

**A00394 MST FREE-EZE PEN LUBE 16net9**

Version 3.1

Revision Date 01/04/2017

Print Date 03/17/2017

**SECTION 1. PRODUCT AND COMPANY IDENTIFICATION**

Material name : A00394 MST FREE-EZE PEN LUBE 16net9

Material number : 00000000001035783

**Manufacturer or supplier's details**

Company : Zep Inc.

Address : 1310 Seaboard Industrial Blvd., NW  
Atlanta, GA 30318

Telephone : 404-352-1680

**Emergency telephone numbers**
**For SDS Information** : Compliance Services 1-877-428-9937

**For a Medical Emergency** : 877-541-2016 Toll Free - All Calls Recorded

**For a Transportation Emergency** : CHEMTREC: 800-424-9300 - All Calls Recorded.  
In the District of Columbia 202-483-7616

**Recommended use of the chemical and restrictions on use**

Recommended use : Lubricant

**SECTION 2. HAZARDS IDENTIFICATION**
**Emergency Overview**

Appearance	Aerosol containing a liquefied gas
Colour	colourless
Odour	solvent-like

**GHS Classification**

 Flammable aerosols : Category 2  
 Gases under pressure : Liquefied gas  
 Carcinogenicity : Category 2

**GHS label elements**

Hazard pictograms :



Signal word : Warning

 Hazard statements : H223 Flammable aerosol.  
 H280 Contains gas under pressure; may explode if heated.  
 H351 Suspected of causing cancer.

 Precautionary statements : **Prevention:**  
 P201 Obtain special instructions before use.  
 P202 Do not handle until all safety precautions have been read and understood.  
 P210 Keep away from heat/sparks/open flames/hot surfaces.

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No smoking.  
 P211 Do not spray on an open flame or other ignition source.  
 P251 Pressurized container: Do not pierce or burn, even after use.  
 P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.  
**Response:**  
 P308 + P313 IF exposed or concerned: Get medical advice/ attention.  
**Storage:**  
 P405 Store locked up.  
 P410 + P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/ 122 °F.  
**Disposal:**  
 Dispose of contents/container in accordance with local regulation.

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**SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**
**Hazardous components**

Chemical name	CAS-No.	Concentration [%]
1,1-difluoroethane	75-37-6	>= 70 - < 90
4-methylpentan-2-one	108-10-1	>= 1 - < 5
oleic acid	112-80-1	>= 1 - < 5

The exact percentages of disclosed substances are withheld as trade secrets.

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**SECTION 4. FIRST AID MEASURES**

- General advice : Do not leave the victim unattended.  
 Move out of dangerous area.  
 Show this safety data sheet to the doctor in attendance.
- If inhaled : If unconscious place in recovery position and seek medical advice.  
 If symptoms persist, call a physician.
- In case of skin contact : If skin irritation persists, call a physician.  
 Wash off immediately with plenty of water for at least 15 minutes.  
 If on clothes, remove clothes.
- In case of eye contact : Remove contact lenses.  
 Protect unharmed eye.  
 Keep eye wide open while rinsing.  
 If eye irritation persists, consult a specialist.  
 Rinse immediately with plenty of water for at least 15 minutes.
- If swallowed : Keep respiratory tract clear.  
 Never give anything by mouth to an unconscious person.  
 If symptoms persist, call a physician.  
 DO NOT induce vomiting unless directed to do so by a physician or poison control center.

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- Most important symptoms and effects, both acute and delayed : Chronic effects are delayed and symptoms may not be observed during an exposure.  
Effects are dependent on exposure (dose, concentration, contact time).  
Suspected of causing cancer.  
Review section 2 of SDS to see all potential hazards.
- Notes to physician : Treat symptomatically. Symptoms may be delayed.

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**SECTION 5. FIREFIGHTING MEASURES**

- Suitable extinguishing media : Alcohol-resistant foam  
Carbon dioxide (CO<sub>2</sub>)  
Dry chemical  
Water spray jet
- Unsuitable extinguishing media : High volume water jet
- Hazardous combustion products : Carbon dioxide (CO<sub>2</sub>)  
Carbon monoxide  
Smoke  
Fluorine compounds
- Specific extinguishing methods : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- Further information : Collect contaminated fire extinguishing water separately. This must not be discharged into drains.  
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.  
For safety reasons in case of fire, cans should be stored separately in closed containments.  
Use a water spray to cool fully closed containers.
- Special protective equipment for firefighters : Wear self-contained breathing apparatus for firefighting if necessary.

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**SECTION 6. ACCIDENTAL RELEASE MEASURES**

- Personal precautions, protective equipment and emergency procedures : Use personal protective equipment.  
Ensure adequate ventilation.  
Evacuate personnel to safe areas.  
Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.  
Remove all sources of ignition.
- Environmental precautions : Prevent product from entering drains.  
Prevent further leakage or spillage if safe to do so.  
If the product contaminates rivers and lakes or drains inform respective authorities.
- Methods and materials for containment and cleaning up : Sweep up or vacuum up spillage and collect in suitable container for disposal.  
Soak up with inert absorbent material (e.g. sand, silica gel,

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acid binder, universal binder, sawdust).

