



Material Safety Data Sheet

Material Name: Tundra Series -15

*** Section 1 - Chemical Product and Company Identification ***

Manufacturer Information
 Arctic Ice LLC
 1313 Western Avenue
 Brookings, SD 57006
 Phone: 605-696-2500
 Fax: 605-696-2585

For Hazardous Materials Incident
 Spill, Leak, Fire, Exposure, or Accident
 Call CHEMTREC Day or Night
 1-800-424-9300 (USA)
 +1 703-527-3887 (International)

*** Section 2 - Hazards Identification ***

Emergency Overview

May cause eye, skin and gastrointestinal irritation.

Potential Health Effects: Eyes

May cause eye irritation.

Potential Health Effects: Skin

May cause skin irritation.

Potential Health Effects: Ingestion

Not considered a likely route of exposure under normal product use conditions. May cause gastrointestinal irritation if swallowed.

Potential Health Effects: Inhalation

None anticipated under normal product use conditions.

HMIS Ratings: Health: 1 Fire: 0 HMIS Reactivity 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe * = Chronic hazard

*** Section 3 - Composition / Information on Ingredients ***

CAS #	Component
Trade Secret	Proprietary Component 1
Trade Secret	Proprietary Component 2

*** Section 4 - First Aid Measures ***

First Aid: Eyes

In case of contact, immediately flush eyes with large amounts of water, continuing to flush for 15 minutes.

First Aid: Skin

For skin contact, wash immediately with soap and water. If irritation persists, get medical attention.

First Aid: Ingestion

If the material is swallowed, get immediate medical attention or advice -- Do not induce vomiting.

First Aid: Inhalation

If the affected person is not breathing, apply artificial respiration.

*** Section 5 - Fire Fighting Measures ***

General Fire Hazards

See Section 9 for Flammability Properties.

None

Hazardous Combustion Products

Carbon monoxide with incomplete combustion.

Extinguishing Media

Small fires: CO2 or dry chemical

Large fires: foam

Fire Fighting Equipment/Instructions

Firefighters should wear full protective gear.

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NFPA Ratings: Health: 1 Fire: 0 Reactivity: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

*** Section 6 - Accidental Release Measures ***

Containment Procedures

Stop the flow of material, if this is without risk.

Clean-Up Procedures

Ventilate area and eliminate all ignition sources. Contain spill. Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers for disposal. Use clean non-sparking tools to collect absorbed material.

Evacuation Procedures

Isolate area. Keep unnecessary personnel away.

Special Procedures

Dike flow of spilled material using soil or sandbags to minimize contamination of drains, surface and ground waters.

*** Section 7 - Handling and Storage ***

Handling Procedures

Avoid contact with skin and eyes. Wash thoroughly after handling.

Storage Procedures

Keep the container tightly closed and in a cool, well-ventilated place.

*** Section 8 - Exposure Controls / Personal Protection ***

A: Component Exposure Limits

Proprietary Component 2 (Trade Secret)

ACGIH: 10 mg/m³ TWA (fume)

20 mg/m³ STEL (fume)

OSHA: 10 mg/m³ TWA

20 mg/m³ STEL

NIOSH: 10 mg/m³ TWA (fume)

20 mg/m³ STEL (fume)

Engineering Controls

Use general ventilation.

PERSONAL PROTECTIVE EQUIPMENT

Personal Protective Equipment: Eyes/Face

Goggles or face shield with goggles, dependent upon potential exposure

Personal Protective Equipment: Skin

Use impervious gloves.

Personal Protective Equipment: Respiratory

Not normally needed.

Personal Protective Equipment: General

Eye wash fountain and emergency showers are recommended.

