## **SECTION 1: Product and company identification**

Product name	: Ice Flow	
Use of the substance/mixture	: Ice melter	
Product code	: 0275	
Company	<ul> <li>Ricmar Industries Inc</li> <li>747 N Church Rd Suite G-4</li> <li>Elmhurst, IL 60126 - USA</li> <li>T (630) 559-9500</li> </ul>	
Emergency number	: INFOTRAC CHEMICAL EMERGENCY RESPONSE: (800) 535-5053	

## **SECTION 2: Hazards identification**

2.1. Classification of the substance or mixture

#### **Classification (GHS-US)**

Flam. Liq. 3	H226
Acute Tox. 4 (Oral)	H302
Acute Tox. 4 (Dermal)	H312
Acute Tox. 4 (Inhalation:dust,mist)	H332
STOT SE 1	H370
STOT RE 2	H373

Full text of H-phrases: see section 16

2.2. Label elements	
GHS-US labeling	
Hazard pictograms (GHS-US)	: GHS02 GHS07 GHS08
Signal word (GHS-US)	: Danger
Hazard statements (GHS-US)	<ul> <li>Flammable liquid and vapor Harmful if swallowed, in contact with skin or if inhaled Causes damage to organs (blood, central nervous system, eye) (Inhalation) May cause damage to organs (kidneys) through prolonged or repeated exposure (oral)</li> </ul>
Precautionary statements (GHS-US)	<ul> <li>Keep away from heat, open flames, sparks No smoking Keep container tightly closed Ground/bond container and receiving equipment Use explosion-proof electrical, lighting equipment Use only non-sparking tools Take precautionary measures against static discharge Do not breathe mist, spray Avoid breathing mist, spray Wash thoroughly after handling Do not eat, drink or smoke when using this product Use only outdoors or in a well-ventilated area Wear eye protection, protective clothing, protective gloves If swallowed: Call a doctor, a POISON CENTER if you feel unwell If on skin: Wash with plenty of soap and water.</li> <li>If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower</li> <li>If inhaled: Remove person to fresh air and keep comfortable for breathing If exposed: Call a poison center/doctor Call a doctor, a POISON CENTER if you feel unwell</li> <li>Get medical advice/attention if you feel unwell</li> <li>Rinse mouth</li> <li>Take off contaminated clothing and wash it before reuse In case of fire: Use carbon dioxide (CO2), dry extinguishing powder, foam to extinguish Store in a well-ventilated place. Keep cool Store locked up</li> <li>Dispose of contents/container to comply with local/regional/national/international regulations.</li> </ul>

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#### 2.3. Other hazards

No additional information available

#### 2.4. Unknown acute toxicity (GHS US)

Not applicable

## **SECTION 3: Composition/information on ingredients**

#### 3.1. Substance

#### Not applicable

Full text of H-phrases: see section 16

3.2. Mixture			
Name	Product identifier	%	Classification (GHS-US)
ethanediol, ethylene glycol	(CAS No) 107-21-1	15.0 - 40.0	Acute Tox. 4 (Oral), H302
methanol	(CAS No) 67-56-1	10.0 - 30.0	Flam. Liq. 2, H225 Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Acute Tox. 3 (Inhalation), H331 STOT SE 1, H370
2,2' -oxybisethanol, diethylene glycol	(CAS No) 111-46-6	1.0 - 5.0	Acute Tox. 4 (Oral), H302 STOT RE 2, H373

4.1. Description of first aid measure	S
First-aid measures general	: If you feel unwell, seek medical advice (show the label where possible). IF exposed or concerned: Get medical advice/attention.
First-aid measures after inhalation	If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.
First-aid measures after skin contact	: Take off immediately all contaminated clothing and wash it before reuse. Wash with plenty of soap and water.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
First-aid measures after ingestion	: Rinse mouth. Call a poison center or a doctor if you feel unwell.
4.2. Most important symptoms and	effects, both acute and delayed
Symptoms/injuries after inhalation	: Harmful if inhaled.
Symptoms/injuries after skin contact	: Harmful in contact with skin.
Symptoms/injuries after eye contact	: Direct contact with the eyes is likely irritating.
Symptoms/injuries after ingestion	: Harmful if swallowed.

