

SECTION 1: Product and company identification

Product name : Windshield Deicer
Use of the substance/mixture : Aerosol
Ice melter
Product code : 8209
Company : Total Solutions
P.O. Box 240014
Milwaukee, WI 53224 - USA
T (414) 354-6417
Emergency number : Chemtec: (800) 424-9300

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GHS-US classification

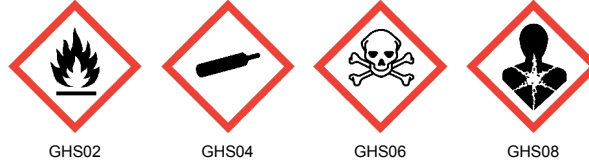
Flam. Aerosol 1 H222
Compressed gas H280
Acute Tox. 3 (Oral) H301
Acute Tox. 3 (Dermal) H311
Acute Tox. 3 (Inhalation:gas) H331
STOT SE 1 H370

Full text of H statements : see section 16

2.2. Label elements

GHS-US labeling

Hazard pictograms (GHS-US) :



Signal word (GHS-US) :

Danger

Hazard statements (GHS-US) :

Extremely flammable aerosol
Contains gas under pressure; may explode if heated
Toxic if swallowed, in contact with skin or if inhaled
Causes damage to organs (central nervous system, cardiovascular system, eyes, respiratory system, Skin, digestive tract)

Precautionary statements (GHS-US) :

Keep away from heat, sparks, open flames, hot surfaces, No smoking. - No smoking
Do not spray on an open flame or other ignition source
Pressurized container: Do not pierce or burn, even after use
Do not breathe fume, mist, spray, vapors
Avoid breathing fume, mist, spray, vapors
Wash thoroughly after handling
Do not eat, drink or smoke when using this product
Use only outdoors or in a well-ventilated area
Wear protective gloves, protective clothing, eye protection
If swallowed: Immediately call a POISON CENTER, a doctor, Do NOT induce vomiting
If on skin: Wash with plenty of IF ON SKIN: Wash with plenty of soap and water
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
Call a POISON CENTER, a doctor if you feel unwell
Specific treatment (see First aid measures on this label)
Rinse mouth
Take off immediately all contaminated clothing
Wash contaminated clothing before reuse
Store in a well-ventilated place. Keep container tightly closed
Store locked up
Protect from sunlight. Store in a well-ventilated place
Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F
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. Substance

Not applicable

Full text of H-phrases: see section 16

3.2. Mixture

| Name | Product identifier | % | GHS-US classification |
|---|--------------------|----------|--|
| methanol | (CAS No) 67-56-1 | 90 - 100 | Flam. Liq. 2, H225 Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Acute Tox. 3 (Inhalation), H331 STOT SE 1, H370 |
| carbon dioxide, liquefied, under pressure | (CAS No) 124-38-9 | 1 - 10 | Not classified |
| 1,2-propanediol | (CAS No) 57-55-6 | 1 - 10 | Not classified |

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. If breathing is difficult, give oxygen. Artificial respiration and/or oxygen if necessary. Respiratory problems: consult a doctor/medical service.
- First-aid measures after skin contact : Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse.
- First-aid measures after eye contact : Rinse immediately with plenty of water. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
- First-aid measures after ingestion : Do NOT induce vomiting. Immediately call a poison center or doctor/physician. Never give anything by mouth to an unconscious person.

