

Version 3.0	Revision Date 05/01/2018	Print Date 05/08/2018

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Material name	:	A00796 MST DE-ICER 16 NET 11.5		
Material number	:	00000000001033961		
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	:	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 : Vehicle Maintenance

SECTION 2. HAZARDS IDENTIFICATION

Emergency Overview

Appearance	Aerosol containing a compressed gas
Colour	clear
Odour	alcohol-like

GHS Classification

Gases under pressure	:	Compressed gas
Acute toxicity (Oral)	:	Category 3
Acute toxicity (Inhalation)	:	Category 3
Acute toxicity (Dermal)	:	Category 3
Specific target organ toxicity -	:	Category 1
single exposure		

GHS label elements

Hazard pictograms

Signal word

:	\diamond		
:	Danger	•	•

Hazard statements : H280 Contains gas under pressure; may explode if heated. H301 + H311 + H331 Toxic if swallowed, in contact with skin or if inhaled. H370 Causes damage to organs.



Version 3.0 R	Revision Date 05/01/2018	Print Date 05/08/2018
P P P P P P P P P P P P P P P P P P P	Prevention: P260 Do not breathe dust/ fume/ gas/ r P264 Wash skin thoroughly after handle P270 Do not eat, drink or smoke when P271 Use only outdoors or in a well-ve P280 Wear protective gloves/ protective P280 Wear protective gloves/ protective P281 Pressurized container: Do not pieles. Response: P301 + P310 + P330 IF SWALLOWED POISON CENTER/doctor. Rinse mouth P302 + P352 + P312 IF ON SKIN: Was Call a POISON CENTER/doctor if you P304 + P340 + P311 IF INHALED: Rer and keep comfortable for breathing. Call CENTER/doctor. P307 + P311 IF exposed: Call a POISO ohysician. P361 + P364 Take off immediately all of and wash it before reuse. Storage: P403 + P233 Store in a well-ventilated ightly closed. P405 Store locked up. P410 + P403 Protect from sunlight. Stop place. Disposal: P501 Dispose of contents/container in egulation.	ling. using this product. Intilated area. e clothing. erce or burn, even after Immediately call a h. sh with plenty of water. feel unwell. move person to fresh air all a POISON ON CENTER or doctor/ contaminated clothing place. Keep container ore in a well-ventilated

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture

: Mixture

Hazardous components

Chemical name	CAS-No.	Concentration [%]
methanol	67-56-1	>= 50 - < 70
propane-1,2-diol	57-55-6	>= 5 - < 10
carbon dioxide	124-38-9	>= 1 - < 3

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

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.



Version 3.0	Revision Date 05/01/2018	Print Date 05/08/2018
In case of skin contact	: Wash off immediately with plenty minutes. If on clothes, remove clothes. If symptoms persist, call a physic	
In case of eye contact	 Remove contact lenses. Protect unharmed eye. Keep eye wide open while rinsing If eye irritation persists, consult a Rinse immediately with plenty of 	specialist.
If swallowed	: Keep respiratory tract clear. Never give anything by mouth to If symptoms persist, call a physic DO NOT induce vomiting unless physician or poison control cente Take victim immediately to hospi	sian. directed to do so by a er.
Most important symptoms and effects, both acute and delayed	: Effects are immediate and delaye Symptoms of overexposure may dizziness; and confusion. May p paralysis, and convulsions.	include disorientation;
	Acute specific target organ toxicit on mode of exposure (oral, derm organs and systems affected, an conditions. Symptoms may inclu abdominal pain, headache, dizzir central nervous system depressio and unconsciousness - potentiall Effects are dependent on exposu contact time). Toxic if swallowed, in contact with Causes damage to organs. Review section 2 of SDS to see a	al, and inhalation), the d any preexisting medical ude respiratory difficulty, ness, drowsiness, vomiting, on, blurred vision, seizures, ly life threatening. ure (dose, concentration, h skin or if inhaled.
Notes to physician	: Treat symptomatically. Symptom	ns may be delayed.