*** Section 9 - Physical & Chemical Properties ***

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Appearance: Clear liquid.
Physical State: Liquid
Vapor Pressure: 717.40 mmHg @ 25°C
Boiling Point: 101.44°C
Solubility (H2O): Soluble
Evaporation Rate: NA
Octanol/H2O Coeff.: ND
Flash Point Method: NA

Odor: None
pH: ND
Vapor Density: ND
Melting Point: NA
Specific Gravity: 1.033 kg/l
VOC: ND
Flash Point: NA
Upper Flammability Limit (UFL): NA
Burning Rate: NA

Lower Flammability Limit (LFL): NA
Auto Ignition: NA

*** Section 10 - Chemical Stability & Reactivity Information ***

Chemical Stability

This is a stable material.

Chemical Stability: Conditions to Avoid

None

Incompatibility

Not Determined

Hazardous Decomposition

Not Determined

Possibility of Hazardous Reactions

Will not occur.

*** Section 11 - Toxicological Information ***

Acute Dose Effects

A: General Product Information

No information available for the product.

B: Component Analysis - LD50/LC50

Proprietary Component 1 (Trade Secret)

Oral LD50 Rat >90 mL/kg

Proprietary Component 2 (Trade Secret)

Oral LD50 Rat 1410 mg/kg

Carcinogenicity

A: General Product Information

No information available for the product.

B: Component Carcinogenicity

None of this product's components are listed by ACGIH, IARC, OSHA, NIOSH, or NTP.

*** Section 12 - Ecological Information ***

Ecotoxicity

A: General Product Information

No information available for the product.

B: Component Analysis - Ecotoxicity - Aquatic Toxicity

Proprietary Component 2 (Trade Secret)

Test & Species

24 Hr LC50 Lepomis macrochirus	725 mg/L
96 Hr LC50 Cyprinus carpio	209 mg/L [static]
24 Hr LC50 Daphnia magna	202 mg/L

Conditions

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*** Section 13 - Disposal Considerations ***

US EPA Waste Number & Descriptions

Component Waste Numbers

No EPA Waste Numbers are applicable for this product's components.

Disposal Instructions

All wastes must be handled in accordance with local, state and federal regulations.

See Section 7 for Handling Procedures. See Section 8 for Personal Protective Equipment recommendations.

*** Section 14 - Transportation Information ***

US DOT Information

Shipping Name: Not Regulated

*** Section 15 - Regulatory Information ***

US Federal Regulations

Component Analysis

This material contains one or more of the following chemicals required to be identified under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65) and/or CERCLA (40 CFR 302.4).

Proprietary Component 2 (Trade Secret)

CERCLA: 5000 lb final RQ; 2270 kg final RQ

State Regulations

Component Analysis - State

The following components appear on one or more of the following state hazardous substances lists:

Component	CAS	CA	MA	MN	NJ	PA	RI
Proprietary Component 2	Trade Secret	Yes	Yes	Yes	Yes	Yes	Yes

Component Analysis - WHMIS IDL

The following components are identified under the Canadian Hazardous Products Act Ingredient Disclosure List:

Component	CAS #	Minimum Concentration
Proprietary Component 2	Trade Secret	1 %

Additional Regulatory Information

Component Analysis - Inventory

Component	CAS #	TSCA	CAN	EEC
Proprietary Component 1	Trade Secret	Yes	DSL	EINECS
Proprietary Component 2	Trade Secret	Yes	DSL	EINECS

*** Section 16 - Other Information ***

Other Information

The information herein is presented in good faith and believed to be accurate as of the effective date given. However, no warranty, expressed or implied, is given. It is the buyer's responsibility to ensure that its activities comply with Federal, State or provincial, and local laws.

Key/Legend

EPA = Environmental Protection Agency; TSCA = Toxic Substance Control Act; ACGIH = American Conference of Governmental Industrial Hygienists; IARC = International Agency for Research on Cancer; NIOSH = National Institute for Occupational Safety and Health; NTP = National Toxicology Program; OSHA = Occupational Safety and Health Administration., NJTSR = New Jersey Trade Secret Registry.

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