

Safety Data Sheet dated 5/5/2022, version 5.0 This version cancels and substitutes any previous version

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Mixture identification: Trade name:

SNOW PLOW

1.2. Relevant identified uses of the substance or mixture and uses advised against Recommended use:
Ice Machine Cleaner
1.3. Details of the supplier of the safety data sheet Company: ERRECOM SPA

Via Industriale, 14

Corzano (BS) Italy

Tel. +39 030/9719096

Competent person responsible for the safety data sheet:

lab@errecom.it

1.4. Emergency telephone number
 +39 02-6610-1029 Poison Control Center Niguarda Ca' Granda - Milano - ITALY

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture EC regulation criteria 1272/2008 (CLP)



Warning, Skin Irrit. 2, Causes skin irritation.



Warning, Eye Irrit. 2, Causes serious eye irritation.

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

Hazard pictograms:



Warning

Hazard statements:

H315 Causes skin irritation. H319 Causes serious eye irritation.

Precautionary statements:

P280 Wear protective gloves and eye protection.

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Special Provisions:

None

Special provisions according to Annex XVII of REACH and subsequent amendments: None

SNOW PLOW/5.0 Page n. 1 of 11



2.3. Other hazards

No PBT, vPvB or endocrine disruptor substances present in concentration >= 0.1% Other Hazards:

No other hazards

SECTION 3: Composition/information on ingredients

- 3.1. Substances
 - N.A.
- 3.2. Mixtures

Hazardous components within the meaning of the CLP regulation and related classification:

Qty	Name	Ident. Numb	er	Classification
>= 7% - < 10%	glycolic acid	CAS: EC: REACH No.:	79-14-1 201-180-5 01-21194855 79-17-XXXX	 2.16/1 Met. Corr. 1 H290 3.1/4/Inhal Acute Tox. 4 H332 3.2/1B Skin Corr. 1B H314 Specific Concentration Limits: C >= 15%: Skin Corr. 1B H314 5% <= C < 15%: Skin Irrit. 2 H315 5% <= C < 15%: Eye Irrit. 2 H319
>= 2.5% - < 5%	ethanol	Index number: CAS: EC: REACH No.:	603-002-00-5 64-17-5 200-578-6 01-21194576 10-43-XXXX	 2.6/2 Flam. Liq. 2 H225 3.3/2 Eye Irrit. 2 H319
>= 0.25% - < 0.5%	propan-2-ol	Index number: CAS: EC: REACH No.:	603-117-00-0 67-63-0 200-661-7 01-21194575 58-25-XXXX	 2.6/2 Flam. Liq. 2 H225 3.3/2 Eye Irrit. 2 H319 3.8/3 STOT SE 3 H336

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

After contact with skin, wash immediately with soap and plenty of water.

In case of eyes contact:

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an opthalmologist immediately.

Protect uninjured eye.

In case of Ingestion:

Do not under any circumstances induce vomiting. OBTAIN A MEDICAL EXAMINATION IMMEDIATELY.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

- 4.2. Most important symptoms and effects, both acute and delayed No information available.
- 4.3. Indication of any immediate medical attention and special treatment needed In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

SNOW PLOW/5.0 Page n. 2 of 11



Treatment: Treat symptomatically.

SECTION 5: Firefighting measures

- 5.1. Extinguishing media
 - Suitable extinguishing media:
 - Water.
 - Carbon dioxide (CO2).
 - Extinguishing media which must not be used for safety reasons:
 - None in particular.
- 5.2. Special hazards arising from the substance or mixture Do not inhale explosion and combustion gases. Burning produces heavy smoke.
- 5.3. Advice for firefighters
 Use suitable breathing apparatus.
 Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
 Move undamaged containers from immediate hazard area if it can be done safely.

SECTION 6: Accidental release measures

- 6.1. Personal precautions, protective equipment and emergency procedures
 - For non emergency personnel:
 - Wear personal protection equipment.
 - Remove persons to safety.
 - See protective measures under point 7 and 8.
 - For emergency responders:
 - Wear personal protection equipment.
- 6.2. Environmental precautions
 Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.
 Retain contaminated washing water and dispose it.
 In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.
 Suitable material for taking up: absorbing material, organia, and
- Suitable material for taking up: absorbing material, organic, sand
- 6.3. Methods and material for containment and cleaning up
 - Wash with plenty of water.
- 6.4. Reference to other sections See also section 8 and 13

