



VEN-MAR SALES, INC.

A00374 MST ENGINE DEGREASER 20net16

Version 2.0 Revision Date 09/10/2015 Print Date 02/08/2016

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Material name : A00374 MST ENGINE DEGREASER 20net16

Material number : 0000000001002335

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

SECTION 2. HAZARDS IDENTIFICATION

Emergency Overview

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

GHS Classification

Gases under pressure : Liquefied gas
Skin corrosion : Category 1B
Serious eye damage : Category 1
Carcinogenicity : Category 1A
Reproductive toxicity : Category 2

GHS Label element

Hazard pictograms





Signal word : Danger

Hazard statements : H280 Contains gas under pressure; may explode if heated.

H314 Causes severe skin burns and eye damage.

H350 May cause cancer.

H361 Suspected of damaging fertility or the unborn child.

Precautionary statements : Prevention:

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read

and understood.

P260 Do not breathe dust or mist.



Version 2.0 Revision Date 09/10/2015 Print Date 02/08/2016

P264 Wash skin thoroughly after handling.

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

P281 Use personal protective equipment as required.

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.

Response:

P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303 + P361 + P353 IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.

P304 + P340 + P310 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/ physician. P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/ physician.

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

P363 Wash contaminated clothing before reuse.

Storage:

P405 Store locked up.

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

P412 Do not expose to temperatures exceeding 50 °C/ 122 °F.

Disposal:

Dispose of contents/container in accordance with local regulation.

Potential Health Effects

Carcinogenicity:

IARC Group 2B: Possibly carcinogenic to humans

cumene 98-82-8

Group 1: Carcinogenic to humans

benzene 71-43-2

ACGIH Confirmed animal carcinogen with unknown relevance to

humans

2-butoxyethanol 111-76-2

Confirmed human carcinogen

benzene 71-43-2

OSHA specifically regulated carcinogen

benzene 71-43-2

NTP Known to be human carcinogen

benzene 71-43-2

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture



Version 2.0 Revision Date 09/10/2015 Print Date 02/08/2016

Hazardous components

Chemical Name	CAS-No.	Concentration [%]
Solvent naphtha (petroleum), heavy arom.	64742-94-5	>= 5 - < 10
2-butoxyethanol	111-76-2	>= 5 - < 10
2-aminoethanol	141-43-5	>= 1 - < 5
propane	74-98-6	>= 1 - < 5
2,2',2"-nitrilotriethanol	102-71-6	>= 1 - < 5
butane	106-97-8	>= 1 - < 5
1,2,4-trimethylbenzene	95-63-6	>= 1 - < 5
mesitylene	108-67-8	>= 1 - < 5
1,2,3-trimethylbenzene	526-73-8	>= 1 - < 5
Benzenesulfonic acid, C10-16-alkyl derivs.	68584-22-5	>= 1 - < 5
TEA Tallate	8043-27-4	>= 1 - < 5
sodium dodecylbenzenesulfonate	25155-30-0	>= 1 - < 5
tetrapotassium pyrophosphate	7320-34-5	>= 1 - < 5
Triethyl amine oleate	9680-30-2	>= 1 - < 5
toluene	108-88-3	>= 0.1 - < 1
benzene	71-43-2	>= 0.1 - < 1

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 : Immediate medical treatment is necessary as untreated

wounds from corrosion of the skin heal slowly and with

difficulty.

Wash off immediately with plenty of water for at least 15

minutes.

If on clothes, remove clothes.

In case of eye contact : Rinse immediately with plenty of water for at least 15 minutes.

Continue rinsing eyes during transport to hospital.

Remove contact lenses. Protect unharmed eye.

Keep eye wide open while rinsing.

If eye irritation persists, consult a specialist.

If swallowed : Clean mouth with water and drink afterwards plenty of water.

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.



Version 2.0 Revision Date 09/10/2015 Print Date 02/08/2016

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

Carbon monoxide

Smoke

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.

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

Soak up with inert absorbent material (e.g. sand, silica gel,

acid binder, universal binder, sawdust).

Sweep up or vacuum up spillage and collect in suitable

container for disposal.

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



Version 2.0 Revision Date 09/10/2015 Print Date 02/08/2016

application area.

Take precautionary measures against static discharges.

Provide sufficient air exchange and/or exhaust in work rooms.

Always replace cap after use.

Dispose of rinse water in accordance with local and national

regulations.

Do not breathe vapours or spray mist.

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.

