

SECTION 1: Product and company identification

Product name : Silicone Lube
Use of the substance/mixture : Lubricant
Product code : 8102
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)

Flam. Aerosol 1 H222
Eye Irrit. 2A H319
Repr. 2 H361
STOT SE 3 H336
Asp. Tox. 1 H304

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) :

Extremely flammable aerosol
May be fatal if swallowed and enters airways
Causes serious eye irritation
May cause drowsiness or dizziness
Suspected of damaging fertility or the unborn child

Precautionary statements (GHS-US) :

Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Keep away from heat, hot surfaces, open flames, sparks. - No smoking
Do not spray on an open flame or other ignition source
Pressurized container: Do not pierce or burn, even after use
Avoid breathing gas
Wash thoroughly after handling
Use only outdoors or in a well-ventilated area
Wear protective gloves, protective clothing, eye protection, face protection
If swallowed: Immediately call a doctor, a POISON CENTER
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
Do NOT induce vomiting
If eye irritation persists: Get medical advice/attention
Store in a well-ventilated place. Keep container tightly closed
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. Substance

Not applicable

Full text of H-phrases: see section 16

3.2. Mixture

Name	Product identifier	%	Classification (GHS-US)
acetone, propan-2-one, propanone	(CAS No) 67-64-1	20 - 40	Flam. Liq. 2, H225 Eye Irrit. 2A, H319 STOT SE 3, H336
butane	(CAS No) 106-97-8	20 - 40	Flam. Gas 1, H220 Compressed gas, H280
propane	(CAS No) 74-98-6	20 - 40	Flam. Gas 1, H220 Compressed gas, H280
heptane, n-heptane	(CAS No) 142-82-5	2.5 - 10	Flam. Liq. 2, H225 Skin Irrit. 2, H315 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
solvent naphtha(petroleum),light aliphatic	(CAS No) 64742-89-8	2.5 - 10	Muta. 1B, H340 Carc. 1B, H350 Asp. Tox. 1, H304
cyclohexane	(CAS No) 110-82-7	1 - 2.5	Flam. Liq. 2, H225 Skin Irrit. 2, H315 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
hexane	(CAS No) 110-54-3	0.1 - 1	Flam. Liq. 2, H225 Skin Irrit. 2, H315 STOT SE 3, H336 STOT RE 2, H373 Asp. Tox. 1, H304 Aquatic Chronic 2, H411
toluene	(CAS No) 108-88-3	0.1 - 1	Flam. Liq. 2, H225 Skin Irrit. 2, H315 STOT SE 3, H336 STOT RE 2, H373 Asp. Tox. 1, H304

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). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. IF exposed or concerned: Get medical advice/attention. Take off immediately all contaminated clothing. show this sheet where possible. Wash contaminated clothing before reuse.
- First-aid measures after inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a poison center or a doctor if you feel unwell.
- First-aid measures after skin contact : Wash skin with plenty of water.
- 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 : Immediately call a poison center or doctor/physician. Rinse mouth. Do not induce vomiting. Vomiting: prevent asphyxia/aspiration pneumonia.

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

- Symptoms/injuries : Causes serious eye irritation. Irritation to throat. May be fatal if swallowed and enters airways.
- Symptoms/injuries after inhalation : May cause drowsiness or dizziness. Headache. Nausea. Fatigue. Irritation of the nasal mucous membranes.
- Symptoms/injuries after skin contact : Contact during a long period may cause light irritation.
- Symptoms/injuries after eye contact : Causes serious eye irritation. Redness of the eye tissue.
- Symptoms/injuries after ingestion : Swallowing the liquid may cause aspiration into the lungs with the risk of chemical pneumonitis.

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 : Alcohol-resistant foam. Dry chemical powder. 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 : Contents under pressure. Pressurized container: may burst if heated.
- Reactivity : Thermal decomposition may produce : hazardous gases.

5.3. Advice for firefighters

- Firefighting instructions : Exercise caution when fighting any chemical fire. 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. 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.