#### 4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

#### **SECTION 5: Firefighting measures** 5.1. Extinguishing media Suitable extinguishing media : Dry chemical powder. Carbon dioxide. Alcohol-resistant foam. 5.2. Special hazards arising from the substance or mixture : Flammable liquid and vapor. Fire hazard Reactivity : Upon combustion: CO and CO2 are formed. 5.3. Advice for firefighters **Firefighting instructions** : Exercise caution when fighting any chemical fire. Use water spray or fog for cooling exposed containers. Take account of environmentally hazardous firefighting water. Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection. **SECTION 6: Accidental release measures**

6.1. Personal precautions	s, protective equipment and emerg	gency procedures		
General measures	: Remove ignition s	ources. Use special care to avoid s	static electric charges.	
6.1.1. For non-emergency	personnel			
Protective equipment	: Protective goggle	s. Gloves. Protective clothing.		
Emergency procedures	: Evacuate unnece	ssary personnel. No naked flames	or sparks.	
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6.1.2. For emergency responders	
Protective equipment	: Equip cleanup crew with proper protection.
Emergency procedures	: Stop leak if safe to do so. Stop release. Ventilate area.
6.2. Environmental precautions	
Avoid release to the environment. Pre	event entry to sewers and public waters.
6.3. Methods and material for con	ntainment and cleaning up
For containment	: Contain released substance, pump into suitable containers.
Methods for cleaning up	: This material and its container must be disposed of in a safe way, and as per local legislation. Take up liquid spill into inert absorbent material, e.g.: sand/earth. Clean contaminated surfaces with a soap solution.
6.4. Reference to other sections	
No additional information available	
SECTION 7: Handling and st	torage
7.1. Precautions for safe handling	9
Precautions for safe handling	: Comply with the legal requirements. Do not handle until all safety precautions have been read and understood. Do not breathe vapors. Use personal protective equipment as required. Do not eat, drink or smoke when using this product. Do not get in eyes, on skin, or on clothing. Handle and open the container with care. Keep away from sources of ignition - No smoking. Take precautions against
	electrostatic charges. Obtain special instructions before use. Remove contaminated clothing immediately.
Hygiene measures	
Hygiene measures 7.2. Conditions for safe storage, i	<ul><li>immediately.</li><li>Wash thoroughly after handling. Wash contaminated clothing before reuse.</li></ul>
	<ul><li>immediately.</li><li>Wash thoroughly after handling. Wash contaminated clothing before reuse.</li></ul>
7.2. Conditions for safe storage, i	immediately. : Wash thoroughly after handling. Wash contaminated clothing before reuse. including any incompatibilities : Comply with applicable regulations. Proper grounding procedures to avoid static electricity should be
<b>7.2.</b> Conditions for safe storage, i Technical measures	<ul> <li>immediately.</li> <li>Wash thoroughly after handling. Wash contaminated clothing before reuse.</li> <li>including any incompatibilities</li> <li>Comply with applicable regulations. Proper grounding procedures to avoid static electricity should be followed.</li> <li>Keep container tightly closed. Keep only in the original container in a cool, well ventilated place away</li> </ul>
7.2. Conditions for safe storage, i Technical measures Storage conditions	<ul> <li>immediately.</li> <li>Wash thoroughly after handling. Wash contaminated clothing before reuse.</li> <li>including any incompatibilities</li> <li>Comply with applicable regulations. Proper grounding procedures to avoid static electricity should be followed.</li> <li>Keep container tightly closed. Keep only in the original container in a cool, well ventilated place away from: sparks, open flames, excessive heat.</li> </ul>
7.2. Conditions for safe storage, i Technical measures Storage conditions Incompatible products	<ul> <li>immediately.</li> <li>Wash thoroughly after handling. Wash contaminated clothing before reuse.</li> <li>including any incompatibilities</li> <li>Comply with applicable regulations. Proper grounding procedures to avoid static electricity should be followed.</li> <li>Keep container tightly closed. Keep only in the original container in a cool, well ventilated place away from: sparks, open flames, excessive heat.</li> <li>Strong oxidizers.</li> </ul>

