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Version 1

1. PRODUCT AND COMPANY IDENTIFICATION**Product identifier****Product Name** United 104 Ice & Frost Melter**Other means of identification****SDS#** UNITED 104**Recommended use of the chemical****And restrictions on use****Recommended use** Frost & Ice Remover**Uses Advised Against** For institutional and industrial use only.**Details of the supplier of the safety data sheet****Company Name**United Laboratories, Inc.
320 37th Avenue
St. Charles, IL 60174
www.unitedlabsinc.com
www.unitedlabsinc.ca**Emergency telephone number****Emergency Telephone** 800-323-2594 (to reorder)
INFOTRAC 1-800-535-5053 (North America)
1-352-323-3500 (International)**2. HAZARDS IDENTIFICATION****Classification****OSHA Regulatory Status**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Flammable	Category 3
Acute toxicity – Oral	Category 3
Acute toxicity – Dermal	Category 3
Acute toxicity – Inhalation	Category 3
Aerosol	Category 1
Specific target organ toxicity (single exposure)	Category 1

Label elements**Emergency Overview****Danger****Hazard statements**

Extremely flammable aerosol, pressurized container may burst if heated. Causes damage to organs. Toxic if swallowed. Toxic in contact with skin. Causes mild skin irritation. Keep out of reach of children. If medical advice is needed, have product container or label on hand.



Appearance Clear Liquid

Physical state Aerosol

Odor Alcohol

Prevention

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not breathe dust/fume/gas mist/vapors/spray. Wash thoroughly after handling. Do not spray on an open flame or other ignition source. Do not pierce or burn, even after use. Do not eat, drink or smoke when using this product.

Response

In case of fire: Use water fog, dry chemical or carbon dioxide to extinguish. If swallowed: Immediately call a poison center/physician. Rinse mouth. If on skin: Take off immediately all contaminated clothing. And wash it before reuse. If skin irritation occurs: Get medical advice/attention. If exposed or concerned: Call a poison center or physician.

Storage

Store in well-ventilated place. Keep cool. Store locked up. Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.

Disposal

Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise classified (HNOC)

No information available.

Environmental hazards

No information available.

Supplemental information

Hazard statement

No information available.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	Weight-%	Trade Secret
Methanol	67-56-1	45-79%	*
Ethylene Glycol	107-21-1	20-35%	*
Carbon Dioxide	124-38-9	2-4%	*

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

First aid measures

Skin Contact

Take off immediately all contaminated clothing, shoes and leather goods (e.g. watchbands, belts). Gently blot or brush away excess product. Wash with plenty of lukewarm, gently flowing water for duration of 15-20 minutes. Call a poison center or physician if you feel unwell. Store contaminated clothing under water, and wash before reuse or discard.

<u>Eye contact</u>	Remove source of exposure or move person to fresh air. Rinse eyes cautiously with lukewarm water, gently flowing water for several minutes, while holding they eyelids open. Remove contact lenses, if present and easy to do. Continue rinsing for 15-20 minutes. Take care not to rinse contaminated water into the unaffected eye or onto the face. If eye irritation persists: Get medical attention.
<u>Inhalation</u>	Remove individual to fresh air and keep at rest in a position comfortable for breathing. Eliminate all ignition sources if safe to do so. Call poison center or physician.
<u>Ingestion</u>	Rinse mouth. Do NOT induce vomiting. Immediately call a poison center/physician. If vomiting occurs naturally, lie on your side, in the recovery position. Never give anything by mouth to an unconscious or convulsing person. Keep person warm and quiet.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Water. Fog. Dry Chemical or Carbon Dioxide.

Unsuitable extinguishing media Water may be ineffective but can be used to cool containers exposed to heat or flame.

Specific hazards arising from the chemical

Contents under pressure. Pressurized container may explode when exposed to heat or flame. Exposure of containers to extreme heat and flames can cause them to rupture often with violent force. Aerosol cans may rupture if heated. Heated cans may burst. In fire, will decompose to carbon dioxide, carbon monoxide.

Protective equipment and precautions for firefighters

Isolate immediate hazard area and keep unauthorized personnel out. Stop spill/release if it can be done safely. Move undamaged containers from immediate hazard area if it can be safely. Water spray may be useful in minimizing or dispersing vapors and to protect personnel. Dispose of fire debris and contaminated extinguishing water accordance with official regulations.

Specific Methods

Use standard firefighting procedures and consider the hazards of other involved materials. Wear protective pressure self-contained breathing apparatus (SCBA) and full turnout gear. Care should always be exercised in dust/mist areas.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Keep unnecessary personnel away. Eliminate all ignition sources, flares, sparks, or flames in immediate area. No smoking. Wear appropriate explosion proof protective equipment. Stay upwind; keep out of low areas. Immediately turn off or isolate any source of ignition. Do not touch or walk through spilled material. Avoid breathing vapor. Avoid contact with skin, eye or clothing. Do not touch damaged containers or spilled materials unless wearing appropriate protective clothing. Clean up immediately.