6.1.1. For non-emergency personnel

- Protective equipment : Do not enter without an appropriate protective equipment.
- Emergency procedures : Do not breathe gas. DO NOT touch spilled material. Ventilate spillage area. Advise local authorities if considered necessary.

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

Do not allow to enter drains or water courses. Prevent soil and water pollution. Avoid release to the environment. Stop leak if safe to do so. Advise local authorities if considered necessary.

6.3. Methods and material for containment and cleaning up

- For containment : Keep combustibles (wood, paper, oil, etc.) away from spilled material. Eliminate every possible source of ignition. Stop leak if safe to do so. Move the cylinder to a safe and open area if the leak is irreparable. Prevent the product from entering drains or confined areas.
- Methods for cleaning up : Take up liquid spill into inert absorbent material. Following product recovery, flush area with water.

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. Do not use if spray button is missing or defective.
- Precautions for safe handling : Do not handle until all safety precautions have been read and understood. 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 non-sparking tools. Use only explosion-free electrical equipment with earth. Avoid contact during pregnancy/while nursing. Wash hands and other exposed areas with mild soap and water before eat, drink or smoke and when leaving work. Observe normal hygiene standards. Do not re-use empty containers. Avoid prolonged and repeated contact with skin. Use only outdoors or in a well-ventilated area. Use personal protective equipment as required. Avoid breathing gas. Obtain special instructions before use. Do not get in eyes, on skin, or on clothing.
- Hygiene measures : Wash contaminated clothing before reuse. Use good personal hygiene practices.

7.2. Conditions for safe storage, including any incompatibilities

- Technical measures : Pressurized container. Do not puncture, incinerate or crush. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Take precautionary measures against static discharge.
- Storage conditions : Store locked up. Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F. Store in a well-ventilated place. Refrigerate.
- Incompatible products : Refer to Section 10 on Incompatible Materials.
- Storage area : Aerosol 3.
- Special rules on packaging : meet the legal requirements.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

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acetone, propan-2-one, propanone (67-64-1)		
ACGIH	ACGIH TWA (ppm)	250 ppm
ACGIH	ACGIH STEL (ppm)	500 ppm
ACGIH	Remark (ACGIH)	eye irr; CNS impair; BEI
butane (106-97-8)		
ACGIH	ACGIH TWA (ppm)	1000 ppm
ACGIH	ACGIH STEL (ppm)	1000 ppm
propane (74-98-6)		
ACGIH	ACGIH TWA (ppm)	1000 ppm
OSHA	OSHA PEL (TWA) (ppm)	1000 ppm
heptane, n-heptane (142-82-5)		
ACGIH	ACGIH TWA (ppm)	400 ppm
cyclohexane (110-82-7)		
ACGIH	ACGIH TWA (ppm)	100 ppm
ACGIH	Remark (ACGIH)	CNS impair
hexane (110-54-3)		
ACGIH	ACGIH TWA (ppm)	50 ppm
ACGIH	Remark (ACGIH)	CNS impair; peripheral neuropathy; eye irr; skin; BEI
toluene (108-88-3)		
ACGIH	ACGIH TWA (ppm)	20 ppm
ACGIH	Remark (ACGIH)	Visual impair; female repro;

8.2. Exposure controls

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

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



Hand protection : Gloves.

Eye protection : Safety glasses.

Skin and body protection : 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.

Consumer exposure controls : When using do not smoke. Wash hands and other exposed areas with mild soap and water before eat, drink or smoke and when leaving work. Use good personal hygiene practices. 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. Clear, colorless liquid.

Odor : solvent odor

Odor threshold : No data available

pH : No data available

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Melting point	: No data available
Freezing point	: No data available
Boiling point	: 150.86 °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	: 0.759 - 0.769 g/ml estimated
Solubility	: No data available
Log Pow	: No data available
Log Kow	: No data available
Auto-ignition temperature	: 232.86 °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

Thermal decomposition may produce : hazardous gases.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use. Hazardous polymerization does not occur.