SECTION 7: Handling and storage

- 7.1. Precautions for safe handling
 - Avoid contact with skin and eyes, inhalation of vapours and mists.
 - Don't use empty container before they have been cleaned.
 - Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.
 - Advice on general occupational hygiene:
 - Contamined clothing should be changed before entering eating areas.
 - Do not eat or drink while working.
 - See also section 8 for recommended protective equipment.
- 7.2. Conditions for safe storage, including any incompatibilities
 Store the product between + 0 °C / + 32 °F and + 40 °C / + 104 °F.
 Keep away from food, drink and feed.
 Incompatible materials:
 See subsection 10.5
 Instructions as regards storage premises:

SNOW PLOW/5.0 Page n. 3 of 11



Adequately ventilated premises. 7.3. Specific end use(s) Information not available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

ethanol - CAS: 64-17-5

ACGIH - STEL: 1000 ppm - Notes: A3 - URT irr AGW - TWA(8h): 380 mg/m3, 200 ppm - STEL(15min): 1520 mg/m3, 800 ppm MAK - TWA(8h): 380 mg/m3, 200 ppm - STEL(15min): 1520 mg/m3, 800 ppm VLA - STEL(15min): 1910 mg/m3, 1000 ppm

VLEP - TWA(8h): 1900 mg/m3, 1000 ppm - STEL(15min): 9500 mg/m3, 5000 ppm WEL - TWA(8h): 1920 mg/m3, 1000 ppm

TLV (GR) - TWA(8h): 1900 mg/m3, 1000 ppm

GVI - TWA(8h): 1900 mg/m3, 1000 ppm

NDS - TWA(8h): 1900 mg/m3

NPHV - TWA(8h): 960 mg/m3, 500 ppm - STEL(15min): 1920 mg/m3

TLV - TWA(8h): 1000 mg/m3

TLV (CZ) - TWA(8h): 1000 mg/m3, 522 ppm - STEL(15min): 3000 mg/m3, 1566 ppm TLV (EST) - TWA(8h): 1000 mg/m3, 500 ppm - STEL(15min): 1900 mg/m3, 1000 ppm propan-2-ol - CAS: 67-63-0

ACGIH - TWA(8h): 200 ppm - STEL: 400 ppm - Notes: A4, BEI - Eye and URT irr, CNS impair

AGW - TWA(8h): 500 mg/m3, 200 ppm - STEL(15min): 1000 mg/m3, 400 ppm MAK - TWA(8h): 500 mg/m3, 200 ppm - STEL(15min): 1000 mg/m3, 400 ppm VLA - TWA(8h): 500 mg/m3, 200 ppm - STEL(15min): 1000 mg/m3, 400 ppm VLEP - STEL(15min): 980 mg/m3, 400 ppm

WEL - TWA(8h): 999 mg/m3, 400 ppm - STEL(15min): 1250 mg/m3, 500 ppm TLV - TWA(8h): 980 mg/m3, 400 ppm - STEL(15min): 1225 mg/m3, 500 ppm NDS - TWA(8h): 900 mg/m3 - STEL(15min): 1200 mg/m3

NPHV - TWA(8h): 500 mg/m3, 200 ppm - STEL(15min): 1000 mg/m3 MV - TWA(8h): 500 mg/m3, 200 ppm - STEL(15min): 2000 mg/m3, 800 ppm GVI - TWA(8h): 999 mg/m3, 400 ppm - STEL(15min): 1250 mg/m3, 500 ppm TLV (CZ) - TWA(8h): 500 mg/m3, 200 ppm - STEL(15min): 1000 mg/m3, 400 ppm TLV (EST) - TWA(8h): 350 mg/m3, 150 ppm - STEL(15min): 600 mg/m3, 250 ppm

DNEL Exposure Limit Values

glycolic acid - CAS: 79-14-1

Worker Industry: 9.2 mg/m³ - Exposure: Human Inhalation - Frequency: Short Term, local effects

Worker Industry: 9.2 mg/m³ - Consumer: 2.3 mg/m³ - Exposure: Human Inhalation - Frequency: Short Term, systemic effects

Worker Industry: 1.53 mg/m³ - Exposure: Human Inhalation - Frequency: Long Term, local effects

Worker Industry: 58 mg/kg - Consumer: 29 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects

Consumer: 0.75 mg/kg - Exposure: Human Oral - Frequency: Long Term (repeated) ethanol - CAS: 64-17-5

