

Non-Flammable Safety Solvent

Safety Data Sheet

SECTION 1: Product and company identification

Product name : Non-Flammable Safety Solvent
 Use of the substance/mixture : Solvent
 Product code : 8200
 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

Classification (GHS-US)

Compressed gas H280
 Skin Irrit. 2 H315
 Eye Irrit. 2A H319
 Muta. 2 H341
 Carc. 1B H350
 STOT SE 3 H336

Full text of H-phrases: see section 16

2.2. Label elements

GHS-US labeling

Hazard pictograms (GHS-US) :



Signal word (GHS-US) :

Danger

Hazard statements (GHS-US) :

Contains gas under pressure; may explode if heated
 Causes skin irritation
 Causes serious eye irritation
 May cause drowsiness or dizziness
 Suspected of causing genetic defects
 May cause cancer

Precautionary statements (GHS-US) :

Obtain special instructions before use
 Do not handle until all safety precautions have been read and understood
 Avoid breathing mist, vapors
 Wash thoroughly after handling
 Use only outdoors or in a well-ventilated area
 Wear protective gloves, protective clothing, eye protection, face protection
 If on skin: Wash with plenty of water
 If inhaled: Remove person to fresh air and keep comfortable for breathing
 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
 If exposed or concerned: Get medical advice/attention
 Call a doctor, a POISON CENTER if you feel unwell
 Specific treatment (see First aid measures on this label)
 If skin irritation occurs: Get medical advice/attention
 If eye irritation persists: Get medical advice/attention
 Take off contaminated clothing and wash before reuse
 Store in a well-ventilated place. Keep container tightly closed
 Store locked up
 Protect from sunlight.
 Dispose of contents/container to comply with local/regional/national/international regulations
 IF SWALLOWED: Rinse mouth, Get medical attention if symptoms occur

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

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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	%	Classification (GHS-US)
trichloroethylene, trichloroethene	(CAS No) 79-01-6	90 - 100	Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Muta. 2, H341 Carc. 1B, H350 STOT SE 3, H336 Aquatic Chronic 3, H412
carbon dioxide, liquefied, under pressure	(CAS No) 124-38-9	2.5 - 10	Not classified

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). IF exposed or concerned: Get medical advice/attention. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. show this sheet where possible.
- First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.
- First-aid measures after skin contact : Take off contaminated clothing and wash it before reuse. Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention.
- First-aid measures after eye contact : Rinse immediately with plenty of water for 15 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 : Ingestion unlikely. Rinse mouth. Do NOT induce vomiting. Get medical attention immediately if symptoms occur.

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

- Symptoms/injuries after inhalation : May be narcotic if inhaled. Headache. Fatigue. Dizziness. Nausea.
- Symptoms/injuries after skin contact : Causes skin irritation. Red skin.
- Symptoms/injuries after eye contact : Causes serious eye irritation. Redness of the eye tissue.
- Symptoms/injuries after ingestion : May be harmful if swallowed.

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

Treat symptomatically. Keep watching the victim. Symptoms may be delayed.

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media : Dry chemical powder. Water fog. Foam. Carbon dioxide. Adapt extinguishing media to the environment.
- Unsuitable extinguishing media : Do not use a water jet since it may cause the fire to spread.

5.2. Special hazards arising from the substance or mixture

- Fire hazard : Under fire conditions closed containers may rupture or explode.
- Explosion hazard : Contains gas under pressure; may explode if heated.
- Reactivity : Thermal decomposition may produce : hazardous gases. hydrogen chloride.

5.3. Advice for firefighters

- Firefighting instructions : In case of fire: Stop leak if safe to do so. Do not move the load if exposed to heat. Move containers away from the fire area if this can be done without risk. Use water spray or fog for cooling exposed containers. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out.
- 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 : Evacuate unnecessary personnel. Stay upwind/keep distance from source. Isolate from fire, if possible, without unnecessary risk. Special attention should be given to low areas/pits where flammable vapors can accumulate. Avoid inhalation of product.

6.1.1. For non-emergency personnel

- Protective equipment : Do not enter without an appropriate protective equipment. Extra personal protection: self-contained breathing apparatus. DO NOT touch spilled material.
- Emergency procedures : Ventilate the area thoroughly, especially low lying areas (basements, work pits etc.). Advice local authorities if considered necessary.