SECTION 5. FIREFIGHTING MEASURES

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



Version 3.0	Revision Date 05/01/2018	Print Date 05/08/2018
Specific extinguishing methods	: Use extinguishing measures that circumstances and the surround	
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.	
Special protective equipment for firefighters	: Wear self-contained breathing an necessary.	oparatus 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	 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. Do not breathe vapours or spray mist. 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. No smoking. Observe label precautions. Electrical installations / working materials must comply with the technological safety standards. Keep in a dry, cool and well-ventilated place.



Version 3.0

Revision Date 05/01/2018

Print Date 05/08/2018

Materials to avoid

: Oxidizing agents

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
methanol	67-56-1	TWA	200 ppm	ACGIH
		STEL	250 ppm	ACGIH
		TWA	200 ppm 260 mg/m3	NIOSH REL
		ST	250 ppm 325 mg/m3	NIOSH REL
		TWA	200 ppm 260 mg/m3	OSHA Z-1
		STEL	250 ppm 325 mg/m3	OSHA P0
		TWA	200 ppm 260 mg/m3	OSHA P0
		С	1,000 ppm	CAL PEL
		PEL	200 ppm 260 mg/m3	CAL PEL
		STEL	250 ppm 325 mg/m3	CAL PEL
propane-1,2-diol	57-55-6	TWA	10 mg/m3	US WEEL
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
		PEL	5,000 ppm 9,000 mg/m3	CAL PEL
		STEL	30,000 ppm 54,000 mg/m3	CAL PEL

Biological occupational exposure limits

Component	CAS-No.	Control	Biological	Sampling	Permissible	Basis
		parameters	specimen	time	concentration	
Methanol	67-56-1	Methanol	Urine	End of	15 mg/l	ACGIH BEI
				shift (As	-	
				soon as		
				possible		
				after		
				exposure		
				ceases)		



Version 3.0	Revision Date 05/01/2018	Print Date 05/08/2018		
Engineering measures	: effective ventilation in all processi	: effective ventilation in all processing areas		
Personal protective equip	ment			
Respiratory protection	: Use respiratory protection unless ventilation is provided or exposure that exposures are within recomm	e assessment demonstrates		
Hand protection Material Remarks	Protective glovesThe suitability for a specific workp with the producers of the protective			
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 in product.	nmediately after handling the		

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: Aerosol containing a compressed gas	
Colour	: clear	
Odour	: alcohol-like	
Odour Threshold	: No data available	
рН	: Not applicable	
Melting point/freezing point	: No data available	
Boiling point	: No data available	
Flash point	: Not applicable	
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	



Version 3.0	Revision Date 05/01/2018	Print Date 05/08/2018
Density	: 0.900 g/cm3	
Solubility(ies)		
Water solubility	: soluble	
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	: 13.68 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	: Oxidizing agents
Hazardous decomposition products	: Carbon oxides Nitrogen oxides (NOx)

SECTION 11. TOXICOLOGICAL INFORMATION

Potential Health Effects

Aggravated Medical Condition	:	None known.
Symptoms of Overexposure	:	Effects are immediate and delayed. Symptoms of overexposure may include disorientation; dizziness; and confusion. May progress to unconsciousness, paralysis, and convulsions.
		Acute specific target organ toxicity effects will differ depending on mode of exposure (oral, dermal, and inhalation), the organs and systems affected, and any preexisting medical conditions. Symptoms may include respiratory difficulty, abdominal pain, headache, dizziness, drowsiness, vomiting,



