

## SECTION 1: IDENTIFICATION

Manufacturer/Distributor	IMS Company 10373 Stafford Road Chagrin Falls, OH 44023-5296	Emergency Phone Prepared by Prepared/Revised	800-424-9300 Product Safety Advisor November 5, 2018
Trade Name .....	UG-10, Universal Ethylene Glycol Circulating Fluid		
Item Numbers .....	125174      5 gallon pail 125175      55 gallon drum		

## SECTION 2: HAZARDS IDENTIFICATION

### 2.1. Classification of the Substance or Mixture

#### Classification (GHS-US)

Acute Tox. 4 (Oral) H302

STOT RE 2 H373

Full text of H-phrases: see section 16

### 2.2. Label Elements

#### GHS-US Labeling

##### Hazard Pictograms (GHS-US)



##### Signal Word (GHS-US)

: Warning

##### Hazard Statements (GHS-US)

: H302 - Harmful if swallowed.

H319 - Causes serious eye irritation.

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

##### Precautionary Statements (GHS-US)

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

P264 - Wash hands, forearms, and other exposed areas 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.

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

P330 - Rinse mouth.

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

### 2.3. Other Hazards

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

### 2.4. Unknown Acute Toxicity (GHS-US)

No data available

**WARNING:** Reproductive Harm – <http://www.p65warnings.cs.gov/>

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1. Substance

Not applicable

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### 3.2. Mixture

Name	Product Identifier	%	Classification (GHS-US)
Proprietary Ingredient A	(CAS No) Proprietary	0.1 - 100	Acute Tox. 4 (Oral), H302 STOT RE 2, H373
Proprietary Ingredient B	(CAS No) Proprietary	< 1	Eye Irrit. 2A, H319 Repr. 1B, H360
Proprietary Ingredient C	(CAS No) Proprietary	< 0.5	Acute Tox. 4 (Oral), H302 Skin Corr. 1B, H314 Eye Dam. 1, H318 Aquatic Acute 2, H401 Aquatic Chronic 2, H411

\*The specific chemical identity and/or exact percentage of composition have been withheld as a trade secret within the meaning of the OSHA Hazard Communication Standard [29 CFR 1910.1200].

Full text of H-phrases: see section 16

## SECTION 4: FIRST AID MEASURES

### 4.1. Description of First Aid Measures

**First-aid Measures General:** Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

**First-aid Measures After Inhalation:** When symptoms occur: go into open air and ventilate suspected area. Obtain medical attention if breathing difficulty persists.

**First-aid Measures After Skin Contact:** Remove contaminated clothing. Drench affected area with water for at least 15 minutes. Obtain medical attention if irritation develops or persists.

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

**First-aid Measures After Ingestion:** Rinse mouth. Do NOT induce vomiting. Obtain medical attention.

### 4.2. Most important symptoms and effects, both acute and delayed

**Symptoms/Injuries:** Harmful if swallowed. May cause damage to organs through prolonged or repeated exposure.

**Symptoms/Injuries After Inhalation:** Prolonged exposure may cause irritation.

**Symptoms/Injuries After Skin Contact:** Prolonged exposure may cause skin irritation.

**Symptoms/Injuries After Eye Contact:** Direct contact with the eyes is likely irritating.

**Symptoms/Injuries After Ingestion:** This material is harmful orally and can cause adverse health effects or death in significant amounts. Acute exposure of humans to this product by ingesting large quantities causes three stages of health effects. CNS depression, including such symptoms as vomiting, drowsiness, coma, respiratory failure, convulsions, metabolic changes, and gastrointestinal upset are followed by cardiopulmonary effects and later renal damage.

**Chronic Symptoms:** May cause damage to organs through prolonged or repeated exposure.

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

If exposed or concerned, get medical advice and attention. If medical advice is needed, have product container or label at hand.

## SECTION 5: FIRE-FIGHTING MEASURES

### 5.1. Extinguishing Media

**Suitable Extinguishing Media:** Use extinguishing media appropriate for surrounding fire.

**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. Under fire conditions, hazardous fumes will be present.

**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.

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

## SECTION 6: ACCIDENTAL RELEASE MEASURES

### 6.1. Personal Precautions, Protective Equipment and Emergency Procedures

**General Measures:** Avoid breathing (vapor, mist, spray). Avoid all contact with skin, eyes, or clothing.

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## 6.1.1. For Non-emergency Personnel

**Protective Equipment:** Use appropriate personal protection equipment (PPE).

**Emergency Procedures:** Evacuate unnecessary personnel.

## 6.1.2. For Emergency Responders

**Protective Equipment:** Equip cleanup crew with proper protection.

**Emergency Procedures:** Ventilate area. 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.

## 6.2. Environmental Precautions

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

## 6.3. Methods and Material for Containment and Cleaning Up

**For Containment:** 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. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill.

