

A00390 MST PENETRATING LUBE 20net19

Version 2.0

Revision Date 10/05/2015

Print Date 02/29/2016

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Material name : A00390 MST PENETRATING LUBE 20net19

Material number : 00000000001002456

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

SECTION 2. HAZARDS IDENTIFICATION
Emergency Overview

| | |
|------------|-------------------------------------|
| Appearance | Aerosol containing a compressed gas |
| Colour | opaque, brown |
| Odour | solvent-like |

GHS Classification

Gases under pressure : Compressed gas
Skin irritation : Category 2
Eye irritation : Category 2A
Carcinogenicity : Category 1A

GHS Label element

Hazard pictograms : 

Signal word : Danger

Hazard statements : H280 Contains gas under pressure; may explode if heated.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H350 May cause cancer.

Precautionary statements : **Prevention:**
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P264 Wash skin thoroughly after handling.
P280 Wear eye protection/ face protection.

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P280 Wear protective gloves.

P281 Use personal protective equipment as required.

Response:

P302 + P352 IF ON SKIN: Wash with plenty of soap and water.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P308 + P313 IF exposed or concerned: Get medical advice/attention.

P332 + P313 If skin irritation occurs: Get medical advice/attention.

P337 + P313 If eye irritation persists: Get medical advice/attention.

P362 Take off contaminated clothing and wash before reuse.

Storage:

P405 Store locked up.

P410 + P403 Protect from sunlight. Store in a well-ventilated place.

Disposal:

Dispose of contents/container in accordance with local regulation.

Potential Health Effects**Carcinogenicity:**

| | | |
|--------------|---|----------|
| IARC | Group 1: Carcinogenic to humans | |
| | trichloroethylene | 79-01-6 |
| ACGIH | Group 2A: Probably carcinogenic to humans | |
| | tetrachloroethylene | 127-18-4 |
| | Suspected human carcinogen | |
| | trichloroethylene | 79-01-6 |
| OSHA | Confirmed animal carcinogen with unknown relevance to humans | |
| | tetrachloroethylene | 127-18-4 |
| | 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 | Reasonably anticipated to be a human carcinogen | |
| | tetrachloroethylene | 127-18-4 |
| | trichloroethylene | 79-01-6 |

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

| Chemical Name | CAS-No. | Concentration [%] |
|--|------------|-------------------|
| tetrachloroethylene | 127-18-4 | >= 50 - < 70 |
| Naphtha (petroleum), hydrotreated light | 64742-49-0 | >= 10 - < 20 |
| trichloroethylene | 79-01-6 | >= 5 - < 10 |
| Distillates (petroleum), hydrotreated heavy naphthenic | 64742-52-5 | >= 5 - < 10 |
| carbon dioxide | 124-38-9 | >= 1 - < 5 |

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1,2,4-trimethylbenzene

95-63-6

>= 1 - < 5

SECTION 4. FIRST AID MEASURES

- General advice : Move out of dangerous area.
Show this safety data sheet to the doctor in attendance.
Do not leave the victim unattended.
- If inhaled : If unconscious place in recovery position and seek medical advice.
If symptoms persist, call a physician.
- In case of skin contact : Wash off immediately with plenty of water for at least 15 minutes.
If on skin, rinse well with water.
If on clothes, remove clothes.
- In case of eye contact : Rinse immediately with plenty of water for at least 15 minutes.
Remove contact lenses.
Protect unharmed eye.
Keep eye wide open while rinsing.
If eye irritation persists, consult a specialist.
- 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.
Take victim immediately to hospital.

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
Chlorine compounds
Sulphur oxides
- 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.

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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.
Evacuate personnel to safe areas.
Ensure adequate ventilation.
Remove all sources of ignition.
Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

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/dust.
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.
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, cool and well-ventilated place.
Containers which are opened must be carefully resealed and kept upright to prevent leakage.
Observe label precautions.
Electrical installations / working materials must comply with the technological safety standards.

Materials to avoid : Strong oxidizing agents
Keep away from metals.