Version 3.0	Revision Date 05/01/2018	Print Date 05/08/2018
	central nervous system depression and unconsciousness - potentially Effects are dependent on exposur contact time).	life threatening.
Carcinogenicity:		
IARC	No component of this product presen equal to 0.1% is identified as probabl	
ACGIH	human carcinogen by IARC. No component of this product presen equal to 0.1% is identified as a carcir	t at levels greater than or
OSHA	carcinogen by ACGIH. No component of this product presen	t at levels greater than or
NTP	equal to 0.1% is on OSHA's list of req No component of this product presen equal to 0.1% is identified as a known by NTP.	it at levels greater than or
Acute toxicity		
Product:		
Acute oral toxicity	: Acute toxicity estimate : 187.61 m Method: Calculation method	g/kg
Acute inhalation toxicity	: Acute toxicity estimate : 0.94 mg/l Exposure time: 4 h Test atmosphere: dust/mist Method: Calculation method	
Acute dermal toxicity	: Acute toxicity estimate : 562.83 m Method: Calculation method	g/kg
Skin corrosion/irritation		
No data available		
Serious eye damage/eye irritat	ion	
No data available		
Respiratory or skin sensitisation	on	
No data available		
Germ cell mutagenicity		
No data available		
Carcinogenicity		
No data available		
Reproductive toxicity		
No data available		
STOT - single exposure		
No data available		



Version 3.0

Revision Date 05/01/2018

Print Date 05/08/2018

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 <u>Components:</u> propane-1,2-diol : Partition coefficient: n-	
octanol/water	: log Pow: -1.07
Mobility in soil	
No data available	
Other adverse effects	
No data available <u>Product:</u>	
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

SECTION 13. DISPOSAL CONSIDERATIONS



Version 3.0	Revision Date 05/01/2018	Print Date 05/08/2018
Disposal methods		
Waste from residues	: Do not dispose of waste into sewe Do not contaminate ponds, watery chemical or used container. Dispose of in accordance with loca	vays or ditches with
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

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.

No substances are subject to TSCA 12(b) export notification requirements.

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

CERCLA Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
methanol	67-56-1	5000	*



Version 3.0	Revision Date 05/01/2018	Print Date 05/08/2018	
*: Calculated RQ exceeds rea	asonably attainable upper limit.		
SARA 304 Extremely Hazar	rdous Substances Reportable Quan	tity	
This material does not contai	in any components with a section 304	EHS RQ.	
SARA 311/312 Hazards		Gases under pressure Acute toxicity (any route of exposure) Specific target organ toxicity (single or repeated exposure)	
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: methanol 67-56-1 53.302 %		
California Prop. 65			
	WARNING: This product can ex including methanol, which is/are California to cause birth defects For more information go to www	e known to the State of sor other reproductive harm.	

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

•

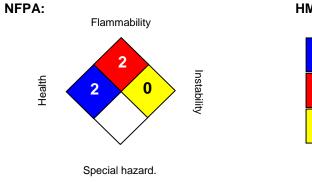


Version 3.0

Revision Date 05/01/2018

Print Date 05/08/2018

Further information



HMIS III:

HEALTH	4
FLAMMABILITY	2
PHYSICAL HAZARD	3

0 = not significant, 1 =Slight,

2 = Moderate, 3 = High 4 = Extreme, * = Chronic

OSHA - GHS Label Information:

Hazard pictograms	
Signal word	: Danger:
Hazard statements	: Contains gas under pressure; may explode if heated. Toxic if swallowed, in contact with skin or if inhaled. Causes damage to organs.
Precautionary statements	:
	 Prevention: Do not breathe dust/ fume/ gas/ mist/ vapours/ spray. Wash skin thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Wear protective gloves/ protective clothing. Pressurized container: Do not pierce or burn, even after use. Response: IF SWALLOWED: Immediately call a POISON CENTER/doctor. Rinse mouth. IF ON SKIN: Wash with plenty of water. Call a POISON CENTER/doctor if you feel unwell. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor. IF exposed: Call a POISON CENTER or doctor/ physician. Take off immediately all contaminated clothing and wash it before reuse. Storage: Store in a well-ventilated place. Keep container tightly closed. Store locked
	up. Protect from sunlight. Store in a well-ventilated place.
	Disposal: Dispose of contents/container in accordance with local regulation.

Version:	3.0
Revision Date:	05/01/2018
Print Date:	05/08/2018

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.

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®,



Version 3.0

Revision Date 05/01/2018

Print Date 05/08/2018

Konk®, Original Bike Spirits®, Blue Coral®, Black Magic®, Rain-X®, Niagara National[™], FC Forward Chemicals®,Rexodan®, Mykal[™], and a number of private labeled brands.