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
2-butoxyethanol	111-76-2	TWA	20 ppm	ACGIH
		TWA	5 ppm 24 mg/m3	NIOSH REL
		TWA	50 ppm 240 mg/m3	OSHA Z-1
		TWA	25 ppm 120 mg/m3	OSHA P0
2-aminoethanol	141-43-5	TWA	3 ppm	ACGIH
		STEL	6 ppm	ACGIH
		TWA	3 ppm 8 mg/m3	NIOSH REL
		ST	6 ppm 15 mg/m3	NIOSH REL
		TWA	3 ppm 6 mg/m3	OSHA Z-1
		STEL	6 ppm 15 mg/m3	OSHA P0
		TWA	3 ppm 8 mg/m3	OSHA P0
propane	74-98-6	TWA	1,000 ppm	ACGIH
		TWA	1,000 ppm 1,800 mg/m3	NIOSH REL
		TWA	1,000 ppm 1,800 mg/m3	OSHA Z-1
		TWA	1,000 ppm 1,800 mg/m3	OSHA P0
2,2',2"-nitrilotriethanol	102-71-6	TWA	5 mg/m3	ACGIH
butane	106-97-8	TWA	800 ppm	NIOSH REL



 Version 2.0
 Revision Date 09/10/2015
 Print Date 02/08/2016

			1,900 mg/m3	
		TWA	800 ppm 1,900 mg/m3	OSHA P0
1,2,4-trimethylbenzene	95-63-6	TWA	25 ppm 125 mg/m3	NIOSH REL
mesitylene	108-67-8	TWA	25 ppm 125 mg/m3	NIOSH REL
1,2,3-trimethylbenzene	526-73-8	TWA	25 ppm 125 mg/m3	NIOSH REL
xylenes	1330-20-7	TWA	100 ppm	ACGIH
		STEL	150 ppm	ACGIH
cumene	98-82-8	TWA	50 ppm	ACGIH
		TWA	50 ppm 245 mg/m3	NIOSH REL
		TWA	50 ppm 245 mg/m3	OSHA Z-1
		TWA	50 ppm 245 mg/m3	OSHA P0
benzene	71-43-2	TWA	0.5 ppm	ACGIH
		STEL	2.5 ppm	ACGIH
		TWA	0.1 ppm	NIOSH REL
		ST	1 ppm	NIOSH REL
		TWA	10 ppm	OSHA Z-2
		CEIL	25 ppm	OSHA Z-2
		Peak	50 ppm	OSHA Z-2
		PEL	1 ppm	OSHA CARC
		STEL	5 ppm	OSHA CARC

Biological occupational exposure limits

Component	CAS-No.	Control	Biological	Sampling	Permissible	Basis
		parameters	specimen	time	concentration	
2-BUTOXYETHANOL	111-76-2	Butoxyacetic acid (BAA)	Urine	End of shift (As soon as	200 mg/g	ACGIH BEI
				possible		
				after		
				exposure ceases)		
Remarks: Creatinine						
METHYLBENZENE	108-88-3	Toluene	In blood	Prior to last shift	0.02 mg/l	ACGIH BEI
				of		
				workwee k		
METHYLBENZENE		Toluene	Urine	End of	0.03 mg/l	ACGIH BEI
				shift (As soon as		
				possible		
				after		
				exposure		
				ceases)		
METHYLBENZENE		o-Cresol	Urine	End of	0.3 mg/g	ACGIH BEI
				shift (As soon as		
				possible		
				after		
				exposure		



Version 2.0 Revision Date 09/10/2015 Print Date 02/08/2016

					ceases)		
Remarks:	Creatinine						
benzene		71-43-2	S- Phenylmerc apturic acid	Urine	End of shift (As soon as possible after exposure ceases)	0.03 mg/g	ACGIH BEI
Remarks:	Creatinine						
benzene			t,t-Muconic acid	Urine	End of shift (As soon as possible after exposure ceases)	0.5 mg/g	ACGIH BEI
Remarks:	Creatinine						

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 : 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 liquefied gas

Colour : clear

Odour : solvent-like

Odour Threshold : No data available

pH : 9 - 10

Melting point/freezing point : No data available Boiling point : No data available



A00374 MST ENGINE DEGREASER 20net16

Version 2.0 Revision Date 09/10/2015 Print Date 02/08/2016

Flash point

Method: closed cup

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 : No data available

Solubility(ies)

Water solubility : completely 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 : 16.50 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

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity

Product:



A00374 MST ENGINE DEGREASER 20net16

Version 2.0 Revision Date 09/10/2015 Print Date 02/08/2016

Acute oral toxicity : Acute toxicity estimate : 3,585 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:

2-aminoethanol:

Acute oral toxicity : LD50 Oral Mouse: 700 mg/kg

LD50 Oral Rat: 1,515 mg/kg

Acute inhalation toxicity : LC50 Mouse: > 1.21 mg/l

propane:

Acute inhalation toxicity : LC50 Mouse: 1,237 mg/l

Exposure time: 2 h

LC50 Rat: 658 mg/l Exposure time: 4 h

LC50 Rat: 1,355 mg/l

2,2',2"-nitrilotriethanol:

Acute oral toxicity : LD50 Rat: 6,400 mg/kg

Acute dermal toxicity : LD50 Rabbit: > 2,000 mg/kg

butane:

Acute inhalation toxicity : LC50 Mouse: 1,237 mg/l

Exposure time: 2 h

LC50 Rat: 1,355 mg/l

sodium dodecylbenzenesulfonate:

Acute oral toxicity : LD50 Oral Rat: 438 mg/kg

Skin corrosion/irritation

Product:

Remarks: Extremely corrosive and destructive to tissue.

Serious eye damage/eye irritation

Product:

Zeplnc

A00374 MST ENGINE DEGREASER 20net16

Version 2.0 Revision Date 09/10/2015 Print Date 02/08/2016

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

Solvent naphtha (petroleum), heavy arom.:

2-butoxyethanol:

2-aminoethanol:

propane:

2,2',2"-nitrilotriethanol:

butane:

1,2,4-trimethylbenzene:

mesitylene:

1,2,3-trimethylbenzene:

Benzenesulfonic acid, C10-16-alkyl derivs.:

TEA Tallate:

sodium dodecylbenzenesulfonate:

tetrapotassium pyrophosphate:

Triethyl amine oleate:

toluene:

benzene:

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



A00374 MST ENGINE DEGREASER 20net16

Version 2.0 Revision Date 09/10/2015 Print Date 02/08/2016

Bioaccumulative potential

Product:

Partition coefficient: n-

octanol/water Components:

: Remarks: No data available

Solvent naphtha (petroleum), heavy arom. :

Partition coefficient: n-

: log Pow: 4.2

octanol/water

2,2',2"-nitrilotriethanol:

Partition coefficient: n-

: Pow: 1

octanol/water

butane:

Partition coefficient: n-

: Pow: 2.89

octanol/water

toluene:

Partition coefficient: n-

: Pow: 2.73

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).

Additional ecological

information

: An environmental hazard cannot be excluded in the

event of unprofessional handling or disposal., Harmful to

aquatic life with long lasting effects.

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.



A00374 MST ENGINE DEGREASER 20net16

Version 2.0 Revision Date 09/10/2015 Print Date 02/08/2016

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

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)
benzene	71-43-2	10	*

^{*:} 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 : Acute Health Hazard

Chronic Health Hazard

Sudden Release of Pressure 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:

 1,2,4-trimethylbenzene
 95-63-6
 3.1722 %

 benzene
 71-43-2
 0.1081 %

California Prop 65 WARNING! This product contains a chemical known to the

State of California to cause cancer.

 cumene
 98-82-8

 benzene
 71-43-2

 naphthalene
 91-20-3

 2,2'-iminodiethanol
 111-42-2

WARNING: This product contains a chemical known to the



A00374 MST ENGINE DEGREASER 20net16

Version 2.0 Revision Date 09/10/2015 Print Date 02/08/2016

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
Not in compliance with the inventory
NZIoC
Not in compliance with the inventory
PICCS
Not in compliance with the inventory
IECSC
Not in compliance with the inventory

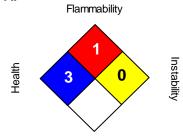
Inventory Acronym and Validity Area Legend:

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:



Special hazard.

HMIS III:

HEALTH	3*
FLAMMABILITY	1
PHYSICAL HAZARD	2

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. Causes severe skin burns and eye damage. May cause cancer. Suspected of damaging fertility or the unborn child.

Precautionary statements

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

Response: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/shower. IF INHALED: Remove victim to fresh air and keep at rest in a position



A00374 MST ENGINE DEGREASER 20net16

Version 2.0 Revision Date 09/10/2015 Print Date 02/08/2016

comfortable for breathing. Immediately call a POISON CENTER or doctor/physician. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician. IF exposed or concerned: Get medical advice/attention. Wash contaminated clothing before reuse.

Storage: Store locked up. Protect from sunlight. Store in a w ell-ventilated place. Do not expose to temperatures exceeding 50 °C/ 122 °F.

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

Version:	2.0
Revision Date:	09/10/2015
Print Date:	02/08/2016

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