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6.1.2. For emergency responders

- Protective equipment : Equip cleanup crew with proper protection.
Emergency procedures : Ventilate area. Stop release. Stop leak if safe to do so.

6.2. Environmental precautions

Absorb and/or contain spill with inert material, then place in suitable container. Prevent runoff from entering drains, sewers or waterways. Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

- For containment : Eliminate every possible source of ignition. Keep combustibles (wood, paper, oil, etc.) away from spilled material. Stop leak if safe to do so. Move the cylinder to a safe and open area if the leak is irreparable. Clean up any spills as soon as possible, using an absorbent material to collect it. Prevent the product from entering drains or confined areas. Following product recovery, flush area with water.
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 : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Pressurized container: Do not pierce or burn, even after use. Avoid breathing mist, vapors. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not use if spray button is missing or defective. Do not spray on a naked flame or any incandescent material. Do not smoke while handling product. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. . Ground/bond container and receiving equipment. Do not re-use empty containers. Do not get in eyes, on skin, or on clothing. Use only outdoors or in a well-ventilated area. Reduce/avoid exposure and/or contact. Use personal protective equipment as required. Observe normal hygiene standards.

7.2. Conditions for safe storage, including any incompatibilities

- Technical measures : Do not puncture, incinerate or crush.
Storage conditions : Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Store in a well-ventilated place. Keep out of reach of children.
Heat-ignition : KEEP SUBSTANCE AWAY FROM: ignition sources, heat sources.
Storage area : Aerosol 1. Store in a cool area. Store away from heat. Keep locked up.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

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)
trichloroethylene, trichloroethene (79-01-6)		
ACGIH	ACGIH TWA (ppm)	10 ppm
ACGIH	ACGIH STEL (ppm)	25 ppm
ACGIH	Remark (ACGIH)	CNS impair; cognitive decrements

8.2. Exposure controls

- Appropriate engineering controls : Ensure good ventilation of the work station. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. . If exposure limits have not been established, maintain airborne levels to an acceptable level. . Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.
Personal protective equipment : Gloves. Protective goggles. Protective clothing.



- Materials for protective clothing : chemical resistant apron.

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Hand protection	: Protective gloves.
Skin and body protection	: Protective clothing.
Respiratory protection	: Where exposure through inhalation may occur from use, respiratory protection equipment is recommended.
Thermal hazard protection	: Use appropriate personal protective equipment when risk assessment indicates this is necessary.
Consumer exposure controls	: When using do not smoke. Use good personal hygiene practices. Wash hands and other exposed areas with mild soap and water before eat, drink or smoke and when leaving work. Take off contaminated clothing and wash before reuse.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Gas
Appearance	: Aerosol. Clear, colorless liquid.
Odor	: characteristic
Odor threshold	: No data available
pH	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: 188.95 °F estimated
Flash point	: None estimated
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	: 1.47 g/cm ³ estimated
Solubility	: Insoluble 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	: < 97 % estimated

SECTION 10: Stability and reactivity

10.1. Reactivity

Thermal decomposition may produce : hazardous gases. hydrogen chloride.

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. Sparks. Open flame. No flames, No sparks. Eliminate all sources of ignition. Incompatible materials.

10.5. Incompatible materials

Strong oxidizing agents.

10.6. Hazardous decomposition products

No additional information available

SECTION 11: Toxicological information

11.1. Information on toxicological effects

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Acute toxicity	: Not classified
Skin corrosion/irritation	: Causes skin irritation.
Serious eye damage/irritation	: Causes serious eye irritation.
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Suspected of causing genetic defects (Inhalation).
Carcinogenicity	: May cause cancer (Inhalation).

trichloroethylene, trichloroethene (79-01-6)	
IARC group	2A - Probably Carcinogenic to Humans
National Toxicology Program (NTP) Status	3 - Reasonably anticipated to be Human Carcinogen

Reproductive toxicity	: Not classified
Specific target organ toxicity (single exposure)	: May cause drowsiness or dizziness.
Specific target organ toxicity (repeated exposure)	: Not classified
Aspiration hazard	: Not classified
Symptoms/injuries after inhalation	: May be narcotic if inhaled. Headache. Fatigue. Dizziness. Nausea.
Symptoms/injuries after skin contact	: Causes skin irritation. Red skin.
Symptoms/injuries after eye contact	: Causes serious eye irritation. Redness of the eye tissue.
Symptoms/injuries after ingestion	: May be harmful if swallowed.
Likely routes of exposure	: Inhalation;Dermal