### **SECTION 8: Exposure controls/personal protection**

#### 8.1. Control parameters

ethanediol, ethyle	ne glycol (107-21-1)	
ACGIH	ACGIH TWA (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup>
ACGIH	Remark (ACGIH)	URT & eye irr
methanol (67-56-1)		
ACGIH	ACGIH TWA (ppm)	200 ppm
ACGIH	ACGIH STEL (ppm)	250 ppm
ACGIH	Remark (ACGIH)	Headache; eye dam; dizziness; nausea

## 8.2. Exposure controls

Personal protective equipment

: Use appropriate personal protective equipment when risk assessment indicates this is necessary. Gloves. Safety glasses. Protective goggles. Protective clothing.



#### **SECTION 9: Physical and chemical properties**

#### 9.1. Information on basic physical and chemical properties

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Salely Dala Sheel	
Appearance	: green. Liquid.
Odor	: glycol Alcohol odor
Odor threshold	: No data available
рН	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: 96 °F Closed Cup
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: No data available
Explosion limits	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available
Vapor pressure	: No data available
Relative density	: No data available
Relative vapor density at 20 °C	: No data available
Specific gravity / density	: 0.99 g/ml
Solubility	: Soluble in water.
Log Pow	: No data available
Log Kow	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
VOC content	: 25 %

#### **SECTION 10: Stability and reactivity**

#### 10.1. Reactivity

Upon combustion: CO and CO2 are formed.

#### 10.2. Chemical stability

#### No additional information available

#### 10.3. Possibility of hazardous reactions

Refer to section 10.1 on Reactivity.

#### 10.4. Conditions to avoid

No additional information available

## 10.5. Incompatible materials

Oxidizing agents.

Acute toxicity

#### 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

#### **SECTION 11: Toxicological information**

11.1. Information on toxicological effects

: Oral: Harmful if swallowed. Dermal: Harmful in contact with skin. Inhalation:dust,mist: Harmful if inhaled.

2,2' -oxybisethanol, diethylene glycol (111-46-6)	
LD50 oral rat	12565 mg/kg
LD50 dermal rabbit	11890 mg/kg
ATE CLP (oral)	500.000 mg/kg body weight
ATE CLP (dermal)	11890.000 mg/kg body weight

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ethanediol, ethylene glycol (107-21-1)	
LD50 oral rat	4700 mg/kg
LD50 dermal rabbit	10626 mg/kg
ATE CLP (oral)	500.000 mg/kg body weight
ATE CLP (dermal)	10626.000 mg/kg body weight
methanol (67-56-1)	
LD50 dermal rabbit	12800 mg/kg
ATE CLP (oral)	100.000 mg/kg body weight
ATE CLP (dermal)	300.000 mg/kg body weight
ATE CLP (gases)	64000.000 ppmV/4h
ATE CLP (dust, mist)	0.500 mg/l/4h
Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
Specific target organ toxicity (single exposure)	: Causes damage to organs (blood, central nervous system, eye) (Inhalation).
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	: Harmful if inhaled.
Symptoms/injuries after skin contact	: Harmful in contact with skin.
Symptoms/injuries after eye contact	: Direct contact with the eyes is likely irritating.
Symptoms/injuries after ingestion	: Harmful if swallowed.

