

Safety Data Sheet

acc. to OSHA HCS

Printing date 02/17/2016

Reviewed on 02/17/2016

1 Identification

- **Product identifier**
- **Trade name:** Rawn Silicone Lube
- **Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
- **Application of the substance / the mixture** Lubricant
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Cortec Corporation
4119 White Bear Parkway
St. Paul, MN 55110 USA
Phone (651) 429-1100
Fax (651) 429-1122
Cortec Spray Technologies
1300 S. River St.
Spooner WI 54801
Phone (715) 635-8711
Fax (715) 635-2200
- **Information department:** regulatory@cortecvci.com
- **Emergency telephone number:**
Spill, Leak, Fire, Exposure, or Accident
24 hour CHEMTREC contact:
USA and Canada 1-800-424-9300
International +1 703-527-3887 (collect calls accepted)

2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS02 GHS04 Flame, Gas cylinder

Flam. Aerosol 1 H222 Extremely flammable aerosol.



GHS04 Gas cylinder

Press. Gas H280 Contains gas under pressure; may explode if heated.



GHS08 Health hazard

Asp. Tox. 1 H304 May be fatal if swallowed and enters airways.



GHS07

Skin Irrit. 2 H315 Causes skin irritation.

STOT SE 3 H336 May cause drowsiness or dizziness.

- **Label elements**

- **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).

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- **Hazard pictograms**



- **Signal word** Danger

- **Hazard-determining components of labeling:**

heptane
 methylcyclohexane
 3-methylhexane
 2-methylhexane
 isobutane
 propane liquefied

- **Hazard statements**

Extremely flammable aerosol.
 Contains gas under pressure; may explode if heated.
 Causes skin irritation.
 May cause drowsiness or dizziness.
 May be fatal if swallowed and enters airways.

- **Precautionary statements**

Keep away from heat/sparks/open flames/hot surfaces. No smoking.
 Do not pierce or burn, even after use.
 Do not spray on an open flame or other ignition source.
 Avoid breathing dust/fume/gas/mist/vapors/spray
 Wear protective gloves.
 Wash thoroughly after handling.
 Use only outdoors or in a well-ventilated area.
 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.
 Specific treatment (see first aid statements on this label).
 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
 Call a POISON CENTER/doctor if you feel unwell.
 If skin irritation occurs: Get medical advice/attention.
 Do NOT induce vomiting.
 IF ON SKIN: Wash with plenty of water.
 Take off contaminated clothing and wash it before reuse.
 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.
 Store in a well-ventilated place. Keep container tightly closed.
 Dispose of contents/container in accordance with local/regional/national/international regulations.

- **Other hazards**

- **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.
- **vPvB:** Not applicable.

3 Composition/information on ingredients

- **Chemical characterization: Mixtures**

- **Description:** Mixture of the substances listed below with nonhazardous additions.

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Trade name: **Rawn Silicone Lube**

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· Dangerous components:		
CAS: 142-82-5 EINECS: 205-563-8	heptane ⚠ Flam. Liq. 2, H225; ⚠ Asp. Tox. 1, H304; ⚠ Skin Irrit. 2, H315; STOT SE 3, H336	10-25%
CAS: 108-87-2 EINECS: 203-624-3	methylcyclohexane ⚠ Flam. Liq. 2, H225; ⚠ Asp. Tox. 1, H304; ⚠ Skin Irrit. 2, H315; STOT SE 3, H336	10-25%
CAS: 589-34-4 EINECS: 209-643-3	3-methylhexane ⚠ Flam. Liq. 2, H225; ⚠ Asp. Tox. 1, H304; ⚠ Skin Irrit. 2, H315; STOT SE 3, H336	10-25%
CAS: 75-28-5 EINECS: 200-857-2	isobutane ⚠ Flam. Gas 1, H220; ⚠ Press. Gas, H280	10-25%
CAS: 74-98-6 EINECS: 200-827-9	propane liquefied ⚠ Flam. Gas 1, H220; ⚠ Press. Gas, H280	10-25%
CAS: 591-76-4 EINECS: 209-730-6	2-methylhexane ⚠ Flam. Liq. 2, H225; ⚠ Asp. Tox. 1, H304; ⚠ Skin Irrit. 2, H315; STOT SE 3, H336	10-25%
CAS: 617-78-7 EINECS: 210-529-0	3-ethylpentane ⚠ Flam. Liq. 2, H225; ⚠ Asp. Tox. 1, H304; ⚠ Skin Irrit. 2, H315; STOT SE 3, H336	2.5-10%
CAS: 565-59-3 EINECS: 209-280-0	2,3-dimethylpentane ⚠ Flam. Liq. 2, H225; ⚠ Asp. Tox. 1, H304; ⚠ Skin Irrit. 2, H315; STOT SE 3, H336	2.5-10%

· **Additional information**

In accordance with paragraph (i) of the OSHA Hazard Communication Standard (29 CFR 1910.1200), the specific chemical identity and/or exact percentage composition has been withheld as a trade secret.