**SECTION 7. HANDLING AND STORAGE**

- Advice on safe handling : Do not breathe vapours or spray mist.  
Avoid exposure - obtain special instructions before use.  
Avoid contact with skin and eyes.  
For personal protection see section 8.  
Smoking, eating and drinking should be prohibited in the application area.  
Take precautionary measures against static discharges.  
Provide sufficient air exchange and/or exhaust in work rooms.  
Dispose of rinse water in accordance with local and national regulations.
- Conditions for safe storage : BEWARE: Aerosol is pressurized. Keep away from direct sun exposure and temperatures over 50 °C. Do not open by force or throw into fire even after use. Do not spray on flames or red-hot objects.  
Keep in a dry place.  
Observe label precautions.  
Keep in a well-ventilated place.  
Electrical installations / working materials must comply with the technological safety standards.
- Materials to avoid : Strong oxidizing agents  
Store and keep away from bases and alkalies.

**SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION****Components with workplace control parameters**

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
1,1-difluoroethane	75-37-6	TWA	1,000 ppm	US WEEL
4-methylpentan-2-one	108-10-1	TWA	20 ppm	ACGIH
		STEL	75 ppm	ACGIH
		TWA	50 ppm 205 mg/m <sup>3</sup>	NIOSH REL
		ST	75 ppm 300 mg/m <sup>3</sup>	NIOSH REL
		TWA	100 ppm 410 mg/m <sup>3</sup>	OSHA Z-1
		TWA	50 ppm 205 mg/m <sup>3</sup>	OSHA P0
		STEL	75 ppm 300 mg/m <sup>3</sup>	OSHA P0
		PEL	50 ppm 205 mg/m <sup>3</sup>	CAL PEL
		STEL	75 ppm 300 mg/m <sup>3</sup>	CAL PEL

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Hazardous components without workplace control parameters

**Biological occupational exposure limits**

Component	CAS-No.	Control parameters	Biological specimen	Sampling time	Permissible concentration	Basis
4-METHYLPENTAN-2-ONE	108-10-1	methyl isobutyl ketone	Urine	End of shift (As soon as possible after exposure ceases)	1 mg/l	ACGIH BEI

**Engineering measures** : effective ventilation in all processing areas

**Personal protective equipment**

Respiratory protection : Use respiratory protection unless adequate local exhaust ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines.

Hand protection  
Remarks : The suitability for a specific workplace should be discussed with the producers of the protective gloves.

Eye protection : Safety glasses  
Ensure that eyewash stations and safety showers are close to the workstation location.

Skin and body protection : Impervious clothing  
Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Hygiene measures : Wash hands before breaks and at the end of workday.  
When using do not eat, drink or smoke.

**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

Appearance : Aerosol containing a liquefied gas

Colour : colourless

Odour : solvent-like

Odour Threshold : No data available

pH : Not applicable

Melting point/freezing point : No data available

Boiling point : No data available

Flash point :  
No data available

Evaporation rate : No data available

Flammability (solid, gas) : Flammable aerosol.

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Upper explosion limit	: No data available
Lower explosion limit	: No data available
Vapour pressure	: No data available
Relative vapour density	: No data available
Density	: 0.91 g/cm <sup>3</sup>
Solubility(ies)	
Water solubility	: negligible
Solubility in other solvents	: not determined
Partition coefficient: n-octanol/water	: No data available
Auto-ignition temperature	: not determined
Thermal decomposition	: No data available
Viscosity	
Viscosity, kinematic	: No data available
Heat of combustion	: 10.08 kJ/g

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**SECTION 10. STABILITY AND REACTIVITY**

Reactivity	: Stable
Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: Vapours may form explosive mixture with air. No decomposition if stored and applied as directed.
Conditions to avoid	: Heat, flames and sparks. Extremes of temperature and direct sunlight.
Incompatible materials	: Strong oxidizing agents Bases Alkaline earth metals
Hazardous decomposition products	: Carbon monoxide Carbon dioxide (CO <sub>2</sub> )

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**SECTION 11. TOXICOLOGICAL INFORMATION****Potential Health Effects**

Aggravated Medical Condition	: None known.
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Symptoms of Overexposure : Chronic effects are delayed and symptoms may not be observed during an exposure.  
Effects are dependent on exposure (dose, concentration, contact time).

**Carcinogenicity:****IARC**

Group 2B: Possibly carcinogenic to humans

**OSHA**4-methylpentan-2-one 108-10-1  
No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.**NTP**

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

**Acute toxicity****Product:**

Acute oral toxicity : Acute toxicity estimate : > 5,000 mg/kg  
Method: Calculation method

Acute inhalation toxicity : Acute toxicity estimate : 31.41 mg/l  
Exposure time: 4 h  
Test atmosphere: dust/mist  
Method: Calculation method

**Components:****1,1-difluoroethane:**

Acute inhalation toxicity : LC50 Mouse: 977,000 mg/l  
Exposure time: 2 h

**Skin corrosion/irritation****Components:****oleic acid:**

Species: human skin  
Exposure time: 72 h  
Result: Mild skin irritation

**Serious eye damage/eye irritation****Product:**

Remarks: May irritate eyes.