## 6.4. Reference to Other Sections

See Heading 8. Exposure controls and personal protection. See Section 13, Disposal Considerations.

## SECTION 7: HANDLING AND STORAGE

### 7.1. Precautions for Safe Handling

**Additional Hazards When Processed:** Handle in accordance with standard industrial practices, and ensure appropriate ventilation. Avoid all contact with skin, eyes, clothing. Do not release into the environment.

**Precautions for Safe Handling:** Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Avoid breathing vapors, mist, spray. Handle empty containers with care because they may still present a hazard.

**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.

**Incompatible Products:** Strong acids, strong bases, strong oxidizers.

### 7.3. Specific End Use(s)

Antifreeze - Coolant.

## 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), NIOSH (REL), or OSHA (PEL).

Proprietary Ingredient A (Proprietary)		
USA ACGIH	ACGIH Ceiling (mg/m <sup>3</sup> )	100 mg/m <sup>3</sup> (aerosol only)
USA ACGIH	ACGIH chemical category	Not Classifiable as a Human Carcinogen
Proprietary Ingredient B (Proprietary)		
USA ACGIH	ACGIH TWA (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup> (inhalable fraction)
USA ACGIH	ACGIH STEL (mg/m <sup>3</sup> )	6 mg/m <sup>3</sup> (inhalable fraction)
USA ACGIH	ACGIH chemical category	Not Classifiable as a Human Carcinogen
USA NIOSH	NIOSH REL (TWA) (mg/m <sup>3</sup> )	1 mg/m <sup>3</sup>

### 8.2. Exposure Controls

#### Appropriate Engineering Controls

: Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed.

#### Personal Protective Equipment

: Gloves. Protective clothing. Protective goggles.



#### Materials for Protective Clothing

: Chemically resistant materials and fabrics.

#### Hand Protection

: Wear protective gloves.

#### Eye Protection

: Chemical safety goggles.

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<b>Skin and Body Protection</b>	: Wear suitable protective clothing.
<b>Respiratory Protection</b>	: 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.
<b>Environmental Exposure Controls</b>	: Do not allow the product to be released into the environment.
<b>Consumer Exposure Controls</b>	: Do not eat, drink or smoke during use.
<b>Other Information</b>	: When using, do not eat, drink or smoke.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1. Information on Basic Physical and Chemical Properties

<b>Physical State</b>	: Liquid
<b>Appearance</b>	: Bright Yellow or Bright Pink
<b>Odor</b>	: Characteristic - mild odor
<b>Odor Threshold</b>	: No data available
<b>pH</b>	: 8.5 - 10.5
<b>Evaporation Rate</b>	: No data available
<b>Melting Point</b>	: No data available
<b>Freezing Point</b>	: No data available
<b>Boiling Point</b>	: 218 - 325 °F (103.33 - 162.78 °C)
<b>Flash Point</b>	: ≈ 240 °F (≈115.56 °C)
<b>Auto-ignition Temperature</b>	: No data available
<b>Decomposition Temperature</b>	: No data available
<b>Flammability (solid, gas)</b>	: No data available
<b>Vapor Pressure</b>	: No data available
<b>Relative Vapor Density at 20 °C</b>	: No data available
<b>Relative Density</b>	: No data available
<b>Specific Gravity</b>	: 1.045 - 1.210
<b>Specific gravity / density</b>	: 8.7 - 10.08 (lbs / gal)
<b>Solubility</b>	: Complete in water
<b>Partition Coefficient: N-Octanol/Water</b>	: No data available
<b>Viscosity</b>	: 2 - 18 cps

### 9.2. Other Information

No additional information 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 is highly dependent on conditions. A complex mixture of airborne solids, liquids and gases, including carbon monoxide, carbon dioxide and other organic compounds will be evolved when this material undergoes combustion or thermal or oxidative degradation.

## SECTION 11: TOXICOLOGICAL INFORMATION

### 11.1. Information On Toxicological Effects

**Acute Toxicity:** Oral: Harmful if swallowed.

<b>IMS UG-10</b>	
<b>ATE (Oral)</b>	500.00 mg/kg body weight
<b>Proprietary Ingredient A (Proprietary)</b>	
<b>LD50 Oral Rat</b>	4700 mg/kg
<b>LD50 Dermal Rat</b>	10600 mg/kg
<b>Proprietary Ingredient B (Proprietary)</b>	
<b>LD50 Oral Rat</b>	2403 mg/kg

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<b>Proprietary Ingredient C (Proprietary)</b>	
<b>LD50 Oral Rat</b>	735 mg/kg (Species: Sprague-Dawley)

**Skin Corrosion/Irritation:** Not classified

**pH:** 8.5 - 10.5

**Serious Eye Damage/Irritation:** Not classified

**pH:** 8.5 - 10.5

**Respiratory or Skin Sensitization:** Not classified

**Germ Cell Mutagenicity:** Not classified

**Carcinogenicity:** Not classified

**Reproductive Toxicity:** Not classified. (The reproductive hazards associated with CAS No Proprietary (Proprietary Ingredient B) are  $\geq 6.5\%$ .)

