

SECTION 1: Product and company identification

Product name : Clean & Thaw
Use of the substance/mixture : Ice melter
Cleaner
Product code : 0428
Company : Total Solutions
P.O. Box 240014
Milwaukee, WI 53224 -USA
T (414) 354-6417
Emergency number : Chemtrec: (800) 424-9300

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GHS-US classification

Acute Tox. 4 (Oral) H302
Skin Irrit. 2 H315
Eye Irrit. 2 H319
STOT SE 1 H370
STOT RE 2 H373

2.2. Label elements

GHS-US labeling

Hazard pictograms (GHS-US) :



GHS07

GHS08

Signal word (GHS-US) : Danger
Hazard statements (GHS-US) : Harmful if swallowed
Causes skin irritation
Causes serious eye irritation
Causes damage to organs (central nervous system, kidneys) (if swallowed)
May cause damage to organs (kidneys) through prolonged or repeated exposure (if swallowed)
Precautionary statements (GHS-US) : Do not breathe mist, spray.
Wash thoroughly after handling
Do not eat, drink or smoke when using this product.
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.
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
If exposed: Call a poison center/doctor
Get medical advice/attention if you feel unwell.
Specific treatment (see First aid measures on this label)
Rinse mouth.
If skin irritation occurs: Get medical advice/attention.
If eye irritation persists: Get medical advice/attention.
Take off contaminated clothing and wash it before reuse.
Store locked up.
Dispose of contents/container to comply with local/regional/national/international regulations.

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. Substances

Not applicable

Full text of H-phrases: see section 16

3.2. Mixtures

| Name | Product identifier | % | GHS-US classification |
|--------------------|----------------------|---------|--|
| ethylene glycol | (CAS-No.) 107-21-1 | 45-55 | Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 STOT SE 1, H370 STOT RE 2, H373 |
| Glycol Ether EB | (CAS-No.) 111-76-2 | 3-7 | Flam. Liq. 4, H227 Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Asp. Tox. 1, H304 |
| diethylene glycol | (CAS-No.) 111-46-6 | 1-5 | Acute Tox. 4 (Oral), H302 STOT RE 2, H373 |
| Alcohol Ethoxylate | (CAS-No.) 68991-48-0 | 0.5-1.5 | Skin Irrit. 2, H315 Eye Irrit. 2A, H319 |
| sodium hydroxide | (CAS-No.) 1310-73-2 | 0.5-1.5 | Acute Tox. 4 (Dermal), H312 Skin Corr. 1A, H314 |

A specific chemical identity and/or percentage of composition has been withheld as a trade secret. Any concentration shown as a range is to protect confidentiality or is due to batch variation.

SECTION 4: First aid measures

4.1. Description of first aid measures

- First-aid measures general : If you feel unwell, seek medical advice (show the label where possible).
- First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.
- First-aid measures after skin contact : Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention.
- First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
- First-aid measures after ingestion : Rinse mouth. Call a poison center/doctor/physician if you feel unwell.

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

- Symptoms/effects : Causes damage to organs (central nervous system, kidneys) (if swallowed). May cause damage to organs (kidneys) through prolonged or repeated exposure (if swallowed). Harmful if swallowed. Causes skin irritation. Causes serious eye irritation.
- Symptoms/effects after inhalation : None under normal use.
- Symptoms/effects after skin contact : Causes skin irritation.
- Symptoms/effects after eye contact : Causes serious eye irritation.
- Symptoms/effects 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 : All extinguishing media allowed.

5.2. Special hazards arising from the substance or mixture

- 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, protective equipment and emergency procedures

- General measures : Isolate from fire, if possible, without unnecessary risk.

6.1.1. For non-emergency personnel

- Protective equipment : Protective goggles. Gloves. Protective clothing.
- Emergency procedures : Evacuate unnecessary personnel. Avoid contact with skin, eyes and clothing. Ventilate spillage area.

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. Prevent entry to sewers and public waters.

6.3. Methods and material for containment and cleaning up

- For containment : Contain released product, 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.

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Comply with the legal requirements. Do not handle until all safety precautions have been read and understood. 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.

Hygiene measures : Wash thoroughly after handling. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Comply with applicable regulations.

Storage conditions : Keep container closed when not in use.

Incompatible products : Oxidizing agent.

Storage area : Meet the legal requirements. Store in a cool area. Store in a well-ventilated place.

Special rules on packaging : meet the legal requirements.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

| diethylene glycol (111-46-6) | | |
|---------------------------------|-------------------------------------|---------------------------|
| Not applicable | | |
| ethylene glycol (107-21-1) | | |
| ACGIH | ACGIH TWA (ppm) | 25 ppm |
| ACGIH | ACGIH STEL (mg/m ³) | 10 mg/m ³ |
| ACGIH | ACGIH STEL (ppm) | 50 ppm |
| ACGIH | Remark (ACGIH) | Kidney dam; URT & eye irr |
| Glycol Ether EB (111-76-2) | | |
| ACGIH | ACGIH TWA (ppm) | 20 ppm |
| ACGIH | Remark (ACGIH) | Eye & URT irr |
| OSHA | OSHA PEL (TWA) (mg/m ³) | 240 mg/m ³ |
| OSHA | OSHA PEL (TWA) (ppm) | 50 ppm |
| sodium hydroxide (1310-73-2) | | |
| ACGIH | ACGIH Ceiling (mg/m ³) | 2 mg/m ³ |
| ACGIH | Remark (ACGIH) | URT, eye, & skin irr |
| OSHA | OSHA PEL (TWA) (mg/m ³) | 2 mg/m ³ |
| Alcohol Ethoxylate (68991-48-0) | | |
| Not applicable | | |

