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SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Material name	:	A00390 MST PENETRATING LUBE 20NET19
Material number	:	0000000001002456
Manufacturer or supplier's	deta	ails
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	:	CHEMTREC: 800-424-9300 - All Calls Recorded.
Emergency		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 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 1B
Specific target organ toxicity - single exposure	:	Category 3 (Central nervous system)

GHS label elements

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.
H336 May cause drowsiness or dizziness.
H350 May cause cancer.



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Precautionary statements	 Prevention: P201 Obtain special instructions P202 Do not handle until all safe and understood. P261 Avoid breathing dust/ fume P264 Wash skin thoroughly after P271 Use only outdoors or in a w P280 Wear protective gloves/ pro protection/ face protection. P251 Pressurized container: Do use. Response: P302 + P352 IF ON SKIN: Wash P304 + P340 + P312 IF INHALE and keep comfortable for breathi CENTER/doctor if you feel unwe P305 + P351 + P338 IF IN EYES for several minutes. Remove cor easy to do. Continue rinsing. P308 + P313 IF exposed or cond attention. P332 + P313 If skin irritation occ attention. P337 + P313 If eye irritation pers attention. P362 Take off contaminated clot Storage: P410 + P403 Protect from sunlig place. P410 + P412 Protect from sunlig temperatures exceeding 50 °C/ 1 Disposal: P501 Dispose of contents/contai regulation. 	ety precautions have been real e/ gas/ mist/ vapours/ spray. r handling. well-ventilated area. otective clothing/ eye not pierce or burn, even after n with plenty of soap and wate D: Remove person to fresh ai ing. Call a POISON II. S: Rinse cautiously with water ntact lenses, if present and cerned: Get medical advice/ sists: Get medical advice/ sists: Get medical advice/ hing and wash before reuse. th. Store in a well-ventilated th. Do not expose to 122 °F.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

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	64742-52-5	>= 5 - < 10
naphthenic		
carbon dioxide	124-38-9	>= 1 - < 3
1,2,4-trimethylbenzene	95-63-6	>= 1 - < 3

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



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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 with soap and water. Wash off immediately with plenty of water for at least 15 minutes. If on clothes, remove clothes. Wash contaminated clothing before re-use.
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.
Most important symptoms and effects, both acute and delayed	:	Effects are immediate and delayed. Symptoms may include irritation, redness, pain, and rash. Symptoms may include central nervous system depression, resulting in headache, nausea and/or dizziness. Chronic effects are delayed and symptoms may not be observed during an exposure. Effects are dependent on exposure (dose, concentration, contact time). Causes skin irritation. Causes serious eye irritation. May cause drowsiness or dizziness. May cause 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



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Specific hazards during firefighting	:	Do not allow run-off from fire fighting to courses.	o enter drains or water
Hazardous combustion products	:	Carbon dioxide (CO2) Carbon monoxide Smoke Chlorine compounds	
Specific extinguishing methods	:	Use extinguishing measures that are a circumstances and the surrounding en	
Further information	:	Collect contaminated fire extinguishing must not be discharged into drains. Fire residues and contaminated fire ex be disposed of in accordance with loca	tinguishing water must
Special protective equipment for firefighters	:	Wear self-contained breathing apparat necessary.	us for firefighting if

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 or spray mist. Avoid exposure - obtain special instructions before use. Provide sufficient air exchange and/or exhaust in work rooms. 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. 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



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	red-hot objects. Keep in a dry, cool and well-ventila Containers which are opened must kept upright to prevent leakage. Observe label precautions. Electrical installations / working mathe the technological safety standards	aterials must comply with
Materials to avoid	: Strong oxidizing agents	

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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
		TWA	25 ppm 170 mg/m3	OSHA P0
		STEL	100 ppm 685 mg/m3	CAL PEL
		С	300 ppm	CAL PEL
		PEL	25 ppm 170 mg/m3	CAL PEL
trichloroethylene	79-01-6	TWA	10 ppm	ACGIH
		STEL	25 ppm	ACGIH
		TWA	100 ppm	OSHA Z-2
		CEIL	200 ppm	OSHA Z-2
		Peak	300 ppm	OSHA Z-2
		TWA	50 ppm 270 mg/m3	OSHA P0
		STEL	200 ppm 1,080 mg/m3	OSHA P0
		STEL	100 ppm 537 mg/m3	CAL PEL
		С	300 ppm	CAL PEL
		PEL	25 ppm 135 mg/m3	CAL PEL
Distillates (petroleum), hydrotreated heavy naphthenic	64742-52-5	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

Components with workplace control parameters



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		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
		PEL	5,000 ppm 9,000 mg/m3	CAL PEL
		STEL	30,000 ppm 54,000 mg/m3	CAL PEL
1,2,4-trimethylbenzene	95-63-6	TWA	25 ppm 125 mg/m3	NIOSH REL

