### Occupational exposure limits

#### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
ETHYLENEGLYCOLMONOMETHYL ETHER (CAS 109-86-4)	PEL	80 mg/m <sup>3</sup>
IODINE (CAS 7553-56-2)	Ceiling	25 ppm 1 mg/m <sup>3</sup> 0.1 ppm
SULFUR DIOXIDE (CAS 7446-09-5)	PEL	13 mg/m <sup>3</sup> 5 ppm

#### US. ACGIH Threshold Limit Values

Components	Type	Value	Form
ETHYLENEGLYCOLMONOMETHYL ETHER (CAS 109-86-4)	TWA	0.1 ppm	
IODINE (CAS 7553-56-2)	STEL TWA	0.1 ppm 0.01 ppm	Vapor and aerosol. Inhalable fraction and vapor.
SULFUR DIOXIDE (CAS 7446-09-5)	STEL	0.25 ppm	

#### US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
ETHYLENEGLYCOLMONOMETHYL ETHER (CAS 109-86-4)	REL	0.3 mg/m <sup>3</sup>
IODINE (CAS 7553-56-2)	Ceiling	0.1 ppm 1 mg/m <sup>3</sup> 0.1 ppm
SULFUR DIOXIDE (CAS 7446-09-5)	REL STEL	5 mg/m <sup>3</sup> 2 ppm 13 mg/m <sup>3</sup> 5 ppm

### Biological limit values

#### US. ACGIH. BEIs. Biological Exposure Indices

Components	Value	Determinant	Sampling Time
ETHYLENEGLYCOLMONOMETHYL ETHER (CAS 109-86-4)	1 mg/g	2-Methoxyacetic acid	*

\* - For sampling details, please see the source document.

### Exposure guidelines

#### US. ACGIH Threshold Limit Values

ETHYLENEGLYCOLMONOMETHYL ETHER (CAS 109-86-4) Can be absorbed through the skin.

#### US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants

2-METHOXYETHANOL (CAS 109-86-4) Can be absorbed through the skin.

#### US. Minnesota Hazardous Substances List (Minn. Rules 5206.0400).

ETHYLENEGLYCOLMONOMETHYL ETHER (CAS 109-86-4) Skin designation applies.

#### US. NIOSH: Pocket Guide to Chemical Hazards

ETHYLENEGLYCOLMONOMETHYL ETHER (CAS 109-86-4) Can be absorbed through the skin.

#### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

ETHYLENEGLYCOLMONOMETHYL ETHER (CAS 109-86-4) Can be absorbed through the skin.

#### US. OSHA Table Z-1-A (29 CFR 1910.1000)

ETHYLENEGLYCOLMONOMETHYL ETHER (CAS 109-86-4) Can be absorbed through the skin.

#### US. Rhode Island Hazardous Substances Right-to-Know Act (R.I. Gen. Laws Section 28-21-1 et. seq.)

ETHYLENEGLYCOLMONOMETHYL ETHER (CAS 109-86-4) Can be absorbed through the skin.

#### US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A

ETHYLENEGLYCOLMONOMETHYL ETHER (CAS 109-86-4) Can be absorbed through the skin.

**Appropriate engineering controls** Explosion-proof general and local exhaust ventilation. Provide eyewash station.

## Individual protection measures, such as personal protective equipment

<b>Eye/face protection</b>	Chemical goggles are recommended.
<b>Skin protection</b>	
<b>Hand protection</b>	Wear protective gloves.
<b>Other</b>	Wear appropriate chemical resistant clothing. It may provide little or no thermal protection. Wear protective gloves.
<b>Respiratory protection</b>	If permissible levels are exceeded use NIOSH mechanical filter / organic vapor cartridge or an air-supplied respirator.
<b>Thermal hazards</b>	Not available.
<b>General hygiene considerations</b>	When using, do not eat, drink or smoke. Do not get in eyes. Do not get this material in contact with skin. Do not get this material on clothing. Wash hands before breaks and immediately after handling the product. Contaminated work clothing should not be allowed out of the workplace. Handle in accordance with good industrial hygiene and safety practice.