### **SECTION 12: Ecological information**

#### 12.1. Toxicity

No additional information available

### 12.2. Persistence and degradability

No additional information available

#### 12.3. Bioaccumulative potential

No additional information available

## SECTION 13: Disposal considerations

#### **13.1. Waste treatment methods** Waste disposal recommendations

: Dispose in a safe manner in accordance with local/national regulations.

## **SECTION 14: Transport information**

#### Department of Transportation (DOT)

Transport document description UN-No.(DOT)	: UN1993 Flammable liquids, n.o.s., 3, III : UN1993
Proper Shipping Name (DOT)	: Flammable liquids, n.o.s.
Transport hazard class(es) (DOT)	: 3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120
Hazard labels (DOT)	: 3 - Flammable liquid
	3
Packing group (DOT)	: III - Minor Danger
DOT Packaging Non Bulk (49 CFR 173.xxx)	: 203
DOT Packaging Bulk (49 CFR 173.xxx)	: 242

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DOT Symbols	: G - Identifies PSN requiring a technical name
DOT Special Provisions (49 CFR 172.102)	: B1,B52,IB3,T4,TP1,TP29
DOT Packaging Exceptions (49 CFR 173.xxx)	: 150
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27)	: 60 L
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)	: 220 L
DOT Vessel Stowage Location	: A

Additional information Other information

: No supplementary information available.

#### ADR

No additional information available

#### Transport by sea

No additional information available

#### Air transport

No additional information available

#### **SECTION 15: Regulatory information**

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory.

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

ethanediol, ethylene glycol	CAS No 107-21-1	15.0 - 40.0	
methanol	CAS No 67-56-1	10.0 - 30.0	

#### ethanediol, ethylene glycol (107-21-1)

cal listings)	
5000 lb	
cal listings)	
5000 lb	

California Proposition 65 - This product contains, or may contain, trace quantities of a substance(s) known to the state of California to cause cancer and/or reproductive toxicity

#### **SECTION 16: Other information**

Training advice

: Normal use of this product shall imply use in accordance with the instructions on the packaging.

Full text of H-phrases:

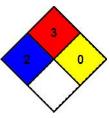
H301		Toxic if swallowed	
H226		Flammable liquid and vapor	
H225		Highly flammable liquid and vapor	
STOT SE 1		Specific target organ toxicity (single exposure) Category 1	
STOT RE 2		Specific target organ toxicity (repeated exposure) Category 2	2
Flam. Liq. 3		Flammable liquids Category 3	
Flam. Liq. 2		Flammable liquids Category 2	
Acute Tox. 4 (Oral)		Acute toxicity (oral) Category 4	
Acute Tox. 4 (Inhala	ation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 4	
Acute Tox. 4 (Derm	al)	Acute toxicity (dermal) Category 4	
Acute Tox. 3 (Oral)		Acute toxicity (oral) Category 3	
Acute Tox. 3 (Inhala	ation)	Acute toxicity (inhalation) Category 3	
Acute Tox. 3 (Derm	al)	Acute toxicity (dermal) Category 3	

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H302	Harmful if swallowed
H311	Toxic in contact with skin
H312	Harmful in contact with skin
H331	Toxic if inhaled
H332	Harmful if inhaled
H370	Causes damage to organs
H373	May cause damage to organs through prolonged or repeated exposure

NFPA health hazard	:	2 - Intense or continued exposure could cause temporary incapacitation or possible residual injury
		unless prompt medical attention is given.
NFPA fire hazard	:	3 - Liguids and solids that can be ignited under almost all ambient conditions.

NFPA fire hazard	:	3 - Liquids and solids that can be ignited under almost all ambient conditions.
NFPA reactivity	:	0 - Normally stable, even under fire exposure conditions, and are not reactive with water.



#### Prepared by: Technical Department

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product. No warranty is expressed or implied regarding the accuracy of this data or the results obtained from the use thereof. Our company assumes no responsibility for personal injury or property damage to the vendee, users or third parties caused by the material. Such vendees or users assume all risks associated with the use of this material.