SAFETY DATA SHEET

A00366 MST SUPERSOLVE 20net18

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Material name : A00366 MST SUPERSOLVE 20net18
Material number : 000000000001033957

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     | colourless                        |
| Odour      | characteristic                    |

GHS Classification

- Gases under pressure : Compressed gas
- Skin irritation : Category 2
- Eye irritation : Category 2A
- Carcinogenicity : Category 1A
- Specific target organ toxicity - single exposure : Category 3 (Central nervous system)

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.
H336 May cause drowsiness or dizziness.
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.
P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
P264 Wash skin thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear eye protection/ face protection.
P280 Wear protective gloves.
P281 Use personal protective equipment as required.

Response:
P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
P304 + P340 + P312 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/ physician if you feel unwell.
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 Protect from sunlight.
P403 + P235 Store in a well-ventilated place. Keep cool.

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

Potential Health Effects

Carcinogenicity:

IARC
Group 1: Carcinogenic to humans
trichloroethylene  79-01-6

ACGIH
Suspected human carcinogen
trichloroethylene  79-01-6

OSHA
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
trichloroethylene  79-01-6

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous components

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS-No.</th>
<th>Concentration [%]</th>
</tr>
</thead>
<tbody>
<tr>
<td>trichloroethylene</td>
<td>79-01-6</td>
<td>&gt;= 90 - &lt;= 100</td>
</tr>
<tr>
<td>carbon dioxide</td>
<td>124-38-9</td>
<td>&gt;= 1 - &lt; 5</td>
</tr>
</tbody>
</table>
SECTION 4. FIRST AID MEASURES

General advice: Show this safety data sheet to the doctor in attendance. Do not leave the victim unattended.

If inhaled: Consult a physician after significant exposure. If unconscious place in recovery position and seek medical advice.

In case of skin contact: If skin irritation persists, call a physician. Wash off immediately with plenty of water for at least 15 minutes. If on clothes, remove clothes.

In case of eye contact: Remove contact lenses. Flush eyes with water at least 15 minutes. Get medical attention if eye irritation develops or persists. Keep eye wide open while rinsing.

If swallowed: Keep respiratory tract clear. DO NOT induce vomiting unless directed to do so by a physician or poison control center.

SECTION 5. FIREFIGHTING MEASURES

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

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. Remove all sources of ignition. Ensure adequate ventilation. 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: Do not breathe vapours/dust. Avoid exposure - obtain special instructions before use. Avoid contact with skin and eyes. For personal protection see section 8.

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. 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: Oxidizing agents

Storage temperature: < 49 °C

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Value type (Form of exposure)</th>
<th>Control parameters / Permissible concentration</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>trichloroethylene</td>
<td>79-01-6</td>
<td>TWA</td>
<td>10 ppm</td>
<td>ACGIH</td>
</tr>
<tr>
<td></td>
<td></td>
<td>STEL</td>
<td>25 ppm</td>
<td>ACGIH</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA</td>
<td>100 ppm</td>
<td>OSHA Z-2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CEIL</td>
<td>200 ppm</td>
<td>OSHA Z-2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Peak</td>
<td>300 ppm</td>
<td>OSHA Z-2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA</td>
<td>50 ppm</td>
<td>OSHA P0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>STEL</td>
<td>200 ppm</td>
<td>OSHA P0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>270 mg/m3</td>
<td>OSHA P0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1,080 mg/m3</td>
<td>OSHA P0</td>
</tr>
<tr>
<td>carbon dioxide</td>
<td>124-38-9</td>
<td>TWA</td>
<td>5,000 ppm</td>
<td>ACGIH</td>
</tr>
<tr>
<td></td>
<td></td>
<td>STEL</td>
<td>30,000 ppm</td>
<td>ACGIH</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA</td>
<td>5,000 ppm</td>
<td>NIOSH REL</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>9,000 mg/m3</td>
<td>NIOSH REL</td>
</tr>
</tbody>
</table>
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Version 1.1   Revision Date 04/24/2015   Print Date 06/09/2015

