

# SAFETY DATA SHEET

### 1. Identification

1. Identification				
Product identifier	WATERMARK® KARL FISCH PYRIDINE-FREE	ER COULOME	TRIC GENERATOR SOLUTION,	
Other means of identification				
Product code	1613			
Recommended use	Laboratory reagent for water de	etermination us	ing the Karl Fischer method.	
<b>Recommended restrictions</b>	None known.			
Manufacturer/Importer/Suppl	Ipplier/Distributor information			
Company name Address	GFS Chemicals, Inc. P.O. Box 245 Powell OH 43065 US			
Telephone	Phone Toll Free Fax	740-881-550 800-858-9682 740-881-5989	2	
Website E-mail	www.gfschemicals.com service@gfschemicals.com			
Emergency phone number	Emergency Assistance	Chemtrec 800	)-424-9300	
2. Hazard(s) identificatio	n			
Physical hazards	Flammable liquids		Category 3	
Health hazards	Acute toxicity, dermal		Category 4	
	Skin corrosion/irritation		Category 2	
	Serious eye damage/eye irritati	on	Category 2	
	Sensitization, skin		Category 1	
	Reproductive toxicity Specific target organ toxicity, single exposure		Category 1	
			Category 1 (central nervous system, kidney, liver, respiratory system, testes)	
	Specific target organ toxicity, re exposure	epeated	Category 1 (central nervous system, hematopoietic system, respiratory system, testes, thyroid gland)	
OSHA hazard(s)	Not classified.			

Label elements



Signal word Hazard statement

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.

**Precautionary statement** Prevention

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 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.

Response	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.		
Storage	Store in a well-ventilated place. Keep cool. Store locked up.		
Disposal	Dispose of contents/container to an approved waste disposal plant.		
Hazard(s) not otherwise classified (HNOC)	Not classified.		
Environmental hazards	Hazardous to the aquatic environment, acute Category 1 hazard		
	Hazardous to the aquatic environment, Category 3 long-term hazard		
Supplemental information			
Hazard statement	Very toxic to aquatic life. Harmful to aquatic life with long lasting effects.		
Precautionary statement			
Prevention	Avoid release to the environment.		
Response	Collect spillage.		
Disposal	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	%
ETHYLENEGLYCOLMONOME THYL ETHER	109-86-4	60 - < 70*
TRADE SECRET*	Proprietary*	20 - < 30*
SULFUR DIOXIDE	7446-09-5	5 - < 10*
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

Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a physician or poison control center immediately.
Skin contact	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.
Eye contact	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.
Ingestion	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.
Most important symptoms/effects, acute and delayed	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.
Indication of immediate medical attention and special treatment needed	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.
General information	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 (CO2). Alcohol resistant foam. Powder.
Material name: WATERMARK® KARL	ISCHER COULOMETRIC GENERATOR SOLUTION, PYRIDINE-FREE

Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	By heating and fire, harmful vapors/gases may be formed.
Special protective equipment and precautions for firefighters	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.
Fire-fighting equipment/instructions	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.
Specific methods	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 mea	isures
Personal precautions, protective equipment and emergency procedures	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.
Methods and materials for containment and cleaning up	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 confinec 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.
Environmental precautions	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	
Precautions for safe handling	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 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.
Conditions for safe storage, including any incompatibilities	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	Туре	Value	
ETHYLENEGLYCOLM ONOMETHYL ETHER (CAS 109-86-4)	PEL	80 mg/m3	
		25 ppm	
IODINE (CAS 7553-56-2)	Ceiling	1 mg/m3	
		0.1 ppm	
SULFUR DIOXIDE (CAS 7446-09-5)	PEL	13 mg/m3	
		5 ppm	
US. ACGIH Threshold Limit Valu	les		
Components	Туре	Value	Form
ethyleneglycolm onomethyl ether (cas 109-86-4)	TWA	0.1 ppm	
IODINE (CAS 7553-56-2)	STEL	0.1 ppm	Vapor and aerosol.
	TWA	0.01 ppm	Inhalable fraction and vapor.
SULFUR DIOXIDE (CAS 7446-09-5)	STEL	0.25 ppm	
US. NIOSH: Pocket Guide to Ch	emical Hazards		
Components	Туре	Value	
ETHYLENEGLYCOLM ONOMETHYL ETHER (CAS 109-86-4)	TWA	0.3 mg/m3	
		0.1 ppm	
IODINE (CAS 7553-56-2)	Ceiling	1 mg/m3	
		0.1 ppm	
SULFUR DIOXIDE (CAS 7446-09-5)	REL	5 mg/m3	
		2 ppm	

#### **Biological limit values**

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

Components	Value	Determinant	Specimen	Sampling Time
ETHYLENEGLYCOLM	1 mg/g	2-Methoxyacetic	Creatinine	*
ONOMETHYL ETHER (CAS		acid	in urine	
109-86-4)				

13 mg/m3

5 ppm

\* - 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).