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

- Symptoms/injuries : Extremely flammable. Contents under pressure. Depression of the central nervous system. May be fatal if swallowed and enters airways. Causes damage to organs (central nervous system, cardiovascular system, eyes, Skin). Toxic if swallowed, in contact with skin or if inhaled.
- Symptoms/injuries after inhalation : Central nervous system depression. Repeated exposure by inhalation or skin absorption may cause systemic poisoning, brain disorders, and blindness. Toxic if inhaled. May cause drowsiness or dizziness. Headache.
- Symptoms/injuries after skin contact : Toxic in contact with skin. May cause irritation to skin.
- Symptoms/injuries after eye contact : May cause severe irritation.
- Symptoms/injuries after ingestion : May be fatal if swallowed and enters airways. MAY BE FATAL IF SWALLOWED. May be harmful if swallowed. Swallowing a small quantity of this material will result in serious health hazard. This material contains methanol, which, when ingested, has cards acidosis, ocular toxicity ranging from diminished visual capacity to complete blindness, and death.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water fog. Dry chemical powder. Carbon dioxide.

5.2. Special hazards arising from the substance or mixture

- Fire hazard : Flammable aerosol. Under fire conditions closed containers may rupture or explode.
- Explosion hazard : vapors may travel long distances along ground before igniting/flashing back to vapor source. Contains gas under pressure; may explode if heated. Bursting aerosol containers may be propelled from a fire at high speed.
- 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.
- Protection during firefighting : Do not attempt to take action without suitable protective equipment.
- Special protective equipment for fire fighters : Standard protective clothing and equipment (Self Contained Breathing Apparatus) for fire fighters.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Evacuate unnecessary personnel. Isolate from fire, if possible, without unnecessary risk. Gas is denser than air. May accumulate in low areas e.g. close to the ground. No flames, no sparks. Eliminate all sources of ignition. No open flames. No smoking.

6.1.1. For non-emergency personnel

Protective equipment : Do not enter without an appropriate protective equipment.
Emergency procedures : Evacuate unnecessary personnel. No open flames, no sparks, and no smoking.

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

Prevent entry to sewers and public waters. Do not allow to enter drains or water courses.

6.3. Methods and material for containment and cleaning up

For containment : Stop leak if safe to do so. Isolate area until gas has dispersed. Eliminate every possible source of ignition. Use water spray to disperse the vapors. Collect spillage.
Methods for cleaning up : Take up liquid spill into inert absorbent material.

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed : Pressurized container: Do not pierce or burn, even after use.
Precautions for safe handling : Avoid contact with skin, eyes and clothing. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Pressurized container: Do not pierce or burn, even after use. Avoid breathing vapors, mist. Use only outdoors or in a well-ventilated area. Do not spray on an open flame or other ignition source.
Safe use of the product : Intentional misuse by deliberately concentrating and inhaling may be harmful or fatal.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Do not puncture, incinerate or crush.
Storage conditions : Store locked up. Keep container tightly closed. Store in a dry place. Store in a well-ventilated place. Keep out of reach of children.
Incompatible products : Strong acids. alkalis. Oxidizing agents.
Incompatible materials : Sources of ignition. Heat sources. Open flame.
Heat-ignition : KEEP SUBSTANCE AWAY FROM: ignition sources. heat sources.
Storage area : Store in a cool area. Store away from heat. Aerosol 1.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

| methanol (67-56-1) | | |
|---|-------------------------------------|---|
| ACGIH | ACGIH TWA (ppm) | 200 ppm |
| ACGIH | ACGIH STEL (ppm) | 250 ppm |
| ACGIH | Remark (ACGIH) | Headache; eye dam; dizziness; nausea |
| OSHA | OSHA PEL (TWA) (mg/m ³) | 260 mg/m ³ |
| OSHA | OSHA PEL (TWA) (ppm) | 200 ppm |
| carbon dioxide, liquefied, under pressure (124-38-9) | | |
| ACGIH | ACGIH TWA (ppm) | 5000 ppm (Carbon dioxide; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value) |
| ACGIH | ACGIH STEL (ppm) | 30000 ppm (Carbon dioxide; USA; Short time value; TLV - Adopted Value) |

8.2. Exposure controls

Appropriate engineering controls : Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure good ventilation of the work station.

Personal protective equipment : Use appropriate personal protective equipment when risk assessment indicates this is necessary. Gloves. Protective goggles. Protective apron.



SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| | |
|---|---------------------------|
| Physical state | : Gas |
| Appearance | : Aerosol. clear. Liquid. |
| Odor | : Solvent-like odor |
| Odor threshold | : No data available |
| pH | : No data available |
| Melting point | : No data available |
| Freezing point | : No data available |
| Boiling point | : No data available |
| Flash point | : 52 °F (liquid portion) |
| 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 | : 0.8 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 | : > 95 % |

SECTION 10: Stability and reactivity

10.1. Reactivity

Upon combustion: CO and CO₂ are formed.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Hazardous polymerization does not occur.

10.4. Conditions to avoid

Heat. No flames, no sparks. Eliminate all sources of ignition. Welding. Open flame. Direct sunlight.

10.5. Incompatible materials

Strong acids. alkalis. Oxidizing agents.

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: Toxic if swallowed. Dermal: Toxic in contact with skin. Inhalation:gas: Toxic if inhaled.

methanol (67-56-1)

| | |
|--------------------|-------------|
| LD50 dermal rabbit | 12800 mg/kg |
|--------------------|-------------|

| | |
|---------------------------|---------------------------|
| methanol (67-56-1) | |
| ATE CLP (oral) | 100.000 mg/kg body weight |
| ATE CLP (dermal) | 300.000 mg/kg body weight |
| ATE CLP (vapors) | 128.200 mg/l/4h |
| ATE CLP (dust, mist) | 0.500 mg/l/4h |

| | |
|----------------------------------|--|
| 1,2-propanediol (57-55-6) | |
| LD50 oral rat | 20000 mg/kg (Rat; Experimental value) |
| LD50 dermal rat | 22500 mg/kg (Rat; Experimental value) |
| LD50 dermal rabbit | 20800 mg/kg (Rabbit; Experimental value) |
| ATE CLP (oral) | 20000.000 mg/kg body weight |
| ATE CLP (dermal) | 20800.000 mg/kg body weight |

| | |
|---|---|
| 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 (central nervous system, cardiovascular system, eyes, respiratory system, Skin, digestive tract). |
| Specific target organ toxicity – repeated exposure | : Not classified |
| Aspiration hazard | : Not classified |
| Potential Adverse human health effects and symptoms | : Toxic if swallowed. Toxic in contact with skin. Toxic if inhaled. |
| Symptoms/injuries after inhalation | : Central nervous system depression. Repeated exposure by inhalation or skin absorption may cause systemic poisoning, brain disorders, and blindness. Toxic if inhaled. May cause drowsiness or dizziness. Headache. |
| Symptoms/injuries after skin contact | : Toxic in contact with skin. May cause irritation to skin. |
| Symptoms/injuries after eye contact | : May cause severe irritation. |
| Symptoms/injuries after ingestion | : May be fatal if swallowed and enters airways. MAY BE FATAL IF SWALLOWED. May be harmful if swallowed. Swallowing a small quantity of this material will result in serious health hazard. This material contains methanol, which, when ingested, has cards acidosis, ocular toxicity ranging from diminished visual capacity to complete blindness, and death. |
| Likely routes of exposure | : Inhalation;Eyes;Dermal;Ingestion |

SECTION 12: Ecological information

12.1. Toxicity

| | |
|--|---|
| carbon dioxide, liquefied, under pressure (124-38-9) | |
| LC50 fish 1 | 35 mg/l (LC50; 96 h; Salmo gairdneri) |
| 1,2-propanediol (57-55-6) | |
| EC50 Daphnia 1 | 34400 mg/l (EC50; 48 h) |
| LC50 fish 2 | 51600 mg/l (LC50; OECD 203: Fish, Acute Toxicity Test; 96 h; Oncorhynchus mykiss) |