8.2. Exposure controls

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



SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid
 Appearance : pink. Liquid.
 Odor : Glycol
 Odor threshold : No data available
 pH : 11 – 14
 Melting point : No data available

Clean & Thaw

Safety Data Sheet



| | |
|---|-----------------------|
| Freezing point | : No data available |
| Boiling point | : No data available |
| Flash point | : > 200 °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 | : 1.07 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 | : < 6 % |

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

No additional information available

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

Acute toxicity : Oral: Harmful if swallowed.

| diethylene glycol (111-46-6) | |
|-------------------------------------|-------------------------|
| LD50 oral rat | 12565 mg/kg |
| LD50 dermal rabbit | 11890 mg/kg |
| ATE CLP (oral) | 500 mg/kg body weight |
| ATE CLP (dermal) | 11890 mg/kg body weight |
| ethylene glycol (107-21-1) | |
| LD50 oral rat | 4700 mg/kg |
| LD50 dermal rabbit | 10626 mg/kg |
| ATE CLP (oral) | 500 mg/kg body weight |
| ATE CLP (dermal) | 10626 mg/kg body weight |
| Glycol Ether EB (111-76-2) | |
| LD50 oral rat | 1300 mg/kg |
| LD50 dermal rat | > 2000 mg/kg |
| ATE CLP (oral) | 1300 mg/kg body weight |
| ATE CLP (dermal) | 1100 mg/kg body weight |
| ATE CLP (dust, mist) | 1.5 mg/l/4h |
| sodium hydroxide (1310-73-2) | |
| LD50 oral rat | 4090 mg/kg |

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Safety Data Sheet

| sodium hydroxide (1310-73-2) | |
|-------------------------------------|------------------------|
| LD50 dermal rabbit | 1350 mg/kg |
| ATE CLP (oral) | 4090 mg/kg body weight |
| ATE CLP (dermal) | 1350 mg/kg body weight |

Skin corrosion/irritation : Causes skin irritation.
pH: 11 - 14

Serious eye damage/irritation : Causes serious eye irritation.
pH: 11 - 14

Respiratory or skin sensitization : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

| Glycol Ether EB (111-76-2) | |
|-----------------------------------|----------------------|
| IARC group | 3 - Not classifiable |

Reproductive toxicity : Not classified

Specific target organ toxicity – single exposure : Causes damage to organs (central nervous system, kidneys) (if swallowed).

Specific target organ toxicity – repeated exposure : May cause damage to organs (kidneys) through prolonged or repeated exposure (if swallowed).

| Glycol Ether EB (111-76-2) | |
|-------------------------------------|--------------|
| NOAEL (oral, rat, 90 days) | see comments |
| NOAEL (dermal, rat/rabbit, 90 days) | see comments |

Aspiration hazard : Not classified

Symptoms/effects after inhalation : None under normal use.

Symptoms/effects after skin contact : Causes skin irritation.

Symptoms/effects after eye contact : Causes serious eye irritation.

Symptoms/effects after ingestion : Harmful if swallowed.

Likely routes of exposure : Skin and eye contact

SECTION 12: Ecological information

12.1. Toxicity

| Glycol Ether EB (111-76-2) | |
|-----------------------------------|--|
| LC50 fish 1 | 1474 mg/l <i>Oncorhynchus mykiss</i> |
| EC50 Daphnia 1 | 100 mg/l Water flea |
| ErC50 (algae) | 1840 mg/l <i>Pseudokirchneriella subcapitata</i> |
| NOEC chronic fish | > 100 mg/l |
| NOEC chronic crustacea | 100 mg/l daphnid |

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

Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT : Not regulated for transport

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.

| | | |
|-----------------|------------------|--------|
| ethylene glycol | CAS-No. 107-21-1 | 45-55% |
| Glycol Ether EB | CAS-No. 111-76-2 | 3-7% |

| | |
|---|---------|
| ethylene glycol (107-21-1) | |
| Subject to reporting requirements of United States SARA Section 313 | |
| CERCLA RQ | 5000 lb |

| | |
|---|--|
| Glycol Ether EB (111-76-2) | |
| Subject to reporting requirements of United States SARA Section 313 | |
| | |

| | |
|---|---------|
| sodium hydroxide (1310-73-2) | |
| Not subject to reporting requirements of the United States SARA Section 313 | |
| CERCLA RQ | 1000 lb |



WARNING This product can expose you to Formaldehyde, which is known to the State of California to cause cancer, and ethylene glycol, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

SECTION 16: Other information

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

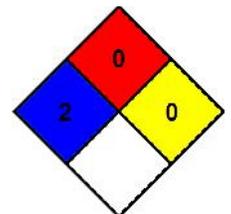
Full text of H-phrases:

| | |
|------|---|
| H227 | Combustible liquid |
| H302 | Harmful if swallowed |
| H304 | May be fatal if swallowed and enters airways |
| H312 | Harmful in contact with skin |
| H314 | Causes severe skin burns and eye damage |
| H315 | Causes skin irritation |
| H319 | Causes serious eye irritation |
| H370 | Causes damage to organs |
| H373 | May cause damage to organs through prolonged or repeated exposure |

NFPA health hazard : 2 - Materials that, under emergency conditions, can cause temporary incapacitation or residual injury.

NFPA fire hazard : 0 - Materials that will not burn under typical fire conditions, including intrinsically noncombustible materials such as concrete, stone, and sand.

NFPA reactivity : 0 - Material that in themselves are normally stable, even under fire conditions.



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.