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS-No.</th>
<th>Control parameters</th>
<th>Biological specimen</th>
<th>Sampling time</th>
<th>Permissible concentration</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRICHLOROETHENE</td>
<td>79-01-6</td>
<td>Trichloroacetic acid</td>
<td>Urine</td>
<td>End of shift at end of workweek</td>
<td>15 mg/l</td>
<td>ACGIH BEI</td>
</tr>
<tr>
<td>TRICHLOROETHENE</td>
<td></td>
<td>Trichloroethanol</td>
<td>In blood</td>
<td>End of shift at end of workweek</td>
<td>0.5 mg/l</td>
<td>ACGIH BEI</td>
</tr>
<tr>
<td>TRICHLOROETHENE</td>
<td></td>
<td>Trichloroethylene</td>
<td>In blood</td>
<td>End of shift at end of workweek</td>
<td></td>
<td>ACGIH BEI</td>
</tr>
<tr>
<td>TRICHLOROETHENE</td>
<td></td>
<td>Trichloroethylene</td>
<td>In exhaled air</td>
<td>End of shift at end of workweek</td>
<td></td>
<td>ACGIH BEI</td>
</tr>
</tbody>
</table>

Biological occupational exposure limits

Personal protective equipment

Respiratory protection: In case of insufficient ventilation, wear suitable respiratory equipment.
In the case of dust or aerosol formation use respirator with an approved filter.

Hand protection

Remarks: The suitability for a specific workplace should be discussed with the producers of the protective gloves.

Eye protection: Eye wash bottle with pure water
Wear face-shield and protective suit for abnormal processing problems.
Safety glasses
Face-shield

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: colourless
Odour: characteristic
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
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
Density: no data available
Solubility(ies)
Water solubility: insoluble
Partition coefficient: n-octanol/water: no data available
Heat of combustion: 7.03 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.
Incompatible materials: Oxidizing agents
Aluminium
Hazardous decomposition products: Carbon oxides
Phosgene
SECTION 11. TOXICOLOGICAL INFORMATION

**Acute toxicity**

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

**Components:**
- **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

**Skin corrosion/irritation**

**Product:**
- Remarks: May cause skin irritation in susceptible persons.

**Serious eye damage/eye irritation**

**Product:**
- Remarks: Eye irritation

**Respiratory or skin sensitisation**
- no data available

**Germ cell mutagenicity**
- no data available

**Carcinogenicity**
- no data available

**Reproductive toxicity**
- no data available
  - **trichloroethylene:**
  - **carbon dioxide:**

**STOT - single exposure**
- no data available

**STOT - repeated exposure**
- no data available

**Aspiration toxicity**
- no data available
Further information

**Product:**

Remarks: Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting., Concentrations substantially above the TLV value may cause narcotic effects., Solvents may degrease the skin.

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**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:**

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., Harmful to aquatic life with long lasting effects.

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**SECTION 13. DISPOSAL CONSIDERATIONS**

**Disposal methods**

Waste from residues : 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, 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

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Component RQ (lbs)</th>
<th>Calculated product RQ (lbs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>trichloroethylene</td>
<td>79-01-6</td>
<td>100</td>
<td>103</td>
</tr>
</tbody>
</table>

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
- 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:
  - trichloroethylene 79-01-6 97.4999 %

California Prop 65
- WARNING! This product contains a chemical known to the
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**: On the inventory, or 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:

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

**SECTION 16. OTHER INFORMATION**

Further information

- **NFPA**:
  - **Flammability**
    - Health: 1
    - Flammability: 1
    - Instability: 0
    - Special hazard.

- **HMIS III**:
  - **HEALTH**: 2
  - **FLAMMABILITY**: 0
  - **PHYSICAL HAZARD**: 2

**OSHA GHS Label Information:**

<table>
<thead>
<tr>
<th>Hazard pictograms</th>
<th>Signal word</th>
<th>Hazard statements</th>
<th>Precautionary statements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Danger: Contains gas under pressure; may explode if heated. Causes skin irritation. Causes serious eye irritation. May cause drowsiness or dizziness. May cause cancer.</td>
<td>Prevention: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid breathing dust/fume/gas/mist/vapours/spray. Wash skin thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear eye protection/face protection. Wear protective gloves. Use personal protective equipment as required.</td>
<td>Response: IF ON SKIN: Wash with plenty of soap and water. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician 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.</td>
<td></td>
</tr>
</tbody>
</table>
advice/attention. Take off contaminated clothing and wash before reuse.

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

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

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