## 9. Physical and chemical properties

<b>Appearance</b>	Clear.
<b>Physical state</b>	Liquid.
<b>Form</b>	Liquid.
<b>Color</b>	Colourless to light yellow.
<b>Odor</b>	Strong.
<b>Odor threshold</b>	Not available.
<b>pH</b>	6
<b>Melting point/freezing point</b>	-42 °F (-41 °C) estimated
<b>Initial boiling point and boiling range</b>	226 °F (108 °C) estimated
<b>Flash point</b>	115 - 140 °F (46 - 60 °C)
<b>Evaporation rate</b>	Not available.
<b>Flammability (solid, gas)</b>	Not applicable.
<b>Upper/lower flammability or explosive limits</b>	
<b>Flammability limit - lower (%)</b>	2.5 % estimated
<b>Flammability limit - upper (%)</b>	Not available.
<b>Explosive limit - lower (%)</b>	Not available.
<b>Explosive limit - upper (%)</b>	Not available.
<b>Vapor pressure</b>	374 hPa estimated
<b>Vapor density</b>	Not available.
<b>Relative density</b>	Not available.
<b>Solubility(ies)</b>	Miscible
<b>Partition coefficient (n-octanol/water)</b>	Not available.
<b>Auto-ignition temperature</b>	640 °F (338 °C) estimated
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	Not available.
<b>Other information</b>	
<b>Density</b>	1.10 g/cm <sup>3</sup>
<b>Flammability class</b>	Combustible II estimated
<b>Flash point class</b>	Combustible II
<b>Percent volatile</b>	73.9 % estimated
<b>Specific gravity</b>	1.1
<b>VOC (Weight %)</b>	73.9 % estimated

## 10. Stability and reactivity

<b>Reactivity</b>	Not available.
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<b>Chemical stability</b>	Risk of ignition. Stable at normal conditions.
<b>Possibility of hazardous reactions</b>	Hazardous polymerization does not occur.
<b>Conditions to avoid</b>	Heat, flames and sparks. Avoid temperatures exceeding the flash point.
<b>Incompatible materials</b>	Aluminum. Strong oxidizing agents. Ammonia. Caustics.
<b>Hazardous decomposition products</b>	Upon decomposition, this product emits oxides of sulfur, carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Ingestion</b>	Causes digestive tract burns.
<b>Inhalation</b>	May cause irritation to the respiratory system.
<b>Skin contact</b>	Causes severe skin burns. May cause an allergic skin reaction.
<b>Eye contact</b>	Causes severe eye burns. Causes serious eye damage.

**Symptoms related to the physical, chemical and toxicological characteristics** Burning pain and severe corrosive skin damage. Permanent eye damage including blindness could result. Unconsciousness. Narcosis. Cyanosis (blue tissue condition, nails, lips, and/or skin). Edema. Liver enlargement. Jaundice. Proteinuria. Behavioral changes. Decrease in motor functions.

### Information on toxicological effects

**Acute toxicity** Causes severe skin burns and eye damage. Harmful in contact with skin.

Product	Species	Test Results
PHOTOVOLT AQUATEST GENERATOR SOLUTION (CAS Mixture)		
<b>Acute</b>		
<i>Dermal</i>		
LD50	Rabbit	1732.0703 mg/kg, estimated
<i>Inhalation</i>		
LC50	Guinea pig	9708.7383 mg/l, 20 Hours, estimated 6278 mg/l
	Mouse	1262.1359 mg/l, 154 Hours, estimated 9708.7383 mg/l, 4 Hours, estimated 6389 mg/l
	Rat	1456.3107 mg/l, 847 Hours, estimated 2308 mg/l
<i>Oral</i>		
LD50	Guinea pig	1285.521 mg/kg, estimated
	Mouse	99999 mg/kg 3.7791 g/kg, estimated
	Rabbit	99999 mg/kg 666.6667 g/kg, estimated
	Rat	2172.4563 mg/kg, estimated 933.3333 g/kg, estimated
<i>Other</i>		
LD50	Mouse	2905.2773 mg/kg, estimated
	Rat	2895.8052 mg/kg, estimated

Components	Species	Test Results
ETHYLENEGLYCOLMONOMETHYL ETHER (CAS 109-86-4)		
<b>Acute</b>		
<i>Dermal</i>		
LD50	Rabbit	1280 mg/kg
<i>Inhalation</i>		
LC50	Rat	1500 mg/l, 7 hours
<i>Oral</i>		
LD50	Guinea pig	950 mg/kg
	Mouse	2560 mg/kg

Components	Species	Test Results
		2.8 g/kg
	Rabbit	890 mg/kg
	Rat	2370 mg/kg
<i>Other</i>		
LD50	Mouse	2147 mg/kg
	Rat	2140 mg/kg
IODINE (CAS 7553-56-2)		
<b>Acute</b>		
<i>Oral</i>		
LD50	Mouse	22 g/kg
	Rabbit	10 g/kg
	Rat	14 g/kg
SULFUR DIOXIDE (CAS 7446-09-5)		
<b>Acute</b>		
<i>Inhalation</i>		
LC50	Guinea pig	1000 mg/l, 20 Hours 130 mg/l, 154 Hours
	Mouse	1000 mg/l, 4 Hours 150 mg/l, 847 Hours
TRADE SECRET (CAS Proprietary)		
<b>Acute</b>		
<i>Oral</i>		
LD50	Rat	970 mg/kg

\* Estimates for product may be based on additional component data not shown.