10.4. Conditions to avoid

Heat. No flames, No sparks. Eliminate all sources of ignition. Aerosol containers are unstable at temperatures above 49°C. Avoid temperatures exceeding the flash point.

10.5. Incompatible materials

acids. Strong oxidizing agents. Nitrates. Fluorine. Chlorine.

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 : Not classified

cyclohexane (110-82-7)	
LD50 oral rat	> 12705 mg/kg (Rat; Equivalent or similar to OECD 401; Experimental value; >5000 mg/kg bodyweight; Rat)
LD50 dermal rabbit	> 2000 mg/kg body weight (Rabbit; Experimental value; Equivalent or similar to OECD 402)
LC50 inhalation rat (mg/l)	> 19.07 mg/l/4h (Rat; Experimental value)
LC50 inhalation rat (ppm)	> 5540 ppm/4h (Rat)
hexane (110-54-3)	
LD50 oral rat	16000 mg/kg body weight (Rat; Equivalent or similar to OECD 401; Experimental value)
LD50 dermal rabbit	> 3350 mg/kg body weight (Rabbit; Read-across; Equivalent or similar to OECD 402)

Skin corrosion/irritation	: Not classified.
Serious eye damage/irritation	: Causes serious eye irritation.
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified.
Carcinogenicity	: Not classified.

toluene (108-88-3)	
IARC group	3 - Not Classifiable
Reproductive toxicity	: Suspected of damaging fertility or the unborn child.
Specific target organ toxicity (single exposure)	: May cause drowsiness or dizziness.
Specific target organ toxicity (repeated exposure)	: Not classified.
Aspiration hazard	: May be fatal if swallowed and enters airways.
Symptoms/injuries after inhalation	: May cause drowsiness or dizziness. Headache. Nausea. Fatigue. Irritation of the nasal mucous membranes.
Symptoms/injuries after skin contact	: Contact during a long period may cause light irritation.
Symptoms/injuries after eye contact	: Causes serious eye irritation. Redness of the eye tissue.
Symptoms/injuries after ingestion	: Swallowing the liquid may cause aspiration into the lungs with the risk of chemical pneumonitis.

SECTION 12: Ecological information

12.1. Toxicity

cyclohexane (110-82-7)	
LC50 fish 1	4.53 mg/l (LC50; OECD 203: Fish, Acute Toxicity Test; 96 h; Pimephales promelas; Flow-through system; Fresh water; Experimental value)
EC50 Daphnia 1	0.9 mg/l (EC50; OECD 202: Daphnia sp. Acute Immobilisation Test; 48 h; Daphnia magna; Static system; Fresh water; Experimental value)
Threshold limit algae 1	3.428 mg/l (EbC50; OECD 201: Alga, Growth Inhibition Test; 72 h; Selenastrum capricornutum)
Threshold limit algae 2	0.925 mg/l (NOEC; OECD 201: Alga, Growth Inhibition Test; 72 h; Selenastrum capricornutum)
hexane (110-54-3)	
LC50 fish 1	2.5 mg/l (LC50; 96 h)
EC50 Daphnia 1	2.1 mg/l (EC50; 48 h)
Threshold limit algae 2	26 mg/l (EbC50; OECD 201: Alga, Growth Inhibition Test; 72 h; Pseudokirchneriella subcapitata; Static system)

12.2. Persistence and degradability

cyclohexane (110-82-7)	
Persistence and degradability	Readily biodegradable in water. Non degradable in the soil. Low potential for adsorption in soil.
Biochemical oxygen demand (BOD)	0.22 g O ₂ /g substance
ThOD	3.425 g O ₂ /g substance
BOD (% of ThOD)	< 0.5 (Literature study)
hexane (110-54-3)	
Persistence and degradability	Readily biodegradable in water. Photooxidation in water. Biodegradable in the soil. Low potential for mobility in soil.
ThOD	3.52 g O ₂ /g substance
BOD (% of ThOD)	0.63 (Literature study)

12.3. Bioaccumulative potential

cyclohexane (110-82-7)	
BCF fish 2	31 - 129 (BCF; 8 weeks; Cyprinus carpio)
Log Pow	3.44 (Experimental value; 25 °C)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).
hexane (110-54-3)	
BCF fish 1	501.187 (BCF; Other; Pimephales promelas)
Log Pow	3.5 - 3.94 (Calculated)
Bioaccumulative potential	Potential for bioaccumulation (500 ≤ BCF ≤ 5000).