Environmental precautions

Environmental precautions Stop spill/release if it can be done safely. Prevent spilled material from entering sewers, storm drains, other unauthorized drainage systems and natural waterways by using sand, earth, or other appropriate barriers.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so. Eliminate all ignition sources (no smoking, flares, sparks or flames in immediate area). Do not touch or walk through spilled material.

Methods for cleaning up Do not touch damaged containers or spilled materials unless wearing protective clothing. Positive pressure, full-face piece self-contained breathing apparatus, or positive pressure supplied air respirator with escape SCBA (NIOSH approved). Use absorbent sweeping compound to soak up material and put into suitable container for proper disposal.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling

Do not handle until all safety precautions have been read and understood. For industrial and institutional use only. Keep away from children. Do not smoke, eat or drink in work areas. Do not breathe vapors or mist. Avoid contact with skin or eyes and clothing. Observe good industrial hygiene practices. Wash hands thoroughly after handling. Remove contaminated clothing and protective equipment before entering eating areas. Eyewash stations and showers should be available in areas where this material is used and stored.

Conditions for safe storage, including any incompatibilities

Storage Conditions

Keep container(s) tightly closed and properly labeled. Store in cool, dry, well-ventilated areas away from heat, direct sunlight and incompatibles. Store in approved containers and protect against physical damage. Keep containers securely sealed when not in use. Indoor storage should meet OSHA standards and appropriate fire codes. Containers that have been opened must be carefully resealed to prevent leakage. Empty container retain residue and may be dangerous. Do not drill, cut, weld, grind or perform similar operations on or near containers. Do not pressurize containers to empty them. Ground all structures, transfer containers and equipment to conform to the national electrical code. Use procedures that prevent static electrical sparks. Static electricity may accumulate and create a fire hazard.

Incompatible materials

Store away from incompatible materials. Keep in cool place is recommended.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

No Exposure limits noted for ingredient(s).

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Methanol 67-56-1	STEL: 250 ppm STEL: 328 mg/m3 TWA: 200 ppm TWA: 262 ppm	TWA: 200 ppm TWA: 260 mg/m3	STEL: 325 mg/m3 STEL: 250 ppm TWA: 260 mg/m3 TWA: 200 ppm
Carbon Dioxide 124-38-9	STEL: 30000 ppm STEL: 54000 mg/m3 TWA: 5000 ppm TWA: 9000 mg/m3	TWA: 5000 ppm TWA: 9000 mg/m3	STEL: 54000 mg/m3 STEL: 30000 ppm TWA: 9000 mg/m3 TWA: 5000 ppm
Ethylene Glycol 107-21-1	STEL: C100 mg/m3	-	-

NIOSH IDLH *Immediately Dangerous to Life or Health*

*For sampling details, please see source document

Individual protection measures, such as personal protective equipment

Eye/face protection

Wear chemical goggles, safety glasses with side shields or vented/splash proof goggles. Contact lenses may absorb irritants. Particles may adhere to lenses and cause corneal damage.

Skin and body protection

Wear long sleeved shirt, long pants, gloves and other protective clothing as required to minimize skin contact. Use of gloves approved to relevant standards made from following materials may provide suitable chemical protection: PVC, neoprene or nitrile rubber gloves. Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, glove thickness, and dexterity. Always seek advice from glove suppliers. Contaminated gloves should be replaced. Chemical-resistant clothing is recommended to avoid prolonged contact. Avoid unnecessary skin contact.

Respiratory protection

If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker, a respiratory protection program that meets or is equivalent to OSHA 29 CFR 1910.134 and ANSI Z88.2 should be followed. Check with respiratory protective equipment suppliers. Where air-filtering respirators are suitable select and appropriate combination of mask and filter. Select a filter suitable for combined particulate/organic gases and vapors.

General Hygiene

When using do not eat, drink or smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Regular cleaning of equipment, work area and clothing is recommended, to remove contaminants.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	Aerosol.
Appearance	Clear.
Color	Clear Liquid.
Odor	Alcohol Odor.

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	No Information available.	
Specific Gravity	No information available.	
Viscosity	No Information available.	
Melting point/freezing point	No Information available.	
Flash point	54°F	
Boiling point/boiling range	100°C (212°F) estimated.	
Evaporation rate	Slower than ether.	
Flammability Limit – lower	6	
Flammability Limit – upper	36	
Vapor pressure	No information available.	
Vapor density	Slower than ether.	
Relative density	No information available.	
Water Solubility	Soluble.	
Partition coefficient (n-octanol/water)	No information available.	
Auto-ignition temperature	No information available.	
Decomposition temperature	No information available.	
Viscosity	No information available.	
Density	No information available.	
Flame extension	No information available.	
Flammability class	No information available.	
Heat of combustion	No information available.	
Heat of combustion (NFPA 30B)	No information available.	
Percent volatile	No information available.	
Specific gravity	No information available.	
VOC (weight %)	66.7% estimated.	

10. STABILITY AND REACTIVITY

Reactivity

This product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical stability

Material is stable at normal conditions.

Possibility of Hazardous Reactions

Hazardous polymerization does not occur.

Conditions to avoid

Avoid temperatures exceeding the flash point. High temperatures.

Incompatible materials

None known.