<b>Skin corrosion/irritation</b>	Causes severe skin burns and eye damage.
<b>Serious eye damage/eye irritation</b>	Causes severe eye burns. Causes serious eye damage.
<b>Respiratory sensitization</b>	Due to lack of data the classification is not possible.
<b>Skin sensitization</b>	May cause an allergic skin reaction.
<b>Germ cell mutagenicity</b>	Due to lack of data the classification is not possible.
<b>Carcinogenicity</b>	This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

#### IARC Monographs. Overall Evaluation of Carcinogenicity

SULFUR DIOXIDE (CAS 7446-09-5) 3 Not classifiable as to carcinogenicity to humans.

<b>Reproductive toxicity</b>	Possible reproductive hazard. May damage fertility or the unborn child.
<b>Specific target organ toxicity - single exposure</b>	Causes damage to organs (central nervous system, kidney, liver, respiratory system, testes).
<b>Specific target organ toxicity - repeated exposure</b>	Causes damage to organs (central nervous system, hematopoietic system, respiratory system, testes, thyroid gland) through prolonged or repeated exposure.
<b>Aspiration hazard</b>	Due to lack of data the classification is not possible.
<b>Chronic effects</b>	Causes damage to organs through prolonged or repeated exposure.

## 12. Ecological information

**Ecotoxicity** Very toxic to aquatic life. Harmful to aquatic life with long lasting effects. Accumulation in aquatic organisms is expected.

Product	Species	Test Results	
PHOTOVOLT AQUATEST GENERATOR SOLUTION (CAS Mixture)			
Crustacea	LC50	Daphnia	15385 mg/l, 24 hours
			140 mg/l, 48 hours
			38.25 mg/l, 96 hours
Fish	LC50	Fish	15385 mg/l, 48 hours
			147 mg/l, 24 hours

Product	Species		Test Results
			107 mg/l, 96 hours
Components	Species		Test Results
ETHYLENEGLYCOLMONOMETHYL ETHER (CAS 109-86-4)			
<b>Aquatic</b>			
Crustacea	LC50	Brine shrimp ( <i>Artemia salina</i> )	> 10000 mg/l, 24 hours
		Water flea ( <i>Daphnia magna</i> )	> 10000 mg/l, 24 hours
Fish	LC50	Bluegill ( <i>Lepomis macrochirus</i> )	> 10000 mg/l, 96 hours
		Carp ( <i>Leuciscus idus melanotus</i> )	> 10000 mg/l, 48 hours
		Goldfish ( <i>Carassius auratus</i> )	> 5000 mg/l, 24 hours
		Inland silverside ( <i>Menidia beryllina</i> )	> 10000 mg/l, 96 hours
		Rainbow trout,donaldson trout ( <i>Oncorhynchus mykiss</i> )	14000 - 18000 mg/l, 96 hours
IODINE (CAS 7553-56-2)			
<b>Aquatic</b>			
Crustacea	LC50	Water flea ( <i>Daphnia magna</i> )	0.55 - 1.32 mg/l, 96 hours 0.03 - 1 mg/l, 48 hours
Fish	LC50	Guppy ( <i>Poecilia reticulata</i> )	3 mg/l, 24 hours
		Rainbow trout,donaldson trout ( <i>Oncorhynchus mykiss</i> )	> 0.01 mg/l, 96 hours

\* Estimates for product may be based on additional component data not shown.

**Persistence and degradability** No data is available on the degradability of this product.

**Bioaccumulative potential** Not available.

**Partition coefficient n-octanol / water (log Kow)**

ETHYLENEGLYCOLMONOMETHYL ETHER	-0.77
IODINE	2.49

**Mobility in soil** Not available.

**Other adverse effects** Not available.

### 13. Disposal considerations

**Disposal instructions** Collect and reclaim or dispose in sealed containers at licensed waste disposal site. This material and its container must be disposed of as hazardous waste. Incinerate the material under controlled conditions in an approved incinerator. Do not incinerate sealed containers. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. If discarded, this product is considered a RCRA ignitable waste, D001. Dispose of contents/container in accordance with local/regional/national/international regulations.