STEL

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

#### controls

### Individual protection measures, such as personal protective equipment

Eye/face protection	Chemical goggles are recommended.
Skin protection	
Hand protection	Wear protective gloves.
Other	Wear appropriate chemical resistant clothing. It may provide little or no thermal protection. Wear protective gloves.
Respiratory protection	If permissible levels are exceeded use NIOSH mechanical filter / organic vapor cartridge or an air-supplied respirator.
Thermal hazards	Not available.
General hygiene considerations	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

Appearance	Liquid.
Physical state	Liquid.
Form	Liquid.
Color	Brown.
Odor	Strong.
Odor threshold	Not available.
рН	6
Melting point/freezing point	-42 °F (-41 °C) estimated
Initial boiling point and boiling range	226 °F (108 °C) estimated
Flash point	115 - 140 °F (46 - 60 °C)
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or ex	xplosive limits
Flammability limit - lower (%)	2.5 % estimated
Flammability limit - upper (%)	Not available.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	374 hPa estimated
Vapor density	Not available.
Relative density	Not available.
Solubility(ies)	Miscible
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	640 °F (338 °C) estimated
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Density	1.10 g/cm3
Flammability class	Combustible II estimated
Flash point class	Combustible II
Percent volatile	65 % estimated
Specific gravity	1.1
VOC (Weight %)	65 % estimated

### 10. Stability and reactivity

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

### 11. Toxicological information

Ingestion	Causes digestive tract burns.		
Inhalation	May cause irritation to the respiratory system.		
Skin contact	Causes severe skin burns. May cause an allergic skin reaction.		
Eye contact	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 toxical affacts			

#### Information on toxicological effects

Acute toxicity

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

Product	Species Test Results	
NATERMARK® KARL FISCH	ER COULOMETRIC GENERATOR SOLUTIO	N, PYRIDINE-FREE (CAS Mixture)
Acute		
Dermal		
LD50	Rabbit	1969.2307 mg/kg, estimated
Inhalation		
LC50	Guinea pig	11111.1113 mg/l, 20 Hours, estimated
		6278 mg/l
		1444.4445 mg/l, 154 Hours, estimated
	Mouse	11111.1113 mg/l, 4 Hours, estimated
		6389 mg/l
		1666.6666 mg/l, 847 Hours, estimated
	Rat	2308 mg/l
Oral		
LD50	Guinea pig	1461.5385 mg/kg, estimated
	Mouse	99999 mg/kg
		4.2909 g/kg, estimated
	Rabbit	99999 mg/kg
		500 g/kg, estimated
	Rat	1911.6334 mg/kg, estimated
		700 g/kg, estimated
Other		
LD50	Mouse	3303.0769 mg/kg, estimated
	Rat	3292.3076 mg/kg, estimated
omponents	Species	Test Results
THYLENEGLYCOLMONOMET	THYL ETHER (CAS 109-86-4)	
Acute		
Dermal	5.11%	1000 //
LD50	Rabbit	1280 mg/kg
Inhalation	Dat	1500 mg/l, 7 hours
LC50	Rat	1300 IIIg/I, / IIOUIS
<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	
Other			
LD50	Mouse	2147 mg/kg	
	Rat	2140 mg/kg	
ODINE (CAS 7553-56-2)			
Acute			
Oral			
LD50	Mouse	22 g/kg	
	Rabbit	10 g/kg	
	Rat	14 g/kg	
SULFUR DIOXIDE (CAS 7446-09-5	)		
Acute			
Inhalation			
LC50	Guinea pig	1000 mg/l, 20 Hours	
		130 mg/l, 154 Hours	
	Mouse	1000 mg/l, 4 Hours	
		150 mg/l, 847 Hours	
RADE SECRET (CAS Proprietary)			
Acute			
Oral			
LD50	Rat	970 mg/kg	
	e based on additional component dat		
Skin corrosion/irritation	Causes severe skin burns and eye damage.		
Serious eye damage/eye rritation	Causes severe eye burns. Causes serious eye damage.		
Respiratory sensitization	Due to lack of data the classification is not possible.		
Skin sensitization	May cause an allergic skin reaction.		
Germ cell mutagenicity	Due to lack of data the classification	is not possible.	
Carcinogenicity	This product is not considered to be	a carcinogen by IARC, ACGIH, NTP, or OSHA.	
	Evaluation of Carcinogenicity		
SULFUR DIOXIDE (CAS 7	•	t classifiable as to carcinogenicity to humans.	
Reproductive toxicity	Possible reproductive hazard. May damage fertility or the unborn child.		
Specific target organ toxicity single exposure	Causes damage to organs (central n	ervous system, kidney, liver, respiratory system, testes).	
Specific target organ toxicity repeated exposure	Causes damage to organs (central n testes, thyroid gland) through prolo	ervous system, hematopoietic system, respiratory system, nged or repeated exposure.	
Aspiration hazard	Due to lack of data the classification	is not possible.	
Chronic effects	Causes damage to organs through p	prolonged or repeated exposure.	
12. Ecological informatio	n		
Ecotoxicity	Very toxic to aquatic life. Harmful to organisms is expected.	aquatic life with long lasting effects. Accumulation in aquat	
Product	Species	Test Results	
WATERMARK® KARL FISCHE	R COULOMETRIC GENERATOR SOLUT	ION, PYRIDINE-FREE (CAS Mixture)	
Fish	LC50 Fish	83.124 mg/l, 96 hours, estimated	
Components	Species	Test Results	
ETHYLENEGLYCOLMONOMET	HYL ETHER (CAS 109-86-4)		
Aquatic	-		
Crustacea	LC50 Brine shrimp (Artemi	a salina) > 10000 mg/l, 24 hours	

