

SECTION 1: Product and company identification

Product name : Multi-Purpose Penetrant
 Use of the substance/mixture : Lubricant
 Aerosol
 Product code : 8101
 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

Flam. Aerosol 1 H222
 Asp. Tox. 1 H304

2.2. Label elements

GHS-US labeling

Hazard pictograms (GHS-US) :



Signal word (GHS-US) : Danger
 Hazard statements (GHS-US) : Extremely flammable aerosol
 May be fatal if swallowed and enters airways
 Precautionary statements (GHS-US) : Keep away from heat, sparks, open flames, hot surfaces. - No smoking.
 Do not spray on an open flame or other ignition source.
 Pressurized container: Do not pierce or burn, even after use.
 If swallowed: Immediately call a doctor, a POISON CENTER
 Do NOT induce vomiting.
 Store locked up.
 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. Substances

Not applicable

Full text of H-phrases: see section 16

3.2. Mixtures

Name	Product identifier	%	GHS-US classification
hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics	(CAS-No.) 64742-47-8	40 - 60	Flam. Liq. 4, H227 Asp. Tox. 1, H304
propane	(CAS-No.) 74-98-6	10 - 20	Flam. Gas 1, H220 Press. Gas (Comp.), H280
diethylene glycol monobutyl ether	(CAS-No.) 112-34-5	2.5 - 10	Eye Irrit. 2A, H319

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 : Take off immediately all contaminated clothing. If you feel unwell, seek medical advice. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this sheet where possible. Wash contaminated clothing before reuse.
- First-aid measures after inhalation : Remove the victim into fresh air. Respiratory problems: consult a doctor/medical service.
- First-aid measures after skin contact : Remove/Take off immediately all contaminated clothing. Rinse with water. If skin irritation or rash 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 : Call a physician immediately. Rinse mouth. Do not induce vomiting.

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

- Symptoms/effects after skin contact : Contact during a long period may cause slight irritation.
- Symptoms/effects after eye contact : Direct contact with the eyes is likely to be irritating.
- Symptoms/effects after ingestion : Swallowing the liquid may cause aspiration into the lungs with the risk of chemical pneumonitis. Risk of lung edema.

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

Treat symptomatically. Symptoms may be delayed.

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media : Powder. Alcohol-resistant foam. Water fog. Carbon dioxide.
- 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 : Extremely flammable aerosol.
- Explosion hazard : Contains gas under pressure; may explode if heated.
- Reactivity : The product is non-reactive under normal conditions of use, storage and transport.

5.3. Advice for firefighters

- Firefighting instructions : In case of fire and/or explosion do not breathe fumes. Move containers away from the fire area if this can be done without risk. NEVER direct water jet on liquid. 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. Some of these materials, if spilled, may evaporate leaving a flammable residue.

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. Gas is denser than air. May accumulate in low areas e.g. close to the ground. Vapors are heavier than air and may travel considerable distance to an ignition source and flash back to source of vapors.

6.1.1. For non-emergency personnel

- Protective equipment : Do not enter without an appropriate protective equipment. Do not breathe gas/vapor. Do not touch spilled material. Fully encapsulating, vapor protective clothing should be worn for spills and leaks with no fire.
- Emergency procedures : Ventilate the area thoroughly, especially low lying areas (basements, workpits etc). Advise local authorities if considered necessary.

6.1.2. For emergency responders

No additional information available

6.2. Environmental precautions

Avoid discharge to the environment. Do not contaminate water with the product or its container. Do not allow to enter drains or water courses.

6.3. Methods and material for containment and cleaning up

- For containment : Eliminate every possible source of ignition. No open flames, no sparks, and no smoking. Keep combustibles (wood, paper, oil, etc.) away from spilled material. vapors are heavier than air and may spread along floors. Gas is denser than air. May accumulate in low areas e.g. close to the ground. This material is classified as a water pollutant under the Clean Water Act and should be prevented from contaminating soil or from entering sewage and drainage systems which lead to waterways. Stop leak if safe to do so. Stop the leak. Turn leaking containers leak-side up to prevent the escape of liquid. Move the cylinder to a safe and open area if the leak is irreparable. Use water spray to disperse the vapors. Isolate area until gas has dispersed.
- Methods for cleaning up : Take up liquid spill into absorbent material. Following product recovery, flush area with water. Clean thoroughly.

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 : vapors may form explosive mixture with air. Exclude sources of heat, sparks and open flame. Pressurized container: Do not pierce or burn, even after use. 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. Use only grounded explosion-free electrical equipment. Do not re-use empty containers. Obtain special instructions before use. Reduce/avoid exposure and/or contact. Do not breathe gas/vapor/aerosol. Avoid contact with skin, eyes and clothing. Avoid prolonged and repeated contact with skin. Use only outdoors or in a well-ventilated area. Wear recommended personal protective equipment.
- Hygiene measures : Wash thoroughly after handling. Use good personal hygiene practices.