**Local disposal regulations** Not available.

**Hazardous waste code** D001: Waste Flammable material with a flash point <140 F

**Waste from residues / unused products** Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

**Contaminated packaging** Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

### 14. Transport information

**DOT**

<b>UN number</b>	UN1188
<b>UN proper shipping name</b>	Ethylene glycol monomethyl ether
<b>Transport hazard class(es)</b>	3
<b>Subsidiary class(es)</b>	Not available.
<b>Packing group</b>	III
<b>Special precautions for user</b>	Read safety instructions, SDS and emergency procedures before handling.
<b>Labels required</b>	3
<b>Special provisions</b>	B1, IB3, T2, TP1
<b>Packaging exceptions</b>	150



Packaging non bulk 203  
Packaging bulk 242

#### IATA

UN number UN1188  
UN proper shipping name Ethylene glycol monomethyl ether  
Transport hazard class(es) 3  
Subsidiary class(es) -  
Packaging group III  
Environmental hazards No  
Labels required Not available.  
ERG Code 3L  
Special precautions for user Not available.

#### IMDG

UN number UN1188  
UN proper shipping name ETHYLENE GLYCOL MONOMETHYL ETHER  
Transport hazard class(es) 3  
Subsidiary class(es) •  
Packaging group III  
Environmental hazards  
Marine pollutant No  
Labels required Not available.  
EmS F-E, S-D  
Special precautions for user Not available.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code No information available.

General information DOT Regulated Marine Pollutant. IMDG Regulated Marine Pollutant.

#### DOT



#### IATA



## 15. Regulatory information

US federal regulations CERCLA/SARA Hazardous Substances - Not applicable.

All components are on the U.S. EPA TSCA Inventory List.

### TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

ETHYLENEGLYCOLMONOMETHYL ETHER (CAS 109-86-4) 1.0 % One-Time Export Notification only.

### US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not on regulatory list.

### CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

## Superfund Amendments and Reauthorization Act of 1986 (SARA)

**Hazard categories**  
Immediate Hazard - Yes  
Delayed Hazard - Yes  
Fire Hazard - Yes  
Pressure Hazard - No  
Reactivity Hazard - No

**SARA 302 Extremely hazardous substance** No

**SARA 311/312 Hazardous chemical** No

## Other federal regulations

### Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

### Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

SULFUR DIOXIDE (CAS 7446-09-5)

**Safe Drinking Water Act (SDWA)** Not regulated.

### Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2) and Chemical Code Number

Not listed.

### Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c))

IODINE (CAS 7553-56-2) 2.2 %WV

### DEA Exempt Chemical Mixtures Code Number

IODINE (CAS 7553-56-2) 6699

**Food and Drug Administration (FDA)** Not regulated.

## US state regulations

WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

### US. Massachusetts RTK - Substance List

ETHYLENEGLYCOLMONOMETHYL ETHER (CAS 109-86-4)

IODINE (CAS 7553-56-2)

SULFUR DIOXIDE (CAS 7446-09-5)

### US. New Jersey Worker and Community Right-to-Know Act

ETHYLENEGLYCOLMONOMETHYL ETHER (CAS 109-86-4) 500 LBS

SULFUR DIOXIDE (CAS 7446-09-5) 500 LBS

### US. Pennsylvania RTK - Hazardous Substances

ETHYLENEGLYCOLMONOMETHYL ETHER (CAS 109-86-4)

IODINE (CAS 7553-56-2)

SULFUR DIOXIDE (CAS 7446-09-5)

### US. Rhode Island RTK

ETHYLENEGLYCOLMONOMETHYL ETHER (CAS 109-86-4)

IODINE (CAS 7553-56-2)

SULFUR DIOXIDE (CAS 7446-09-5)

### US. California Proposition 65

#### US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance

ETHYLENEGLYCOLMONOMETHYL ETHER (CAS 109-86-4)

SULFUR DIOXIDE (CAS 7446-09-5)

## International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	Yes

<b>Country(s) or region</b>	<b>Inventory name</b>	<b>On inventory (yes/no)*</b>
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

\*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s)

## 16. Other information, including date of preparation or last revision

**Issue date** February-14-2013

**Version #** 01

**Further information** Not available.

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**Revision Information** Product and Company Identification: Product Codes  
Composition / Information on Ingredients: Ingredients