Components		Species	Test Results	
		Water flea (Daphnia magna)	> 10000 mg/l, 24 hours	
Fish	LC50	Bluegill (Lepomis macrochirus)	> 10000 mg/l, 96 hours	
		Carp (Leuciscus idus melanotus)	> 10000 mg/l, 48 hours	
		Goldfish (Carassius auratus)	> 5000 mg/l, 24 hours	
		Inland silverside (Menidia beryllina)	> 10000 mg/l, 96 hours	
		Rainbow trout,donaldson trout (Oncorhynchus mykiss)	14000 - 18000 mg/l, 96 hours	
IODINE (CAS 7553-56-2) Aquatic				
Crustacea	LC50	Water flea (Daphnia magna)	0.55 - 1.32 mg/l, 96 hours	
			0.03 - 1 mg/l, 48 hours	
Fish	LC50	Guppy (Poecilia reticulata)	3 mg/l, 24 hours	
		Rainbow trout,donaldson trout (Oncorhynchus mykiss)	0.48 - 0.58 mg/l, 96 hours	
			> 0.01 mg/l, 96 hours	
* Estimates for product may	be based on a	dditional component data not shown.		
		wailable on the degradability of this produ	ct.	
ioaccumulative potential	Not availabl			
Partition coefficient n-oct ETHYLENEGLYCOLMONOMET IODINE	-	(log Kow) -0.77 2.49		
lobility in soil	Not availabl	e.		
ther adverse effects	Not available.			
3. Disposal considerati	ons			
isposal 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.			
ocal disposal regulations	Not availabl	e.		
azardous waste code	D001: Waste Flammable material with a flash point $<140$ F			
Vaste from residues / nused products	product res	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).		
ontaminated 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.			
4. Transport information	on			
от				
UN number	UN1188			
UN proper shipping name		col monomethyl ether		
Transport hazard class(es Subsidary class(es)	<ul> <li>3 Not availabl</li> </ul>	٩		
Packing group	III			
Special precautions for user		instructions, SDS and emergency procedu	res before handling.	

s for	Read safety instructions	SDS and emergency	procedures before handling.
5 101	Read salety instructions,	SDS and emergency	procedures before nandling.

user	
Labels required	3
Special provisions	B1, IB3, T2, TP1
Packaging exceptions	150
Packaging non bulk	203
Packaging bulk	242
ΙΑΤΑ	
UN number	UN1188
UN proper shipping name	Ethylene glycol monomethyl ether