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

SAFETY DATA SHEET



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| Components | CAS-No. | Value type (Form of exposure) | Control parameters / Permissible concentration | Basis |
|---|------------|----------------------------------|---|-----------|
| tetrachloroethylene | 127-18-4 | TWA | 25 ppm | ACGIH |
| | | STEL | 100 ppm | ACGIH |
| | | TWA | 100 ppm | OSHA Z-2 |
| | | CEIL | 200 ppm | OSHA Z-2 |
| | | Peak | 300 ppm | OSHA Z-2 |
| trichloroethylene | 79-01-6 | TWA | 25 ppm 170 mg/m3 | OSHA P0 |
| | | TWA | 10 ppm | ACGIH |
| | | STEL | 25 ppm | ACGIH |
| | | TWA | 100 ppm | OSHA Z-2 |
| | | CEIL | 200 ppm | OSHA Z-2 |
| Distillates (petroleum), hydrotreated heavy naphthenic | 64742-52-5 | Peak | 300 ppm | OSHA Z-2 |
| | | TWA | 50 ppm 270 mg/m3 | OSHA P0 |
| | | STEL | 200 ppm 1,080 mg/m3 | OSHA P0 |
| | | TWA (Mist) | 5 mg/m3 | OSHA Z-1 |
| | | TWA (Inhalable fraction) | 5 mg/m3 | ACGIH |
| carbon dioxide | 124-38-9 | TWA | 5,000 ppm | ACGIH |
| | | STEL | 30,000 ppm | ACGIH |
| | | TWA | 5,000 ppm 9,000 mg/m3 | NIOSH REL |
| | | ST | 30,000 ppm 54,000 mg/m3 | NIOSH REL |
| | | TWA | 5,000 ppm 9,000 mg/m3 | OSHA Z-1 |
| | | TWA | 10,000 ppm 18,000 mg/m3 | OSHA P0 |
| | | STEL | 30,000 ppm 54,000 mg/m3 | OSHA P0 |
| 1,2,4-trimethylbenzene | 95-63-6 | TWA | 25 ppm 125 mg/m3 | NIOSH REL |

Biological occupational exposure limits

| Component | CAS-No. | Control parameters | Biological specimen | Sampling time | Permissible concentration | Basis |
|-------------------|----------|----------------------|---------------------|---|---------------------------|-----------|
| TETRACHLOROETHENE | 127-18-4 | Tetrachloroethylene | In blood | Prior to shift (16 hours after exposure ceases) | 0.5 mg/l | ACGIH BEI |
| TETRACHLOROETHENE | | Tetrachloroethylene | In end-exhaled air | Prior to shift (16 hours after exposure ceases) | 3 .parts per million | ACGIH BEI |
| TRICHLOROETHENE | 79-01-6 | Trichloroacetic acid | Urine | End of shift at | 15 mg/l | ACGIH BEI |

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| | | | | | | |
|-------------------|--|-------------------|--------------------|---------------------------------|----------|-----------|
| | | | | end of workweek | | |
| TRICHLOROETHYLENE | | Trichloroethanol | In blood | End of shift at end of workweek | 0.5 mg/l | ACGIH BEI |
| TRICHLOROETHYLENE | | Trichloroethylene | In blood | End of shift at end of workweek | | ACGIH BEI |
| TRICHLOROETHYLENE | | Trichloroethylene | In end-exhaled air | End of shift at end of workweek | | ACGIH BEI |

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

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

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : Aerosol containing a compressed gas

Colour : opaque, brown

Odour : solvent-like

Odour Threshold : No data available

pH : Not applicable

Melting point/freezing point : No data available

Boiling point : No data available

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| | | |
|--|---|-------------------------------|
| Flash point | : | No data available |
| Evaporation rate | : | No data available |
| Flammability (solid, gas) | : | The product is not flammable. |
| Upper explosion limit | : | No data available |
| Lower explosion limit | : | No data available |
| Vapour pressure | : | No data available |
| Relative vapour density | : | No data available |
| Density | : | 1.210 g/cm ³ |
| Solubility(ies) | | |
| Water solubility | : | insoluble |
| 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 | : | 18.53 kJ/g |

SECTION 10. STABILITY AND REACTIVITY

| | | |
|------------------------------------|---|--|
| Reactivity | : | Stable |
| Chemical stability | : | Stable under normal conditions. |
| Possibility of hazardous reactions | : | 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 Aluminium Metals |
| Hazardous decomposition products | : | Carbon oxides Sulphur oxides Chlorine Phosgene Hydrogen fluoride |

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SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity

Product:

Acute oral toxicity : Acute toxicity estimate : 4,421 mg/kg
Method: Calculation method

Acute inhalation toxicity : Acute toxicity estimate : > 10 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Method: Calculation method

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

Components:**tetrachloroethylene:**

Acute oral toxicity : LD50 Oral Rat: 2,629 mg/kg

Acute inhalation toxicity : LC50 Rat: 34,200 mg/l
Exposure time: 8 h

Acute dermal toxicity : LD50 Dermal Rabbit: 5,000 mg/kg

trichloroethylene:

Acute oral toxicity : LD50 Oral Rat: 4,920 mg/kg

Acute inhalation toxicity : LC50 Mouse: 8450 ppm
Exposure time: 4 h

Acute dermal toxicity : LD50 Dermal Rabbit: > 20,000 mg/kg

Distillates (petroleum), hydrotreated heavy naphthenic:

Acute oral toxicity : LD50 Rat: > 5,000 mg/kg

Acute inhalation toxicity : LC50 Rat: > 5 mg/l
Exposure time: 4 h

Acute dermal toxicity : LD50 Rabbit: > 5,000 mg/kg

Skin corrosion/irritation

Product:

Remarks: May cause skin irritation and/or dermatitis.