For the wording of the listed hazard phrases refer to section 16.

4 First-aid measures

· **Description of first aid measures**

- **After inhalation** In case of unconsciousness place patient stably on side position for transportation.
- **After skin contact** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact** Rinse opened eye for several minutes under running water.
- **After swallowing** Seek immediate medical advice.
- **Information for doctor**
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents**



CO₂, sand, extinguishing powder. Do not use water.

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- **For safety reasons unsuitable extinguishing agents**
Water.
Water with full jet.
- **Special hazards arising from the substance or mixture** No further relevant information available.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**



Wear protective equipment. Keep unprotected persons away.

- Ensure adequate ventilation
- Keep away from ignition sources
- **Environmental precautions:** Inform respective authorities in case of seepage into water course or sewage system.
- **Methods and material for containment and cleaning up:**
Ensure adequate ventilation.
Do not flush with water or aqueous cleansing agents
- **Reference to other sections**
See Section 7 for information on safe handling
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and storage

- **Handling**
- **Precautions for safe handling**
Ensure good ventilation/exhaustion at the workplace.
Open and handle receptacle with care.
- **Information about protection against explosions and fires:**



Keep ignition sources away - Do not smoke.

- Protect against electrostatic charges.
- Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50 °C, i.e. electric lights.
Do not pierce or burn, even after use.
Do not spray on a naked flame or any incandescent material.
Use explosion-proof apparatus / fittings and spark-proof tools.
- **Conditions for safe storage, including any incompatibilities**
- **Storage**
- **Requirements to be met by storerooms and receptacles:**
Store in a cool location.
Store only in the original receptacle.
Observe official regulations on storing packagings with pressurized containers.
- **Information about storage in one common storage facility:**
Store away from foodstuffs.
Store away from oxidizing agents.
- **Further information about storage conditions:**
Keep receptacle tightly sealed.
Do not gas tight seal receptacle.

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- Store in cool, dry conditions in well sealed receptacles.
- Protect from heat and direct sunlight.
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **Control parameters**

- **Components with limit values that require monitoring at the workplace:**

142-82-5 heptane (10-25%)

PEL (USA)	Long-term value: 2000 mg/m ³ , 500 ppm
REL (USA)	Long-term value: 350 mg/m ³ , 85 ppm Ceiling limit value: 1800* mg/m ³ , 440* ppm *15-min
TLV (USA)	Short-term value: 2050 mg/m ³ , 500 ppm Long-term value: 1640 mg/m ³ , 400 ppm

108-87-2 methylcyclohexane (10-25%)

PEL (USA)	Long-term value: 2000 mg/m ³ , 500 ppm
REL (USA)	Long-term value: 1600 mg/m ³ , 400 ppm
TLV (USA)	Long-term value: 1610 mg/m ³ , 400 ppm

589-34-4 3-methylhexane (10-25%)

TLV (USA)	Short-term value: 2050 mg/m ³ , 500 ppm Long-term value: 1640 mg/m ³ , 400 ppm
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75-28-5 isobutane (10-25%)

TLV (USA)	Short-term value: 2370 mg/m ³ , 1000 ppm
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74-98-6 propane liquefied (10-25%)

PEL (USA)	Long-term value: 1800 mg/m ³ , 1000 ppm
REL (USA)	Long-term value: 1800 mg/m ³ , 1000 ppm
TLV (USA)	refer to Appendix F in TLVs and BEIs book

591-76-4 2-methylhexane (10-25%)

TLV (USA)	Short-term value: 2050 mg/m ³ , 500 ppm Long-term value: 1640 mg/m ³ , 400 ppm
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565-59-3 2,3-dimethylpentane (2.5-10%)

TLV (USA)	Short-term value: 2050 mg/m ³ , 500 ppm Long-term value: 1640 mg/m ³ , 400 ppm
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- **Additional information:** The lists that were valid during the creation were used as basis.