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)

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

12.3. Bioaccumulative potential

carbon dioxide, liquefied, under pressure (124-38-9)	
Log Pow	0.83 (Experimental value)
Bioaccumulative potential	Bioaccumulation: not applicable.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods	: Contents under pressure. Do not puncture, incinerate or crush. Do not allow into drains or water courses or dispose of where ground or surface waters may be affected.
Waste disposal recommendations	: Dispose in a safe manner in accordance with local/national regulations. Do not discharge into the sewer.
Additional information	: Handle unclean empty containers as full ones. This material and its container must be disposed of in a safe manner. Empty containers should be taken for recycle, recovery or waste in accordance with local regulation. Do not re-use empty containers.

SECTION 14: Transport information

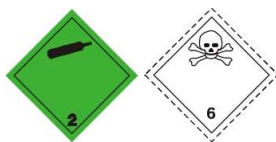
Department of Transportation (DOT)

Transport document description	: UN1950 Aerosols (poison, Packing Group III (each not exceeding 1 L capacity)), 2.2, III
UN-No.(DOT)	: UN1950
Proper Shipping Name (DOT)	: Aerosols poison, Packing Group III (each not exceeding 1 L capacity)
Transport hazard class(es) (DOT)	: 2.2 - Class 2.2 - Non-flammable compressed gas 49 CFR 173.115

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Hazard labels (DOT) : 2.2 - Non-flammable gas
6.1 - Poison inhalation hazard



Packing group (DOT) : III - Minor Danger
DOT Packaging Non Bulk (49 CFR 173.xxx) : None
DOT Packaging Bulk (49 CFR 173.xxx) : None
DOT Special Provisions (49 CFR 172.102) :
DOT Packaging Exceptions (49 CFR 173.xxx) : 306
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27) : Forbidden
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75) : Forbidden
DOT Vessel Stowage Location : A
DOT Vessel Stowage Other : 48 - Stow "away from" sources of 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

UN-No. (IMDG) : UN1950
Proper Shipping Name (IMDG) : Aerosols
Class (IMDG) : 2.2 - Non-flammable, non-toxic gases
Subsidiary risks (IMDG) : 6.1 (PGIII)

Air transport

UN-No.(IATA) : UN1950
Proper Shipping Name (IATA) : Aerosols, non-flammable, containing substances in Division 6.1, PG III
Class (IATA) : 2.2 - Gases : Non-flammable, non-toxic
Subsidiary risks (IATA) : 6.1 (PGIII)

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.

trichloroethylene, trichloroethene	CAS No 79-01-6	90 - 100
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trichloroethylene, trichloroethene (79-01-6)	
Listed on SARA Section 313 (Specific toxic chemical listings)	
RQ (Reportable quantity, section 304 of EPA's List of Lists)	100 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 and/or reproductive toxicity.

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:

Aquatic Chronic 3	Hazardous to the aquatic environment - Chronic Hazard Category 3
Carc. 1B	Carcinogenicity Category 1B

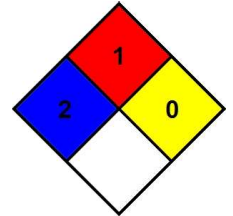
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TOTAL
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Compressed gas	Gases under pressure Compressed gas
Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
Muta. 2	Germ cell mutagenicity Category 2
Skin Irrit. 2	Skin corrosion/irritation Category 2
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H280	Contains gas under pressure; may explode if heated
H315	Causes skin irritation
H319	Causes serious eye irritation
H336	May cause drowsiness or dizziness
H341	Suspected of causing genetic defects
H350	May cause cancer
H412	Harmful to aquatic life with long lasting effects

- NFPA health hazard : 2 - Intense or continued exposure could cause temporary incapacitation or possible residual injury unless prompt medical attention is given.
- NFPA fire hazard : 1 - Must be preheated before ignition can occur.
- NFPA reactivity : 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.



Prepared by: Technical Department

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