**Specific Target Organ Toxicity (Single Exposure):** Not classified

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

**Aspiration Hazard:** Not classified

**Symptoms/Injuries After Inhalation:** Prolonged exposure may cause irritation.

**Symptoms/Injuries After Skin Contact:** Prolonged exposure may cause skin irritation.

**Symptoms/Injuries After Eye Contact:** Direct contact with the eyes is likely irritating.

**Symptoms/Injuries After Ingestion:** This material is harmful orally and can cause adverse health effects or death in significant amounts. Acute exposure of humans to this product by ingesting large quantities causes three stages of health effects. CNS depression, including such symptoms as vomiting, drowsiness, coma, respiratory failure, convulsions, metabolic changes, and gastrointestinal upset are followed by cardiopulmonary effects and later renal damage.

**Chronic Symptoms:** May cause damage to organs through prolonged or repeated exposure.

## SECTION 12: ECOLOGICAL INFORMATION

### 12.1. Toxicity

**Ecology - General** : May be toxic to aquatic life.

<b>Proprietary Ingredient A (Proprietary)</b>	
<b>LC50 Fish 1</b>	41000 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss)
<b>EC50 Daphnia 1</b>	46300 mg/l (Exposure time: 48 h - Species: Daphnia magna)
<b>LC 50 Fish 2</b>	14 - 18 ml/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])

### 12.2. Persistence and Degradability

<b>IMS UG-10</b>	
<b>Persistence and Degradability</b>	Not established.

### 12.3. Bioaccumulative Potential

<b>IMS UG-10</b>	
<b>Bioaccumulative Potential</b>	Not established.
<b>Proprietary Ingredient A (Proprietary)</b>	
<b>Log Pow</b>	-1.93

### 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 Disposal Recommendations:** Dispose of contents/container in accordance with local, regional, national, and international regulations.

**Additional Information:** Container may remain hazardous when empty. Continue to observe all precautions.

**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

**14.1. In Accordance with DOT - shipment in containers of less than 5,000 pounds are not regulated by the U.S. Department of Transportation**

**Proper Shipping Name** : ENVIRONMENTALLY HAZARDOUS SUBSTANCES, LIQUID, N.O.S., (ETHYLENE GLYCOL)

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**Hazard Class** : 9



**Identification Number** : UN3082

**Label Codes** : 9

**Packing Group** : III

**ERG Number** : 171

## 14.2. In Accordance with IMDG

**Proper Shipping Name** : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., (ETHYLENE GLYCOL)

**Hazard Class** : 9

**Identification Number** : UN3082

**Packing Group** : III

**Label Codes** : 9

**EmS-No. (Fire)** : F-A

**EmS-No. (Spillage)** : S-F



## 14.3. In Accordance with IATA

**Proper Shipping Name** : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., (ETHYLENE GLYCOL)

**Packing Group** : III

**Identification Number** : UN3082

**Hazard Class** : 9

**Label Codes** : 9

**ERG Code (IATA)** : 9L



## SECTION 15: REGULATORY INFORMATION

### 15.1 US Federal Regulations

<b>IMS UG-10</b>	
<b>SARA Section 311/312 Hazard Classes</b>	Immediate (acute) health hazard Delayed (chronic) health hazard
<b>Proprietary Ingredient A (Proprietary)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory Listed on United States SARA Section 313	
<b>EPA TSCA Regulatory Flag</b>	Y2 - Y2 - indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.
<b>SARA Section 313 - Emission Reporting</b>	1.0 %
<b>Proprietary Ingredient C (Proprietary)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	

### 15.2 US State Regulations

<b>Proprietary Ingredient A (Proprietary)</b>	
U.S. - Massachusetts - Right To Know List U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List U.S. - Pennsylvania - RTK (Right to Know) List	
<b>Proprietary Ingredient B (Proprietary)</b>	
U.S. - Massachusetts - Right To Know List	

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

**Revision Date** : 11/05/2018  
**Other Information** : This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

### GHS Full Text Phrases:

Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Aquatic Acute 2	Hazardous to the aquatic environment - Acute Hazard Category 2

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Aquatic Chronic 2	Hazardous to the aquatic environment - Chronic Hazard Category 2
Eye Dam. 1	Serious eye damage/eye irritation Category 1
Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
Repr. 1B	Reproductive toxicity Category 1B
Skin Corr. 1B	Skin corrosion/irritation Category 1B
STOT RE 2	Specific target organ toxicity (repeated exposure) Category 2
H302	Harmful if swallowed
H314	Causes severe skin burns and eye damage
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
H401	Toxic to aquatic life
H411	Toxic to aquatic life with long lasting effects

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SDS US (GHS HazCom)