12.2. Persistence and degradability

| | |
|--|--|
| carbon dioxide, liquefied, under pressure (124-38-9) | |
| Persistence and degradability | Biodegradability: not applicable. Not applicable (gas). |
| Biochemical oxygen demand (BOD) | Not applicable |
| Chemical oxygen demand (COD) | Not applicable |
| ThOD | Not applicable |
| 1,2-propanediol (57-55-6) | |
| Persistence and degradability | Readily biodegradable in water. Biodegradable in the soil. |
| Biochemical oxygen demand (BOD) | 0.96 - 1.08 g O ₂ /g substance |
| Chemical oxygen demand (COD) | 1.63 g O ₂ /g substance |
| ThOD | 1.69 g O ₂ /g substance |
| BOD (% of ThOD) | 0.57 |

12.3. Bioaccumulative potential

| | |
|--|--|
| carbon dioxide, liquefied, under pressure (124-38-9) | |
| Log Pow | 0.83 (Experimental value) |
| Bioaccumulative potential | Bioaccumulation: not applicable. |
| 1,2-propanediol (57-55-6) | |
| Log Pow | -1.41 - -0.30 (-0.92; Experimental value; -1.07; Experimental value; Equivalent or similar to OECD 107; 20.5 °C) |
| Bioaccumulative potential | Not bioaccumulative. |

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations : This material, as supplied, is a hazardous waste according to federal regulations (40 CFR 261). . Dispose of contents/container to comply with local/regional/national regulations.

SECTION 14: Transport information

Department of Transportation (DOT)

Transport document description : UN1950 Aerosols (flammable, (each not exceeding 1 L capacity)), 2.1
 UN-No.(DOT) : UN1950
 Proper Shipping Name (DOT) : Aerosols
 flammable, (each not exceeding 1 L capacity)
 Class (DOT) : 2.1 - Class 2.1 - Flammable gas 49 CFR 173.115
 Hazard labels (DOT) : 2.1 - Flammable gas



DOT Packaging Non Bulk (49 CFR 173.xxx) : None
 DOT Packaging Bulk (49 CFR 173.xxx) : None
 DOT Special Provisions (49 CFR 172.102) : N82
 DOT Packaging Exceptions (49 CFR 173.xxx) : 306
 DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27) : 75 kg
 DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75) : 150 kg
 DOT Vessel Stowage Location : A
 DOT Vessel Stowage Other : 25 - Shade from radiant heat, 87 - Stow "separated from" Class 1 (explosives) except Division 14,126 - Segregation same as for Class 9, miscellaneous hazardous materials

Additional information

Other information : This product may be eligible to be shipped as a Limited Quantity or Consumer Commodity ORM-D utilizing the exception found at 49 CFR 173.306.

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.

| | | |
|----------|----------------|-----------|
| methanol | CAS No 67-56-1 | 90 - 100% |
|----------|----------------|-----------|

| |
|--------------------|
| methanol (67-56-1) |
|--------------------|

Windshield Deicer

Safety Data Sheet

| | |
|---|---------|
| methanol (67-56-1) | |
| Subject to reporting requirements of United States SARA Section 313 | |
| CERCLA RQ | 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, developmental and/or reproductive harm

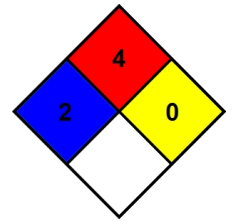
SECTION 16: Other information

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

Full text of H-phrases:

| | |
|------|--|
| H222 | Extremely flammable aerosol |
| H225 | Highly flammable liquid and vapor |
| H280 | Contains gas under pressure; may explode if heated |
| H301 | Toxic if swallowed |
| H311 | Toxic in contact with skin |
| H331 | Toxic if inhaled |
| H370 | Causes damage to organs |

- NFPA health hazard : 2 - Materials that, under emergency conditions, can cause temporary incapacitation or residual injury.
- NFPA fire hazard : 4 - Materials that rapidly or completely vaporize at atmospheric pressure and normal ambient temperature or that are readily dispersed in air and burn readily.
- 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.