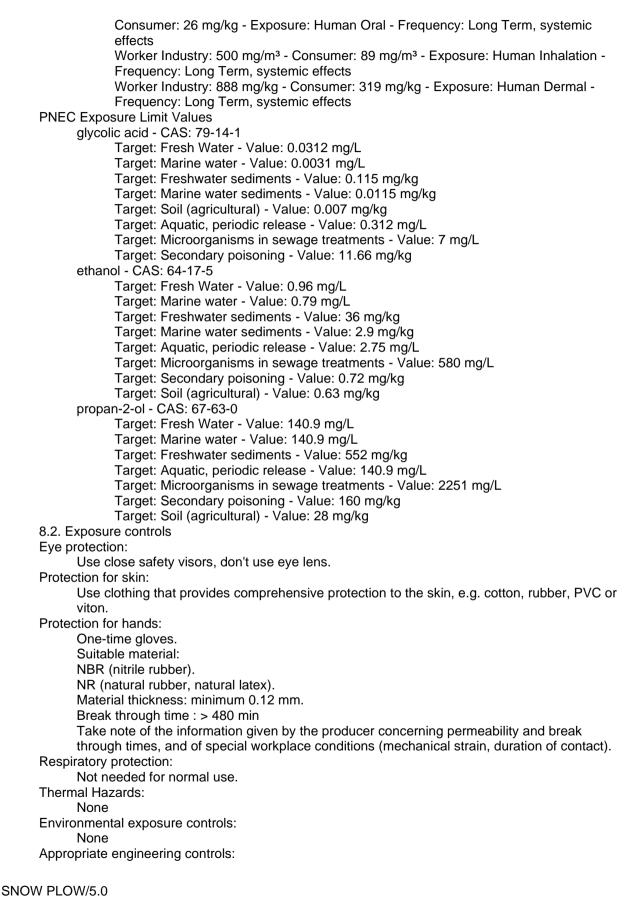
Worker Industry: 1900 mg/m³ - Exposure: Human Inhalation - Frequency: Short Term, local effects

Worker Industry: 950 mg/m³ - Exposure: Human Inhalation - Frequency: Long Term, systemic effects

Worker Industry: 343 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects

propan-2-ol - CAS: 67-63-0

SNOW PLOW/5.0 Page n. 4 of 11



Page n. 5 of 11



None

Properties	Value	Method:	Notes:
Physical state:	Liquid		
Colour:	Colourless		
Odour:	characteristic		
Melting point/freezing point:	N.A.		
Boiling point or initial boiling point and boiling range:	N.A.		
Flammability:	N.A.		
Lower and upper explosion limit:	N.A.		
Flash point:	65 ° C		
Auto-ignition temperature:	N.A.		
Decomposition temperature:	N.A.		
pH:	2,1		
Kinematic viscosity:	N.A.		
Solubility in water:	total		
Solubility in oil:	partial		
Partition coefficient n-octanol/water (log value):	N.A.		
Vapour pressure:	N.A.		
Density and/or relative density:	1.03 g/mL (+20°C / +68°F)		
Relative vapour density:	N.A.		

9.2. Other information

No other relevant information

SECTION 10: Stability and reactivity

- 10.1. Reactivity
 - Stable under normal conditions
- 10.2. Chemical stability
 - Stable under normal conditions
- 10.3. Possibility of hazardous reactions None
- 10.4. Conditions to avoid Stable under normal conditions.
- 10.5. Incompatible materials Bases, amines, alkali metals, permanganates.
- 10.6. Hazardous decomposition products No data available

SNOW PLOW/5.0 Page n. 6 of 11



SECTION 11: Toxicological information 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008 Toxicological information of the product: a) acute toxicity Not classified Based on available data, the classification criteria are not met b) skin corrosion/irritation The product is classified: Skin Irrit. 2 H315 c) serious eye damage/irritation The product is classified: Eye Irrit. 2 H319 d) respiratory or skin sensitisation Not classified Based on available data, the classification criteria are not met e) germ cell mutagenicitv Not classified Based on available data, the classification criteria are not met f) carcinogenicity Not classified Based on available data, the classification criteria are not met g) reproductive toxicity Not classified Based on available data, the classification criteria are not met h) STOT-sinale exposure Not classified Based on available data, the classification criteria are not met i) STOT-repeated exposure Not classified Based on available data, the classification criteria are not met i) aspiration hazard Not classified Based on available data, the classification criteria are not met Toxicological information of the main substances found in the product: glycolic acid - CAS: 79-14-1 a) acute toxicity: Test: LD50 - Route: Oral - Species: Rat > 2000 mg/kg Test: LC50 - Route: Inhalation Mist - Species: Rat 3.6 mg/L - Notes: (aerosol) b) skin corrosion/irritation: Test: Skin Corrosive - Route: Skin Positive c) serious eye damage/irritation: Test: Eye Corrosive - Route: Eyes Positive d) respiratory or skin sensitisation: Test: Skin Sensitization - Route: Skin Negative e) germ cell mutagenicity: Test: Respiratory Sensitization Negative Test: Mutagenesis Negative f) carcinogenicity: Test: Carcinogenicity Negative g) reproductive toxicity: Test: Reproductive Toxicity Negative ethanol - CAS: 64-17-5 a) acute toxicity: Test: LD50 - Route: Oral - Species: Rat > 2000 mg/kg Test: LD50 - Route: Skin - Species: Rabbit > 2000 mg/kg Test: LC50 - Route: Inhalation - Species: Mouse > 20 mg/L - Duration: 4h propan-2-ol - CAS: 67-63-0