Hazardous Decomposition Products

In fire, will decompose to carbon dioxide, carbon monoxide.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure**Product Information**

Inhalation	May cause irritation of respiratory tract, headache, dizziness, nausea, and loss of coordination. Extreme over exposure may result in unconsciousness and possibly death.
Eye contact	Direct contact with eyes may cause temporary irritation (burning, redness).
Skin Contact	Overexposure will cause defatting of skin. Causes mild skin irritation.
Ingestion	Toxic if swallowed.
Symptoms related to the physical, chemical and toxicological characteristics	Direct contact with eyes may cause temporary irritation.

Information on toxicological effects

Acute toxicity Inhalation: effect of overexposure includes irritation of respiratory tract, headache, dizziness, nausea, and loss of coordination. Extreme overexposure may result in unconsciousness and possibly death.

Chemical Name	Dermal LD50	Oral LD50	Inhalation LC50
Ethylene Glycol 107-21-1	9.5 mg/kg (Rabbit)	5.89 g/kg; 8.54 g/kg (Rat)	-
Methanol 67-56-1	15800 mg/kg (Rabbit)	5628 mg/kg – 10280 mg/kg (Rat)	-

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

Skin/Eye irritation	Causes mild irritation to skin. May cause redness or burning sensation with overexposure.
Sensitization	This product is not expected to cause skin sensitization.
Germ cell mutagenicity	No information available.
Carcinogenicity	No information available.
Reproductive toxicity	No information available.
STOT - single exposure	Causes damage to organs.
STOT - repeated exposure	No Information available.
Aspiration hazard	No information available.
Potential Health Effects	Increased susceptibility to the effects of this material may be observed in people with preexisting disease of any of the following: eyes, kidneys, liver, and skin. Excessive human exposure to methanol may lead to: fatigue, headache, anaesthetic, neurologic effects, and visual difficulties including blindness or death. Recurrent overexposure may result in liver and kidney injury. He has toxic to the fetus in laboratory animals at doses that are toxic to the mother. Ingestion may cause any of the following: blindness. Eye contact may cause any of the following: conjunctivitis, mild irritation.

12. ECOLOGICAL INFORMATION

Ecotoxicity

No information available.

Persistence and degradability

Methanol (67-56-1) 72% aerobic biodegradability.

Bioaccumulation

No Information available.

Mobility in Soil

Methanol (67-56-1). Will no absorb on soil.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal Considerations	Disposal should be in accordance with applicable regional, national and local laws and regulations. Contents under pressure. Do not puncture or incinerate. This material and its container must be disposed of as hazardous waste. Do not allow to drain into water or sewer supplies. Collect and dispose in sealed containers at licensed waste disposal site.
Hazardous waste code	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Waste from residues/unused products	Disposal should be 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	Do not reuse container.

14. TRANSPORT INFORMATION

This product meets the exception requirements of Section 173.306 as a limited quantity and may be shipped as a limited quantity. Until 12/31/2020, the "Consumer Commodity-ORM-D" marking may still be used in place of the new limited quantity diamond mark for packages of UN 1950 Aerosols. Limited quantities require the limited quantity diamond mark on cartons after 12/31/20 and may be used now in place of the "Consumer Commodity ORM-D" marking and both may be displayed concurrently.

DOT

UN/ID No.	UN1950
Proper shipping name	Aerosols, flammable.
Transport hazard class(es)	2.1
Special provisions	N82
Packaging exceptions	306

IATA

UN/ID No.	UN1950
UN proper shipping name	Aerosols, flammable, containing substances in Division 6.1, Packing Group III
Transport hazard class(es)	2.1
Subsidiary risk	6.1 (PGIII)
Environmental hazards	No.
ERG Code	10P

IMDG

UN/ID No.	UN1950
Proper shipping name	Aerosols, flammable
Transport hazard Class(es)	2.1
Subsidiary risk	6.1 (PGIII)
Labels(s)	2.1, 6.1
Environmental Class	
Marine Pollutant	No.

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

15. REGULATORY INFORMATION

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical Name	% of Weight	Regulation List
Carbon Dioxide 124-38-9	2%-4%	SARA 312, TSCA, ACGIH, OSHA
Ethyl Glycol 107-21-1	20%-35%	CERCLA, HAPS, SARA312,SARA313, VOC,TSCA,ACGIH
Methanol 67-56-1	45%-79%	CERCLA, HAPS, SARA312, SARA313, VOC, TSCA, RCRA, ACGIH

SARA 311/312 Hazard Categories

Acute health hazard	Yes
Chronic Health Hazard	No
Fire hazard	Yes
Sudden release of pressure hazard	No
Reactive Hazard	No

US State Regulations

California Proposition 65

WARNING: This product contains a chemical known to the State of California to cause birth defects and other reproductive harm. Methanol (67-56-1)

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Carbon Dioxide 124-38-9	X	X	X
Ethyl Glycol 107-21-1	X	X	X
Methanol 67-56-1	X	X	X

16. OTHER INFORMATION

HMIS Health hazards 2 Flammability 3 Physical hazards 0 Personal protection B

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Revision Note

No Information available

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as 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 in the text.

End of Safety Data Sheet