- **Exposure controls**

- **Personal protective equipment**

- **General protective and hygienic measures**

- Keep away from foodstuffs, beverages and feed.
- Immediately remove all soiled and contaminated clothing
- Wash hands before breaks and at the end of work.
- Avoid contact with the eyes and skin.

- **Breathing equipment:**



Use suitable respiratory protective device in case of insufficient ventilation.

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· Protection of hands:

Protective gloves

I.E., Nitrile, Viton, Neoprene

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection: Tightly sealed goggles.

· Body protection: Protective work clothing.

9 Physical and chemical properties

· Information on basic physical and chemical properties
· General Information
· Appearance:
Form: Aerosol

Color: According to product specification

· Odor: Characteristic

· Odor threshold: Not determined.

· pH-value: Not determined.

· Change in condition
Melting point/Melting range: undetermined

Boiling point/Boiling range: Not applicable, as aerosol

· Flash point: -97 °C (-143 °F) (*)

· Flammability (solid, gaseous) Not applicable.

· Ignition temperature: 215 °C (419 °F) (*)

· Decomposition temperature: Not determined.

· Auto igniting: Product is not selfigniting.

· Danger of explosion: Not determined.

· Explosion limits:
Lower: 1.0 Vol % (*)

Upper: 10.9 Vol % (*)

· Vapor pressure at 20 °C (68 °F): 8300 hPa (6226 mm Hg) (*)

· Density: Not determined

· Relative density Not determined.

· Vapor density Not determined.

· Evaporation rate Not applicable.

· Solubility in / Miscibility with
Water: Not miscible or difficult to mix

· Partition coefficient (n-octanol/water): Not determined.

· Viscosity:
dynamic: Not determined.

kinematic: Not determined.

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· Other information

The above data are typical values and do not constitute a specification.
*Properties have been calculated.

10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**

· LD/LC50 values that are relevant for classification:
142-82-5 heptane

Inhalative	LC50/4 h	103 mg/l (Rat)
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· Primary irritant effect:

- **on the skin:** Irritant to skin and mucous membranes.
- **on the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.

· Additional toxicological information:

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:
Irritant

· Carcinogenic categories
· IARC (International Agency for Research on Cancer)

IARC Category 3 : Not classifiable as to its carcinogenicity to humans
--

· NTP (National Toxicology Program)

None of the ingredients is listed.

· OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

12 Ecological information

· Toxicity
· Aquatic toxicity:
142-82-5 heptane

LC50/ 96 h	375 mg/l (Mozambique tilapia (Tilapia mossambica))
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108-87-2 methylcyclohexane

LC50/ 96 h	5.8 mg/l (Striped Bass (Morone saxatilis))
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- **Persistence and degradability** No further relevant information available.

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- **Behavior in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Ecotoxicological effects:**
- **Remark:** Very toxic for fish
- **Additional ecological information:**
- **General notes:**
Also poisonous for fish and plankton in water bodies.
Very toxic for aquatic organisms
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation**



Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

- | | |
|-------------------------------------|---|
| · UN-Number | UN1950 |
| · DOT, ADR, IMDG, IATA | UN1950 |
| · UN proper shipping name | Aerosols, flammable |
| · DOT, IATA | 1950 Aerosols, flammable |
| · ADR | 1950 Aerosols, MARINE POLLUTANT/ENVIRONMENTALLY HAZARDOUS |
| · IMDG | AEROSOLS (HEPTANES, METHYLCYCLOHEXANE), MARINE POLLUTANT |
| · Transport hazard class(es) | |
| · DOT | |
| | |
| · Class | 2.1 |
| · Label | 2.1 |

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· ADR



· Class 2 5F Gases
 · Label 2.1

· IMDG



· Class 2.1
 · Label 2.1

· IATA



· Class 2.1
 · Label 2.1

· Packing group
 · DOT, ADR, IMDG, IATA Void

· Environmental hazards: Product contains environmentally hazardous substances: heptane, 3-methylhexane
 · Marine pollutant: Yes (DOT)
 Symbol (fish and tree)
 · Special marking (ADR): Symbol (fish and tree)

· Special precautions for user Warning: Gases
 · Danger code (Kemler): -
 · EMS Number: F-D,S-U
 · Stowage Code SW1 Protected from sources of heat.
 SW22 For AEROSOLS with a maximum capacity of 1 litre: Category A. For AEROSOLS with a capacity above 1 litre: Category B. For WASTE AEROSOLS: Category C, Clear of living quarters.
 · Segregation Code SG69 For AEROSOLS with a maximum capacity of 1 litre: Segregation as for class 9. Stow "separated from" class 1 except for division 1.4. For AEROSOLS with a capacity above 1 litre: Segregation as for the appropriate subdivision of class 2. For WASTE AEROSOLS: Segregation as for the appropriate subdivision of class 2.

· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable.

· Transport/Additional information:

· DOT
 · Remarks: Special marking with the symbol (fish and tree).

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· ADR	
· Excepted quantities (EQ)	Code: E0 Not permitted as Excepted Quantity
<hr style="border-top: 1px dashed black;"/>	
· IMDG	
· Limited quantities (LQ)	1L
· Excepted quantities (EQ)	Code: E0 Not permitted as Excepted Quantity
· UN "Model Regulation":	UN 1950 AEROSOLS, 2.1, MARINE POLLUTANT/ ENVIRONMENTALLY HAZARDOUS

15 Regulatory information

· Safety, health and environmental regulations/legislation specific for the substance or mixture

· SARA Section 355 (extremely hazardous substances)

None of the ingredients is listed.

· SARA Section 313 (specific toxic chemical listings)

None of the ingredients is listed.

· TSCA (Toxic Substances Control Act) (Substances not listed)

617-78-7 | 3-ethylpentane

· Prop 65 - Chemicals known to cause cancer

None of the ingredients is listed.

· Carcinogenicity categories

· EPA (Environmental Protection Agency)

142-82-5 | heptane

D

· TLV (Threshold Limit Value established by ACGIH)

None of the ingredients is listed.

· MAK (German Maximum Workplace Concentration)

None of the ingredients is listed.

· NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

· GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).

· Hazard pictograms



GHS02 GHS04 GHS07 GHS08

· Signal word Danger

· Hazard-determining components of labeling:

heptane
 methylcyclohexane
 3-methylhexane
 2-methylhexane
 isobutane

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propane liquefied

- **Hazard statements**

Extremely flammable aerosol.
 Contains gas under pressure; may explode if heated.
 Causes skin irritation.
 May cause drowsiness or dizziness.
 May be fatal if swallowed and enters airways.

- **Precautionary statements**

Keep away from heat/sparks/open flames/hot surfaces. No smoking.
 Do not pierce or burn, even after use.
 Do not spray on an open flame or other ignition source.
 Avoid breathing dust/fume/gas/mist/vapors/spray
 Wear protective gloves.
 Wash thoroughly after handling.
 Use only outdoors or in a well-ventilated area.
 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.
 Specific treatment (see first aid statements on this label).
 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
 Call a POISON CENTER/doctor if you feel unwell.
 If skin irritation occurs: Get medical advice/attention.
 Do NOT induce vomiting.
 IF ON SKIN: Wash with plenty of water.
 Take off contaminated clothing and wash it before reuse.
 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.
 Store in a well-ventilated place. Keep container tightly closed.
 Dispose of contents/container in accordance with local/regional/national/international regulations.

- **National regulations**

- **Technical instructions (air):**

Class	Share in %
NK	51.6

- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.
 Cortec Corporation does not warranty any translation of this SDS not created by Cortec Corporation.

- **Relevant phrases**

H220 Extremely flammable gas.
 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.
 H336 May cause drowsiness or dizziness.

- **Date of preparation / last revision** 02/17/2016 / -

- **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
 IMDG: International Maritime Code for Dangerous Goods
 DOT: US Department of Transportation
 IATA: International Air Transport Association

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ACGIH: American Conference of Governmental Industrial Hygienists
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
NIOSH: National Institute for Occupational Safety
OSHA: Occupational Safety & Health
Flam. Gas 1: Flammable gases, Hazard Category 1
Flam. Aerosol 1: Flammable aerosols, Hazard Category 1
Press. Gas: Gases under pressure: Compressed gas
Flam. Liq. 2: Flammable liquids, Hazard Category 2
Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2
STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3
Asp. Tox. 1: Aspiration hazard, Hazard Category 1

· *** Data compared to the previous version altered.**

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