SNOW PLOW/5.0 Page n. 7 of 11



a) acute toxicity: Test: LD50 - Route: Oral - Species: Rat 4710 mg/kg Test: LD50 - Route: Skin - Species: Rat 12800 mg/kg Test: LC50 - Route: Inhalation - Species: Rat 72.6 mg/L - Duration: 4h Test: LD50 - Route: Skin - Species: Rabbit 6290 mg/kg 11.2. Information on other hazards Endocrine disrupting properties: No endocrine disruptor substances present in concentration >= 0.1%**SECTION 12: Ecological information** 12.1. Toxicity Adopt good working practices, so that the product is not released into the environment. Not classified for environmental hazards Based on available data, the classification criteria are not met glycolic acid a) Aquatic acute toxicity: Endpoint: LC50 - Species: Fish 115 mg/L - Duration h: 96 - Notes: US EPA E 72-2 Endpoint: EC50 - Species: Daphnia 99.6 mg/L - Duration h: 48 - Notes: OECD TG 202 Endpoint: LC50 - Species: Algae 15.3 mg/L - Duration h: 72 - Notes: OECD TG 201 b) Aquatic chronic toxicity: Endpoint: NOEC - Species: Fish 91 mg/L Endpoint: NOEC - Species: Daphnia 71 mg/L Endpoint: NOEC - Species: Algae 14 mg/L ethanol a) Aquatic acute toxicity: Endpoint: LC50 - Species: Fish > 11200 mg/L - Duration h: 96 Endpoint: EC50 - Species: Daphnia > 12300 mg/L - Duration h: 48 - Notes: Species: Daphnia magna Endpoint: EC50 - Species: Algae > 275 mg/L - Duration h: 72 - Notes: Species: Chlorella vulgaris propan-2-ol a) Aquatic acute toxicity: Endpoint: EC0 - Species: Fish 10000 mg/L - Duration h: 48 - Notes: Pimephales promelas Endpoint: LC50 - Species: Fish > 1400 mg/L - Duration h: 96 - Notes: Lepomis macrochirus Endpoint: LC50 - Species: Fish 6550 mg/L - Duration h: 96 - Notes: Pimephales promelas 12.2. Persistence and degradability glycolic acid - CAS: 79-14-1 Biodegradability: Readily biodegradable - Test: Modified Sturm Test - Notes: OECD TG 301B / 301D ethanol - CAS: 64-17-5 Biodegradability: Readily biodegradable - Test: Solubility in water - Notes: 1000 -10000 mg/L propan-2-ol - CAS: 67-63-0 Biodegradability: Readily biodegradable 12.3. Bioaccumulative potential glycolic acid - CAS: 79-14-1 Bioaccumulation: Not bioaccumulative ethanol - CAS: 64-17-5 Bioaccumulation: Not bioaccumulative - Test: Kow - Partition coefficient 0.350000propan-2-ol - CAS: 67-63-0

SNOW PLOW/5.0 Page n. 8 of 11



Bioaccumulation: Not bioaccumulative - Test: Kow - Partition coefficient 0.05

- 12.4. Mobility in soil
 - N.A.
- 12.5. Results of PBT and vPvB assessment vPvB Substances: None - PBT Substances: None
- 12.6. Endocrine disrupting properties No endocrine disruptor substances present in concentration >= 0.1%
- 12.7. Other adverse effects None

SECTION 13: Disposal considerations

- 13.1. Waste treatment methods
 - Recover if possible. In so doing, comply with the local and national regulations currently in force.

