

## A07703MA TM MICRO MANGO 3000 SH 5N2.7

| Version 1.0 | Revision Date 02/21/2015 | Print Date 06/30/2015 |
|-------------|--------------------------|-----------------------|
|             |                          |                       |

## SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

| Material name                | :    | A07703MA TM MICRO MANGO 3000 SH 5N2.7                   |
|------------------------------|------|---|
| Material number              | :    | 0000000001042430  |
| Manufacturer or supplier's o | leta | ils   |
| Company                      | :    | Zep Inc.  |
| Address                      | :    | 1310 Seaboard Industrial Blvd., NW<br>Atlanta, GA 30318 |
| Telephone                    | :    | 404-352-1680  |

| Emergency telephone nu            | mbe | rs   |
|-----------------------------------|-----|--|
| For SDS Information               | :   | Compliance Services 1-877-428-9937   |
| For a Medical Emergency           | :   | 877-541-2016 Toll Free - All Calls Recorded  |
| For a Transportation<br>Emergency | :   | CHEMTREC: 800-424-9300 - All Calls Recorded.<br>In the District of Columbia 202-483-7616 |

#### **SECTION 2. HAZARDS IDENTIFICATION**

#### **Emergency Overview**

| Appearance | Aerosol containing a liquefied gas |
|------------|------------------------------------|
| Colour     | colourless, light yellow           |
| Odour      | characteristic                     |

#### **GHS** Classification

| Flammable aerosols<br>Gases under pressure<br>Eye irritation<br>Specific target organ toxicity -<br>single exposure | <ul> <li>Category 2</li> <li>Liquefied gas</li> <li>Category 2A</li> <li>Category 3 (Central nervous system)</li> </ul>  |
|---|--|
| GHS Label element   |  |
| Hazard pictograms   |  |
| Signal word   | : Warning  |
| Hazard statements   | <ul> <li>H223 Flammable aerosol.</li> <li>H280 Contains gas under pressure; may explode if heated.</li> <li>H319 Causes serious eye irritation.</li> <li>H336 May cause drowsiness or dizziness.</li> </ul>            |
| Precautionary statements  | <ul> <li>Prevention:</li> <li>P210 Keep away from heat, hot surfaces, sparks, open flames<br/>and other ignition sources. No smoking.</li> <li>P211 Do not spray on an open flame or other ignition source.</li> </ul> |



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| <ul> <li>P251 Pressurized container: Do not pierce or burn, even after use.</li> <li>P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.</li> <li>P264 Wash skin thoroughly after handling.</li> <li>P271 Use only outdoors or in a well-ventilated area.</li> <li>P280 Wear eye protection/ face protection.</li> <li><b>Response:</b></li> <li>P304 + P340 + P312 IF INHALED: Remove victim to fresh aid and keep at rest in a position comfortable for breathing. Call POISON CENTER or doctor/ physician if you feel unwell.</li> <li>P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</li> <li>P337 + P313 If eye irritation persists: Get medical advice/ attention.</li> <li><b>Storage:</b></li> <li>P405 Store locked up.</li> <li>P410 + P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/ 122 °F.</li> <li>P403 Store in a well-ventilated place.</li> <li><b>Disposal:</b></li> <li>P501 Dispose of contents/container in accordance with local regulation.</li> </ul> |  |
|  |  |
|  |  |
| No component of this product present<br>equal to 0.1% is identified as probable  |  |
| No component of this product present<br>equal to 0.1% is identified as a carcin  |  |
| No component of this product present<br>equal to 0.1% is identified as a carcin  |  |
| No component of this product present<br>equal to 0.1% is identified as a knowr<br>by NTP.  |  |
|  | <ul> <li>P251 Pressurized container: Do nuse.</li> <li>P261 Avoid breathing dust/fume/<br/>P264 Wash skin thoroughly after I<br/>P271 Use only outdoors or in a we<br/>P280 Wear eye protection/face p<br/><b>Response:</b></li> <li>P304 + P340 + P312 IF INHALED<br/>and keep at rest in a position com<br/>POISON CENTER or doctor/phys<br/>P305 + P351 + P338 IF IN EYES:<br/>for several minutes. Remove cont<br/>easy to do. Continue rinsing.</li> <li>P337 + P313 If eye irritation persi<br/>attention.</li> <li><b>Storage:</b></li> <li>P405 Store locked up.</li> <li>P410 + P412 Protect from sunligh<br/>temperatures exceeding 50 °C/12<br/>P403 Store in a well-ventilated plating<br/><b>Disposal:</b></li> <li>P501 Dispose of contents/contain<br/>regulation.</li> </ul> No component of this product present<br>equal to 0.1% is identified as probable<br>human carcinogen by IARC. No component of this product present<br>equal to 0.1% is identified as a carcin<br>carcinogen by ACGIH. No component of this product present<br>equal to 0.1% is identified as a carcin<br>carcinogen by OSHA. No component of this product present<br>equal to 0.1% is identified as a carcin<br>carcinogen by OSHA. No component of this product present<br>equal to 0.1% is identified as a knowr |

#### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### Hazardous components

| Chemical Name        | CAS-No.    | Concentration [%] |
|----------------------|------------|-------------------|
| 1,1-difluoroethane   | 75-37-6    | >= 50 - < 70      |
| propan-2-ol          | 67-63-0    | >= 20 - < 30      |
| alkanes, C12-14-iso- | 68551-19-9 | >= 5 - < 10       |

#### SECTION 4. FIRST AID MEASURES

General advice

: Move out of dangerous area.



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|                         | Show this safety data sheet to the Do not leave the victim unattended   |                            |
| If inhaled              | : Consult a physician after significan<br>If unconscious place in recovery po<br>advice.  |                            |
| In case of skin contact | <ul> <li>If skin irritation persists, call a phys</li> <li>Wash off immediately with plenty or<br/>minutes.</li> <li>If on clothes, remove clothes.</li> </ul>  |                            |
| In case of eye contact  | : Remove contact lenses.<br>Protect unharmed eye.<br>Keep eye wide open while rinsing.<br>If eye irritation persists, consult a s<br>Rinse immediately with plenty of w   |                            |
| If swallowed            | : Keep respiratory tract clear.<br>Never give anything by mouth to a<br>If symptoms persist, call a physicia<br>DO NOT induce vomiting unless di<br>physician or poison control center.<br>Take victim immediately to hospita | n.<br>rected to do so by a |

#### SECTION 5. FIREFIGHTING MEASURES

| Suitable extinguishing media                  | : | Alcohol-resistant foam<br>Carbon dioxide (CO2)<br>Dry chemical<br>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)<br>Carbon monoxide<br>Smoke<br>Fluorine 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<br>must not be discharged into drains.<br>Fire residues and contaminated fire extinguishing water must<br>be disposed of in accordance with local regulations.<br>For safety reasons in case of fire, cans should be stored<br>separately in closed containments.<br>Use a water spray to cool fully closed containers. |
| Special protective equipment for firefighters | : | Wear self-contained breathing apparatus for firefighting if necessary.   |



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#### SECTION 6. ACCIDENTAL RELEASE MEASURES

| Personal precautions, :<br>protective equipment and<br>emergency procedures | Use personal protective equipment.<br>Ensure adequate ventilation.<br>Remove all sources of ignition.<br>Evacuate personnel to safe areas.<br>Beware of vapours accumulating to form explosive<br>concentrations. Vapours can accumulate in low areas. |
|---|--|
| Environmental precautions :   | Prevent product from entering drains.<br>Prevent further leakage or spillage if safe to do so.<br>If the product contaminates rivers and lakes or drains inform<br>respective authorities.   |
| Methods and materials for : containment and cleaning up                     | Soak up with inert absorbent material (e.g. sand, silica gel,<br>acid binder, universal binder, sawdust).<br>Sweep up or vacuum up spillage and collect in suitable<br>container for disposal.   |

#### SECTION 7. HANDLING AND STORAGE

| Advice on safe handling     | : | <ul> <li>Avoid exposure - obtain special instructions before use.</li> <li>Avoid contact with skin and eyes.</li> <li>For personal protection see section 8.</li> <li>Smoking, eating and drinking should be prohibited in the application area.</li> <li>Do not breathe vapours or spray mist.</li> <li>Take precautionary measures against static discharges.</li> <li>Provide sufficient air exchange and/or exhaust in work rooms.</li> <li>Dispose of rinse water in accordance with local and national regulations.</li> <li>Always replace cap after use.</li> </ul> |
|-----------------------------|---|---|
| Conditions for safe storage | : | <ul> <li>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.</li> <li>No smoking.</li> <li>Observe label precautions.</li> <li>Keep in a dry, cool and well-ventilated place.</li> <li>Electrical installations / working materials must comply with the technological safety standards.</li> </ul>  |
| Materials to avoid          | : | Keep away from oxidising agents and strongly acid or alkaline materials.  |

#### SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Components with workplace control parameters

|  | Components | CAS-No. | Value type | Control | Basis |
|--|------------|---------|------------|---------|-------|
|--|------------|---------|------------|---------|-------|