Transport hazard class(es)	3
Subsidary class(es)	-
Packaging group	III
Environmental hazards	No
Labels required	Not available.
ERG Code	3L
Special precautions for	Not available.
user	
IMDG	
UN number	UN1188
UN proper shipping name	ETHYLENE GLYCOL MONOMETHYL ETHER
Transport hazard class(es)	3
Subsidary class(es)	•
Packaging group	III
Environmental hazards	
Marine pollutant	No
Labels required	Not available.
EmS	F-E, S-D
Special precautions for	Not available.
user	
Transport in bulk according	No information available.
to Annex II of MARPOL 73/78 and the IBC Code	
General information	DOT Regulated Marine Pollutant. IMDG Regulated Marine Pollutant.
DOT	



### 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)

US. USHA Specifically Regulated

#### 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 Extreme hazardous substan				
SARA 311/312 Hazardous chemica	No			
Other federal regulation	ons			
Clean Air Act (CAA)	) Section 112 Hazar	dous Air Pollut	ants (HAPs) List	
	<b>) Section 112(r) Acc</b> E (CAS 7446-09-5)	idental Releas	e Prevention (40 CFR 68.130)	
Safe Drinking Wate (SDWA)		ed.		
Drug Enforcement Chemical Code Nur		A). List 2, Essei	ntial Chemicals (21 CFR 1310.02(b) ar	nd 1310.04(f)(2) and
-	-	A). List 1 & 2 E	xempt Chemical Mixtures (21 CFR 131	.0.12(c))
IODINE (CAS 75	,		2.2 %WV	
-	ical Mixtures Code I	lumber	6600	
IODINE (CAS 75		- 4	6699	
Food and Drug Administration (FD	Not regulate	30.		
US state regulations	WARNING:	This product con productive harm.	tains a chemical known to the State of Cali	fornia to cause birth defects
US. Massachus	etts RTK - Substand			
IODINE (CA	LYCOLMONOMETHYL S 7553-56-2)	-	-86-4)	
	XIDE (CAS 7446-09-5		Know Act	
-	US. New Jersey Worker and Community Right-to-Know Act ETHYLENEGLYCOLMONOMETHYL ETHER (CAS 500 LBS			
,	)XIDE (CAS 7446-09-5	)	500 LBS	
	nia RTK - Hazardous			
ETHYLENEGLYCOLMONOMETHYL ETHER (CAS 109-86-4) IODINE (CAS 7553-56-2)				
US. Rhode Isla	SULFUR DIOXIDE (CAS 7446-09-5) US. Rhode Island RTK			
IODINE (CA	ETHYLENEGLYCOLMONOMETHYL ETHER (CAS 109-86-4) IODINE (CAS 7553-56-2) SULFUR DIOXIDE (CAS 7446-09-5)			
US. California Prop	•	,		
-		rcinogens & Re	eproductive Toxicity (CRT): Listed sub	stance
ETHYLENEG	LYCOLMONOMETHYL DXIDE (CAS 7446-09-5	ETHER (CAS 109		
International Inventor	ies			
Country(s) or regio	on Inventory	name		On inventory (yes/no)*
Australia	-		nical Substances (AICS)	Yes
Canada		ubstances List (D		Yes
Canada		tic Substances Li	•	No
China			cal Substances in China (IECSC)	Yes
Europe	European II (EINECS)	ventory of Existi	ing Commercial Chemical Substances	Yes
Europe	European L	st of Notified Cho	emical Substances (ELINCS)	No
Japan	Inventory o	f Existing and Ne	ew Chemical Substances (ENCS)	No
Korea	Existing Che	emicals List (ECL)	)	Yes
New Zealand	New Zealan	d Inventory		Yes
Philippines	Philippine II (PICCS)	ventory of Chem	nicals and Chemical Substances	Yes
United States & Puert *A "Yes" indicates this p			t (TSCA) Inventory ments administered by the governing country(s)	Yes

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

in the text.

Issue date	February-14-2013
Revision date	September-05-2013
Version #	02
Further information	Not available.
Disclaimer	The information in the sheet was written based on the best knowledge and experience currently available. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid

for such material used in combination with any other materials or in any process, unless specified

Material name: WATERMARK® KARL FISCHER COULOMETRIC GENERATOR SOLUTION, PYRIDINE-FREE Version #: 02 Revision date: September-05-2013 Issue date: February-14-2013

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