Biological occupational exposure limits

Component	CAS-No.	Control	Biological	Sampling	Permissible	Basis
Component	CAO-NO.	parameters	specimen	time	concentration	Dasis
TETRACHLOROETHEN	127-18-4					
	127-18-4	Tetrachloroe	In blood	Prior to	0.5 mg/l	ACGIH BEI
E		thylene		shift (16		
				hours		
				after		
				exposure		
				ceases)	-	
TETRACHLOROETHEN		Tetrachloroe	In end-	Prior to	3.ppm	ACGIH BEI
E		thylene	exhaled air	```		
				hours		
				after		
				exposure		
				ceases)		
TRICHLOROETHENE	79-01-6	Trichloroace	Urine	End of	15 mg/l	ACGIH BEI
		tic acid		shift at		
				end of		
				workwee		
				k		
TRICHLOROETHENE		Trichloroeth	In blood	End of	0.5 mg/l	ACGIH BEI
		anol		shift at	-	
				end of		
				workwee		
				k		
TRICHLOROETHENE		Trichloroeth	In end-	End of		ACGIH BEI
		ylene	exhaled air			
				end of		
				workwee		
				k		
		I	I			

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 Remarks		Protective gloves The suitability for a specific workplace should be discussed



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	with the producers of the protectiv	e gloves.
Eye protection	: Ensure that eyewash stations and the workstation location. Safety glasses	safety showers are close to
Skin and body protection	: Impervious clothing Choose body protection according concentration of the dangerous su	
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
рН	: 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)	: 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/cm3
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	

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Viscosity, kinematic Heat of combustion : No data available

: 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
Hazardous decomposition products	: Carbon oxides Chlorine Phosgene Hydrogen fluoride

SECTION 11. TOXICOLOGICAL INFORMATION

Potential Health Effects

Aggravated Medical Condition Symptoms of Overexposure	 None known. Effects are immediate and delayed. Symptoms may include irritation, redness, pain, and Symptoms may include central nervous system depr resulting in headache, nausea and/or dizziness. Chronic effects are delayed and symptoms may not observed during an exposure. Effects are dependent on exposure (dose, concentra contact time). 	ression, be
Carcinogenicity:		
IARC	Group 1: Carcinogenic to humans	
	trichloroethylene Group 2A: Probably carcinogenic to humans	79-01-6
ACGIH	tetrachloroethylene Suspected human carcinogen	127-18-4
	trichloroethylene Confirmed animal carcinogen with unknown relevance humans	79-01-6 to
	tetrachloroethylene	127-18-4



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OSHA NTP	No component of this product preser equal to 0.1% is on OSHA's list of re Known to be human carcinogen		r
	trichloroethylene Reasonably anticipated to be a hum	79-0 an carcinogen	1-6
	tetrachloroethylene	127-1	8-4
Acute toxicity			
Product:			
Acute oral toxicity	: Acute toxicity estimate : 4,421 mg Method: Calculation method	j/kg	
Acute inhalation toxicity	: Acute toxicity estimate : 149.66 m Exposure time: 4 h	ıg/l	
	Test atmosphere: dust/mist Method: Calculation method		
Acute dermal toxicity	: Acute toxicity estimate : > 5,000 n Method: Calculation method	ng/kg	
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	9	
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	g/kg	
Distillates (petroleum), hyd Acute oral toxicity	Irotreated heavy naphthenic: : 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:			

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Remarks: Irritating to skin.

Serious eye damage/eye irritation

Product:

Remarks: Irritating to eyes.

Respiratory or skin sensitisation

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

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
Components:		
tetrachloroethylene :		
Partition coefficient: n-	:	log Pow: 3.40



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octanol/water 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 Environme Stratospheric Ozone - CAA Sec Substances	
Remarks	This product neither contains, ne with a Class I or Class II ODS a Clean Air Act Section 602 (40 C + B).	s defined by the U.S.
Additional ecological information	: An environmental hazard canno event of unprofessional handling 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



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

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

 The following substance(s) is/are subject to TSCA 12(b) export notification requirements: trichloroethylene
 79-01-6

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	181

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 Serious eye damage or eye irritatio Carcinogenicity Specific target organ toxicity (single Skin corrosion or irritation	sure)
SARA 302	No chemicals in this material are su requirements of SARA Title III, Sec	ing
SARA 313	The following components are subj established by SARA Title III, Secti tetrachloroethylene trichloroethylene 1,2,4-trimethylbenzene	 vels 54.99 % 8.385 % 1.0023 %

California Prop. 65



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WARNING: This product can expose you to chemicals including tetrachloroethylene, trichloroethylene, ethylbenzene, benzene, naphthalene, which is/are known to the State of California to cause cancer, and trichloroethylene, toluene, benzene, which is/are known to the State of California to cause 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:

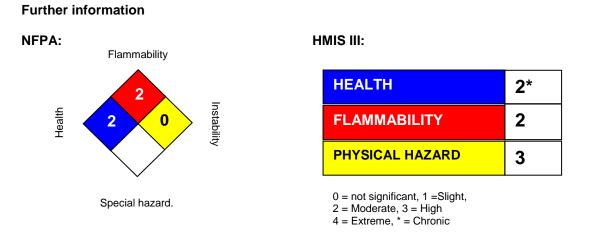
DSL	All components of this product are on the Canadian DSL
TSCA	On TSCA Inventory

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



OSHA - GHS Label Information:





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ventilated area. Wear protective gloves/ protective clothing/ eye protection/ face protection. Pressurized container: Do not pierce or burn, even after use. **Response:** IF ON SKIN: Wash with plenty of soap and water. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell. 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: Protect from sunlight. Store in a well-ventilated place. 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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