**Respiratory or skin sensitisation**

No data available

**Germ cell mutagenicity**

No data available

**Carcinogenicity**

# SAFETY DATA SHEET



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No data available

### Reproductive toxicity

No data available

**1,1-difluoroethane:**  
**4-methylpentan-2-one:**  
**oleic acid:**

### STOT - single exposure

No data available

### STOT - repeated exposure

No data available

### Aspiration toxicity

No data available

### Further information

**Product:**

Remarks: No data available

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## SECTION 12. ECOLOGICAL INFORMATION

### Ecotoxicity

No data available

### Persistence and degradability

No data available

### Bioaccumulative potential

**Product:**

Partition coefficient: n- : Remarks: No data available  
octanol/water

### Mobility in soil

No data available

### Other adverse effects

No data available

**Product:**

Regulation

40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone - CAA Section 602 Class I Substances

Remarks

This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).



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Additional ecological information : No data available

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**SECTION 13. DISPOSAL CONSIDERATIONS****Disposal methods**

- Waste from residues : The product should not be allowed to enter drains, water courses or the soil.  
Do not contaminate ponds, waterways or ditches with chemical or used container.  
Do not dispose of waste into sewer.
- Contaminated packaging : Empty remaining contents.  
Dispose of as unused product.  
Do not re-use empty containers.  
Do not burn, or use a cutting torch on, the empty drum.

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**SECTION 14. TRANSPORT INFORMATION**

Transportation Regulation: 49 CFR (USA):  
ORM-D, CONSUMER COMMODITY

Transportation Regulation: IMDG (Vessel):  
UN1950, AEROSOLS, FLAMMABLE, 2.1, - Limited quantity

Transportation Regulation: IATA (Cargo Air):  
UN1950, AEROSOLS, FLAMMABLE, 2.1, - Limited quantity

Transportation Regulation: IATA (Passenger Air):  
UN1950, AEROSOLS, FLAMMABLE, 2.1, - Limited quantity

Transportation Regulation: TDG (Canada):  
UN1950, AEROSOLS, FLAMMABLE, 2.1, - Limited quantity

The product as delivered to the customer conforms to packaging requirements for shipment by road under US Department of Transportation (DOT) regulations. Additional transportation classifications noted above are for reference only, and not a certification or warranty of the suitability of the packaging for shipment under these alternative transport regulations.

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**SECTION 15. REGULATORY INFORMATION**

**TSCA list** : No substances are subject to a Significant New Use Rule.  
No substances are subject to TSCA 12(b) export notification requirements.

**EPCRA - Emergency Planning and Community Right-to-Know Act**

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**CERCLA Reportable Quantity**

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
4-methylpentan-2-one	108-10-1	5000	*

\*: Calculated RQ exceeds reasonably attainable upper limit.

**SARA 304 Extremely Hazardous Substances Reportable Quantity**

This material does not contain any components with a section 304 EHS RQ.

**SARA 311/312 Hazards** : Sudden Release of Pressure Hazard  
Fire Hazard  
Chronic Health Hazard

**SARA 302** : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313** : The following components are subject to reporting levels established by SARA Title III, Section 313:

4-methylpentan-2-one	108-10-1	4.776 %
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**California Prop 65** WARNING! This product contains a chemical known to the State of California to cause cancer.

4-methylpentan-2-one	108-10-1
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WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

4-methylpentan-2-one	108-10-1
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**The components of this product are reported in the following inventories:**

**TSCA** On TSCA Inventory

**DSL** All components of this product are on the Canadian DSL

For information on the country notification status for other regions please contact the manufacturer's regulatory group.

**Inventory Acronym and Validity Area Legend:**

TSCA (USA), DSL (Canada), NDSL (Canada)

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**SECTION 16. OTHER INFORMATION**

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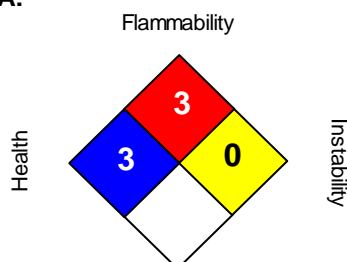
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## Further information

## NFPA:



## HMIS III:

HEALTH	3*
FLAMMABILITY	3
PHYSICAL HAZARD	2

0 = not significant, 1 = Slight,  
2 = Moderate, 3 = High  
4 = Extreme, \* = Chronic

## OSHA - GHS Label Information:

Hazard pictograms



Signal word

: **Warning:**

Hazard statements

: Flammable aerosol. Contains gas under pressure; may explode if heated. Suspected of causing cancer.

Precautionary statements

**Prevention:** Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. 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. Wear protective gloves/ protective clothing/ eye protection/ face protection.

**Response:** IF exposed or concerned: Get medical advice/ attention.

**Storage:** Store locked up. Protect from sunlight. Do not expose to temperatures exceeding 50 °C/ 122 °F.

**Disposal:** Dispose of contents/container in accordance with local regulation.

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