SECTION 14: Transport information

- 14.1. UN number or ID number
 - Not classified as dangerous in the meaning of transport regulations.
- 14.2. UN proper shipping name N.A.
- 14.3. Transport hazard class(es)
- N.A. 14.4. Packing group
 - N.A.
- 14.5. Environmental hazards ADR-Enviromental Pollutant: No IMDG-Marine pollutant: No
- 14.6. Special precautions for user
 - N.A.
- 14.7. Maritime transport in bulk according to IMO instruments N.A.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture Dir. 98/24/EC (Risks related to chemical agents at work) Dir. 2000/39/EC (Occupational exposure limit values) Regulation (EC) n. 1907/2006 (REACH) Regulation (EC) n. 1272/2008 (CLP) Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013 Regulation (EU) n. 2020/878 Regulation (EU) n. 286/2011 (ATP 2 CLP) Regulation (EU) n. 618/2012 (ATP 3 CLP) Regulation (EU) n. 487/2013 (ATP 4 CLP) Regulation (EU) n. 944/2013 (ATP 5 CLP) Regulation (EU) n. 605/2014 (ATP 6 CLP) Regulation (EU) n. 2015/1221 (ATP 7 CLP) Regulation (EU) n. 2016/918 (ATP 8 CLP) Regulation (EU) n. 2016/1179 (ATP 9 CLP) Regulation (EU) n. 2017/776 (ATP 10 CLP) Regulation (EU) n. 2018/669 (ATP 11 CLP) Regulation (EU) n. 2018/1480 (ATP 13 CLP)

SNOW PLOW/5.0 Page n. 9 of 11



Regulation (EU) n. 2019/521 (ATP 12 CLP) Regulation (EU) n. 2020/217 (ATP 14 CLP) Regulation (EU) n. 2020/1182 (ATP 15 CLP) Regulation (EU) n. 2021/643 (ATP 16 CLP) Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications: Restrictions related to the product: Restrictions related to the product: Restriction 3 Restriction 40 Restrictions related to the substances contained: Restriction 75 Where applicable, refer to the following regulatory provisions : Directive 2012/18/EU (Seveso III) Regulation (EC) nr 648/2004 (detergents). Dir. 2004/42/EC (VOC directive)

Provisions related to directive EU 2012/18 (Seveso III): Seveso III category according to Annex 1, part 1 None

15.2. Chemical safety assessment No Chemical Safety Assessment has been carried out for the mixture.

SECTION 16: Other information

Full text of phrases referred to in Section 3:

- H290 May be corrosive to metals.
- H332 Harmful if inhaled.
- H314 Causes severe skin burns and eye damage.
- H315 Causes skin irritation.
- H319 Causes serious eye irritation.
- H225 Highly flammable liquid and vapour.
- H336 May cause drowsiness or dizziness.

Hazard class and hazard category	Code	Description
Met. Corr. 1	2.16/1	Substance or mixture corrosive to metals, Category 1
Flam. Liq. 2	2.6/2	Flammable liquid, Category 2
Acute Tox. 4	3.1/4/Inhal	Acute toxicity (inhalation), Category 4
Skin Corr. 1B	3.2/1B	Skin corrosion, Category 1B
Skin Irrit. 2	3.2/2	Skin irritation, Category 2
Eye Irrit. 2	3.3/2	Eye irritation, Category 2
STOT SE 3	3.8/3	Specific target organ toxicity - single exposure, Category 3

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Classification according to Regulation (EC) Nr. 1272/2008	Classification procedure
Skin Irrit. 2, H315	Calculation method
Eye Irrit. 2, H319	Calculation method



This document was prepared by a competent person who has received appropriate training. Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities

SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This MSDS cancels and replaces any preceding release.

ADR:	European Agreement concerning the International Carriage of Dangerous Goods by Road.
ATE:	Acute Toxicity Estimate
ATEmix:	Acute toxicity Estimate (Mixtures)
CAS:	Chemical Abstracts Service (division of the American Chemical Society).
CLP: DNEL:	Classification, Labeling, Packaging. Derived No Effect Level.
EINECS: GefStoffVO:	European Inventory of Existing Commercial Chemical Substances. Ordinance on Hazardous Substances, Germany.
GHS:	Globally Harmonized System of Classification and Labeling of Chemicals.
IATA:	International Air Transport Association.
IATA-DGR:	Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
ICAO:	International Civil Aviation Organization.
ICAO-TI:	Technical Instructions by the "International Civil Aviation Organization" (ICAO).
IMDG:	International Maritime Code for Dangerous Goods.
INCI:	International Nomenclature of Cosmetic Ingredients.
KSt:	Explosion coefficient.
LC50:	Lethal concentration, for 50 percent of test population.
LD50:	Lethal dose, for 50 percent of test population.
PNEC:	Predicted No Effect Concentration.
RID:	Regulation Concerning the International Transport of Dangerous Goods by Rail.
STEL:	Short Term Exposure limit.
STOT:	Specific Target Organ Toxicity.
TLV:	Threshold Limiting Value.
TWA:	Time-weighted average
WGK:	German Water Hazard Class.