Serious eye damage/eye irritation

Product:

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Remarks: May cause irreversible eye damage.

Respiratory or skin sensitisation

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

No data available

Reproductive toxicity

No data available

- tetrachloroethylene:
- Naphtha (petroleum), hydrotreated light:
- trichloroethylene:
- Distillates (petroleum), hydrotreated heavy naphthenic:
- carbon dioxide:
- 1,2,4-trimethylbenzene:

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

Components:

tetrachloroethylene :

Partition coefficient: n-octanol/water : log Pow: 3.40

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trichloroethylene :

| | |
|--|-----------------|
| Partition coefficient: n-octanol/water | : log Pow: 2.29 |
|--|-----------------|

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 | : An environmental hazard cannot be excluded in the event of unprofessional handling or disposal., Toxic to aquatic life. |

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. |

SECTION 14. TRANSPORT INFORMATION

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

| |
|---|
| Transportation Regulation: IMDG (Vessel): UN1950, AEROSOLS, NON-FLAMMABLE, 2.2, - Limited quantity |
|---|

| |
|--|
| Transportation Regulation: IATA (Cargo Air): UN1950, AEROSOLS, NON-FLAMMABLE, 2.2, - Limited quantity |
|--|

| |
|--|
| Transportation Regulation: IATA (Passenger Air): UN1950, AEROSOLS, NON-FLAMMABLE, 2.2, - Limited quantity |
|--|

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 Transportation Regulation: TDG (Canada):
 UN1950, AEROSOLS, NON-FLAMMABLE, 2.2, - Limited quantity

SECTION 15. REGULATORY INFORMATION

EPCRA - Emergency Planning and Community Right-to-Know Act
CERCLA Reportable Quantity

| Components | CAS-No. | Component RQ (lbs) | Calculated product RQ (lbs) |
|---------------------|----------|-----------------------|--------------------------------|
| tetrachloroethylene | 127-18-4 | 100 | 182 |

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
 Acute Health 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:

| | | |
|------------------------|----------|----------|
| tetrachloroethylene | 127-18-4 | 54.99 % |
| trichloroethylene | 79-01-6 | 8.385 % |
| 1,2,4-trimethylbenzene | 95-63-6 | 1.0023 % |

California Prop 65 WARNING! This product contains a chemical known to the State of California to cause cancer.

| | |
|---------------------|----------|
| tetrachloroethylene | 127-18-4 |
| trichloroethylene | 79-01-6 |
| ethylbenzene | 100-41-4 |
| benzene | 71-43-2 |
| naphthalene | 91-20-3 |

WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

| | |
|---------|----------|
| toluene | 108-88-3 |
| benzene | 71-43-2 |

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
AICS On the inventory, or in compliance with the inventory
NZIoC Not in compliance with the inventory
PICCS On the inventory, or in compliance with the inventory
IECSC On the inventory, or in compliance with the inventory

Inventory Acronym and Validity Area Legend:

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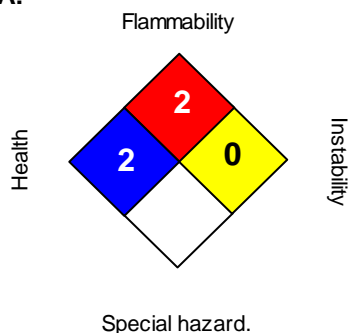
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AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TCSI (Taiwan), TSCA (USA)

SECTION 16. OTHER INFORMATION

Further information

NFPA:



HMIS III:

| | |
|-----------------|----|
| HEALTH | 2* |
| FLAMMABILITY | 2 |
| PHYSICAL HAZARD | 0 |

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

OSHA GHS Label Information:

Hazard pictograms



Signal word

Hazard statements

Precautionary statements

Danger:

Contains gas under pressure; may explode if heated. Causes skin irritation. Causes serious eye irritation. May cause cancer.

Prevention: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wash skin thoroughly after handling. Wear eye protection/ face protection. Wear protective gloves. Use personal protective equipment as required.

Response: IF ON SKIN: Wash with plenty of soap and water. 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. If skin irritation occurs: Get medical advice/ attention. If eye irritation persists: Get medical advice/ attention. Take off contaminated clothing and wash before reuse.

Storage: Store locked up. Protect from sunlight. Store in a well-ventilated place.

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

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We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind. The information in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. Users should make their own investigations to determine the suitability and applicability of the information for their particular purposes. This SDS has been prepared by the Compliance Services organization supporting this manufacturer, supplier or distributor.

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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.