

A00394 MST FREE-EZE PEN LUBE 16N9 OBS

Version 4.1

Revision Date 03/22/2018

Print Date 05/20/2019

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Material name : A00394 MST FREE-EZE PEN LUBE 16N9 OBS

Material number : 00000000001035783

Manufacturer or supplier's details

Company : Zep Inc.

Address : 350 Joe Frank Harris Parkway, SE
Emerson, GA 30137

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.

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P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. 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:

P410 + P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/ 122 °F.

Disposal:

P501 Dispose of contents/container in accordance with local regulation.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Hazardous components

Chemical name	CAS-No.	Concentration [%]
1,1-difluoroethane	75-37-6	>= 70 - < 90
acetone	67-64-1	>= 3 - < 5
4-methylpentan-2-one	108-10-1	>= 3 - < 5
oleic acid	112-80-1	>= 1 - < 3

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

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.
Get medical attention immediately.
- 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.
Remove contaminated clothing and shoes.
Wash contaminated clothing before reuse.
- 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.

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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.

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.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media : Alcohol-resistant foam
 Carbon dioxide (CO₂)
 Dry chemical
 Water spray jet

Unsuitable extinguishing media : High volume water jet

Specific hazards during firefighting : Do not allow run-off from fire fighting to enter drains or water courses.

Hazardous combustion products : Carbon dioxide (CO₂)
 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.

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.

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- 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, 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.
Always replace cap after use.
- 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
acetone	67-64-1	TWA	250 ppm	ACGIH
		STEL	500 ppm	ACGIH
		TWA	250 ppm 590 mg/m ³	NIOSH REL
		TWA	1,000 ppm 2,400 mg/m ³	OSHA Z-1

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		TWA	750 ppm 1,800 mg/m ³	OSHA P0
		STEL	1,000 ppm 2,400 mg/m ³	OSHA P0
		STEL	750 ppm 1,780 mg/m ³	CAL PEL
		C	3,000 ppm	CAL PEL
		PEL	500 ppm 1,200 mg/m ³	CAL PEL
4-methylpentan-2-one	108-10-1	TWA	20 ppm	ACGIH
		STEL	75 ppm	ACGIH
		TWA	50 ppm 205 mg/m ³	NIOSH REL
		ST	75 ppm 300 mg/m ³	NIOSH REL
		TWA	100 ppm 410 mg/m ³	OSHA Z-1
		TWA	50 ppm 205 mg/m ³	OSHA P0
		STEL	75 ppm 300 mg/m ³	OSHA P0
		PEL	50 ppm 205 mg/m ³	CAL PEL
		STEL	75 ppm 300 mg/m ³	CAL PEL

Biological occupational exposure limits

Component	CAS-No.	Control parameters	Biological specimen	Sampling time	Permissible concentration	Basis
2-PROPANONE	67-64-1	Acetone	Urine	End of shift (As soon as possible after exposure ceases)	25 mg/l	ACGIH BEI
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

Material : Protective gloves

Remarks : The suitability for a specific workplace should be discussed

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with the producers of the protective gloves.

- Eye protection : Safety glasses
Access to clean water to rinse eyes must be available, options include: eye wash stations or showers, or eye wash bottles with pure water.
- 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.
- 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/cm³
- 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

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Viscosity, kinematic : No data available
 Heat of combustion : 10.08 kJ/g

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 (CO₂)

SECTION 11. TOXICOLOGICAL INFORMATION
Potential Health Effects

Aggravated Medical Condition : None known.

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
 4-methylpentan-2-one 108-10-1

ACGIH Confirmed animal carcinogen with unknown relevance to humans
 4-methylpentan-2-one 108-10-1

OSHA No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

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

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Product:

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

Acute inhalation toxicity : Acute toxicity estimate : 39.26 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

acetone:

Acute oral toxicity : LD50 Rat: 5,800 mg/kg

Acute inhalation toxicity : LC50 Rat: 132 mg/l
Exposure time: 3 h

LC50 Rat: 50.1 mg/l

Acute dermal toxicity : LD50 Guinea pig: > 7,426 mg/kg

LD50 Rabbit: > 7,426 mg/kg

Skin corrosion/irritation**Product:**

Remarks: May irritate skin.

Components:**oleic acid:**

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

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

Remarks: Irritating to eyes.

Respiratory or skin sensitisation

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

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No data available

Reproductive toxicity

No data available

STOT - single exposure

No data available

STOT - repeated exposure

No data available

Aspiration toxicity

No data available

Further information**Product:**

Remarks: No data available

SECTION 12. ECOLOGICAL INFORMATION**Ecotoxicity**

No data available

Persistence and degradability

No data available

Bioaccumulative potential**Product:**

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

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).

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.
Dispose of in accordance with local regulations.
- 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.

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.

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)
acetone	67-64-1	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 : Gases under pressure
Flammable (gases, aerosols, liquids, or solids)
Carcinogenicity

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 3.8208 %

California Prop. 65

WARNING: This product can expose you to chemicals including 4-methylpentan-2-one, which is/are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

The components of this product are reported in the following inventories:

DSL All components of this product are on the Canadian DSL
TSCA On TSCA Inventory

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)

SECTION 16. OTHER INFORMATION

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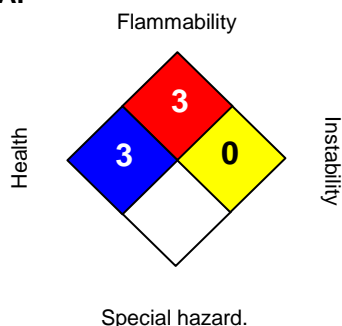
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Further information

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, hot surfaces, sparks, open flames and other ignition sources. 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: 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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Zep Inc. markets products under well recognized and established brand names such as Zep®, Zep Commercial®, Zep Professional®, Enforcer®, National Chemical™, Selig™, Misty®, Next Dimension™, Petro®, i-Chem®, TimeMist®, TimeWick™, MicrobeMax®, Country Vet®, Konk®, Original Bike Spirits®, Blue Coral®, Black Magic®, Rain-X®, Niagara National™, FC Forward Chemicals®, Rexodan®, Mykal™, and a number of private labeled brands.

SAFETY DATA SHEET



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