SECTION 13: Disposal considerations

13.1. Waste treatment methods

- Waste treatment methods : Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Contents under pressure. Do not puncture, incinerate or crush. Dispose of contents/container to comply with local/regional/national regulations. Do not allow into drains or water courses or dispose of where ground or surface waters may be affected.
- Waste disposal recommendations : Dispose of contents/container to comply with local/regional/national regulations.
- Additional information : Empty containers should be taken for recycle, recovery or waste in accordance with local regulation. Handle empty containers with care because residual vapors are flammable. Handle unclean empty containers as full ones. Do not re-use empty containers.

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)
- Transport hazard class(es) (DOT) : 2.1 - Class 2.1 - Flammable gas 49 CFR 173.115
- Hazard labels (DOT) : 2.1 - Flammable gas



- Marine pollutant : Yes (IMDG only)



- 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 : No supplementary information available.

ADR

No additional information available

Transport by sea

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

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.

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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.

cyclohexane	CAS No 110-82-7	1 - 2.5
toluene	CAS No 108-88-3	0.1 - 1

acetone, propan-2-one, propanone (67-64-1)	
Not listed on SARA Section 313 (Specific toxic chemical listings)	
RQ (Reportable quantity, section 304 of EPA's List of Lists)	5000 lb
butane (106-97-8)	
Not listed on SARA Section 313 (Specific toxic chemical listings)	
propane (74-98-6)	
Not listed on SARA Section 313 (Specific toxic chemical listings)	
cyclohexane (110-82-7)	
Listed on SARA Section 313 (Specific toxic chemical listings)	
RQ (Reportable quantity, section 304 of EPA's List of Lists)	1000 lb
toluene (108-88-3)	
Listed on SARA Section 313 (Specific toxic chemical listings)	
RQ (Reportable quantity, section 304 of EPA's List of Lists)	1000 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 Acute 1	Hazardous to the aquatic environment - Acute Hazard Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment - Chronic Hazard Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment - Chronic Hazard Category 2
Asp. Tox. 1	Aspiration hazard Category 1
Carc. 1B	Carcinogenicity Category 1B
Compressed gas	Gases under pressure Compressed gas
Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
Flam. Aerosol 1	Flammable aerosol Category 1
Flam. Gas 1	Flammable gases Category 1
Flam. Liq. 2	Flammable liquids Category 2
Muta. 1B	Germ cell mutagenicity Category 1B
Repr. 2	Reproductive toxicity Category 2
Skin Irrit. 2	Skin corrosion/irritation Category 2
STOT RE 2	Specific target organ toxicity (repeated exposure) Category 2
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H220	Extremely flammable gas
H222	Extremely flammable aerosol
H225	Highly flammable liquid and vapor
H280	Contains gas under pressure; may explode if heated
H304	May be fatal if swallowed and enters airways
H315	Causes skin irritation
H319	Causes serious eye irritation
H336	May cause drowsiness or dizziness

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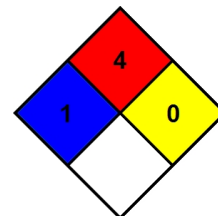
Safety Data Sheet

H340	May cause genetic defects
H350	May cause cancer
H361	Suspected of damaging fertility or the unborn child
H373	May cause damage to organs through prolonged or repeated exposure
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects
H411	Toxic to aquatic life with long lasting effects

NFPA health hazard : 1 - Exposure could cause irritation but only minor residual injury even if no treatment is given.

NFPA fire hazard : 4 - Will rapidly or completely vaporize at normal pressure and temperature, or is readily dispersed in air and will burn readily.

NFPA reactivity : 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.



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.