7.2. Conditions for safe storage, including any incompatibilities

- Technical measures : Do not puncture, incinerate or crush. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Proper grounding procedures to avoid static electricity should be followed.
- Storage conditions : Store locked up.
- Incompatible products : Refer to Section 10 on Incompatible Materials.
- Incompatible materials : Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50°C.
- Storage area : Aerosol 3. Store in a cool area.
- Special rules on packaging : meet the legal requirements.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

propane (74-98-6)		
ACGIH	ACGIH TWA (ppm)	1000 ppm
ACGIH	Remark (ACGIH)	Simple Asphyxiant
OSHA	OSHA PEL (TWA) (mg/m ³)	1800 mg/m ³
OSHA	OSHA PEL (TWA) (ppm)	1000 ppm
diethylene glycol monobutyl ether (112-34-5)		
ACGIH	ACGIH TWA (ppm)	10 ppm

8.2. Exposure controls

- Appropriate engineering controls : Provide sufficient air exchange and/or exhaust. 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. Ensure adequate ventilation, especially in confined areas.
- Personal protective equipment : Use appropriate personal protective equipment when risk assessment indicates this is necessary. Gloves. Face shield. Protective clothing. Safety glasses.



- Hand protection : In case of repeated or prolonged contact wear gloves.
- Eye protection : Avoid contact with eyes. Face shield.
- Skin and body protection : Avoid contact with skin. Wear chemical protective equipment that is specifically recommended by the manufacturer. Use of an impervious apron is recommended. It may provide little or no thermal protection.
- Respiratory protection : If permissible levels are exceeded use NIOSH mechanical filter / organic vapor cartridge or an air-supplied respirator.
- Thermal hazard protection : Use appropriate personal protective equipment when risk assessment indicates this is necessary.

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Consumer exposure controls : When using do not smoke. Avoid contact with eyes. Avoid contact with skin. Keep away from food and drink. Use good personal hygiene practices. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Contaminated work clothing should not be allowed out of the workplace. 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 : Liquid
Appearance : Aerosol. amber. dark brown.
Odor : characteristic
Odor threshold : No data available
pH : No data available
Melting point : No data available
Freezing point : No data available
Boiling point : 182.69 °F estimated
Flash point : -156 °F Propellant 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 : 0.831 - 0.851 g/ml estimated
Solubility : No data available
Log Pow : No data available
Log Kow : No data available
Auto-ignition temperature : 254.99 °C estimated
Decomposition temperature : No data available
Viscosity : No data available
Viscosity, kinematic : < 20 cSt
Viscosity, dynamic : No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

The product is stable at normal handling and storage conditions.

10.3. Possibility of hazardous reactions

Hazardous polymerization does not occur.

10.4. Conditions to avoid

Heat. Open flame. Sparks. Incompatible materials. Aerosol containers are unstable at temperatures above 49°C. Avoid temperatures exceeding the flash point.

10.5. Incompatible materials

Strong oxidizing agents. Fluorine. Chlorine. Nitrates.

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 : Dermal: Not classified.

hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics (64742-47-8)

LD50 dermal rabbit > 5000 mg/kg body weight (Rabbit, Literature)

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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	: Not classified
Specific target organ toxicity – repeated exposure	: Not classified
Aspiration hazard	: May be fatal if swallowed and enters airways.
Symptoms/effects after skin contact	: Contact during a long period may cause slight irritation.
Symptoms/effects after eye contact	: Direct contact with the eyes is likely to be irritating.
Symptoms/effects after ingestion	: Swallowing the liquid may cause aspiration into the lungs with the risk of chemical pneumonitis. Risk of lung edema.
Likely routes of exposure	: Skin and eye contact; Inhalation; Ingestion

SECTION 12: Ecological information

12.1. Toxicity

hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics (64742-47-8)	
LC50 fish 1	> 100 mg/l (Pisces)
EC50 Daphnia 1	> 100 mg/l (Invertebrata)

12.2. Persistence and degradability

hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics (64742-47-8)	
Persistence and degradability	Readily biodegradable in water.

12.3. Bioaccumulative potential

hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics (64742-47-8)	
Log Pow	6 - 8.2
Bioaccumulative potential	High potential for bioaccumulation (Log Kow > 5).

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. Dispose of contents/container to comply with local/regional/national/international regulations.
Additional information	: This material and its container must be disposed of in a safe manner. Empty containers should be taken for recycling, recovery or waste in accordance with local regulation. Handle unclean empty containers as full ones.

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

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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 : When transported by ground, 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. If any alteration of packaging, product, or mode of transportation is further intended, different shipping names and labeling may be required.

ADR

No additional information available

Transport by sea

UN-No. (IMDG)	: UN1950
Proper Shipping Name (IMDG)	: Aerosols
Class (IMDG)	: 2.1 - Flammable gases
Limited quantities (IMDG)	: LTD QTY

Air transport

UN-No. (IATA)	: UN1950
Proper Shipping Name (IATA)	: Aerosols, flammable
Class (IATA)	: 2.1 - Gases : Flammable

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.

This product or mixture does not contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

California Proposition 65 - This product does not contain substances 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.

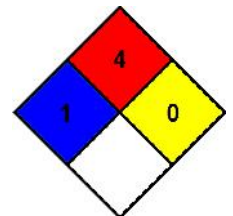
Full text of H-phrases:

H220	Extremely flammable gas
H227	Combustible liquid
H280	Contains gas under pressure; may explode if heated
H304	May be fatal if swallowed and enters airways
H319	Causes serious eye irritation

NFPA health hazard : 1 - Materials that, under emergency conditions, can cause significant irritation.

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

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