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|                    |          | (Form of exposure) | parameters /<br>Permissible<br>concentration |                 |
| 1,1-difluoroethane | 75-37-6  | TWA                | 1,000 ppm                                    | US WEEL         |
| propan-2-ol        | 67-63-0  | TWA                | 200 ppm                                      | ACGIH           |
|                    |          | STEL               | 400 ppm                                      | ACGIH           |
|                    |          | TWA                | 400 ppm<br>980 mg/m3                         | NIOSH REL       |
|                    |          | ST                 | 500 ppm<br>1,225 mg/m3                       | NIOSH REL       |
|                    |          | TWA                | 400 ppm<br>980 mg/m3                         | OSHA Z-1        |
|                    |          | TWA                | 400 ppm<br>980 mg/m3                         | OSHA P0         |
|                    |          | STEL               | 500 ppm<br>1,225 mg/m3                       | OSHA P0         |

#### **Biological occupational exposure limits**

| Component   | CAS-No. | Control    | Biological | Sampling | Permissible   | Basis     |
|-------------|---------|------------|------------|----------|---------------|-----------|
|             |         | parameters | specimen   | time     | concentration |           |
| PROPAN-2-OL | 67-63-0 | Acetone    | Urine      | End of   | 40 mg/l       | ACGIH BEI |
|             |         |            |            | shift at |               |           |
|             |         |            |            | end of   |               |           |
|             |         |            |            | workwee  |               |           |
|             |         |            |            | k        |               |           |

#### 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            |   |
| -                          | 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<br>the workstation location.<br>Tightly fitting safety goggles   |
| Skin and body protection : | impervious clothing<br>Choose body protection according to the amount and<br>concentration of the dangerous substance at the work place.  |
| Hygiene measures :         | When using do not eat or drink.<br>When using do not smoke.<br>Wash hands before breaks and at the end of workday.  |

#### SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

| Appearance | : Aerosol containing a liquefied gas |
|------------|--------------------------------------|
| Colour     | : colourless, light yellow           |

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| Odour                                      | : characteristic         |                       |
| Odour Threshold                            | : no data available      |                       |
| рН   | : not applicable         |                       |
| Melting point/freezing point               | : no data available      |                       |
| Boiling point                              | : no data available      |                       |
| Flash point                                | :<br>not applicable      |                       |
| Evaporation rate                           | : no data available      |                       |
| 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                           | : negligible             |                       |
| Partition coefficient: n-<br>octanol/water | : no data available      |                       |
| Auto-ignition temperature                  | : not determined         |                       |
| Thermal decomposition                      | : no data available      |                       |
| Viscosity                                  |                          |                       |
| Viscosity, kinematic                       | : no data available      |                       |

#### 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.<br>Vapours may form explosive mixture with air. |
| Conditions to avoid                | : Heat, flames and sparks.<br>Extremes of temperature and direct sunlight.                            |
| Incompatible materials             | : Acids<br>Bases<br>Oxidizing agents  |
| Hazardous decomposition products   | : Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke).                                  |



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#### SECTION 11. TOXICOLOGICAL INFORMATION

#### Acute toxicity

## Product:

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

#### Components:

# **1,1-difluoroethane:**Acute inhalation toxicity: LC50 mouse: 977,000 mg/l<br/>Exposure time: 2 h

#### Skin corrosion/irritation

#### Product:

Remarks: May cause skin irritation in susceptible persons.

#### 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

1,1-difluoroethane: propan-2-ol: alkanes, C12-14-iso-:

#### 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

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and vomiting., Concentrations substantially above the TLV value may cause narcotic effects., Solvents may degrease the skin.

#### SECTION 12. ECOLOGICAL INFORMATION

#### Ecotoxicity

| -  |  |
|--|--|
| no data available                              |  |
| Persistence and degradability                  |  |
| no data available<br>Bioaccumulative potential |  |
| Product:                                       |  |
| Partition coefficient: n-<br>octanol/water     | Remarks: no data available   |
| Mobility in soil                               |  |
| no data available                              |  |
| Other adverse effects                          |  |
| no data available<br>Product:                  |  |
| Regulation                                     | 40 CFR Protection of Environment; Part 82 Protection of<br>Stratospheric Ozone - CAA Section 602 Class I<br>Substances   |
| Remarks  | This product neither contains, nor was manufactured<br>with a Class I or Class II ODS as defined by the U.S.<br>Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A<br>+ B). |
| Additional ecological information              | no data available  |

#### SECTION 13. DISPOSAL CONSIDERATIONS

| Disposal methods       |  |
|------------------------|--|
| Waste from residues    | <ul> <li>Dispose of in accordance with local regulations.</li> <li>Do not contaminate ponds, waterways or ditches with<br/>chemical or used container.</li> <li>The product should not be allowed to enter drains, water<br/>courses or the soil.</li> </ul> |
| Contaminated packaging | <ul> <li>Empty remaining contents.</li> <li>Dispose of as unused product.</li> <li>Do not re-use empty containers.</li> <li>Do not burn, or use a cutting torch on, the empty drum.</li> </ul>   |



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#### SECTION 14. TRANSPORT INFORMATION

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

Transportation Regulation: IMDG (Vessel): UN1950, AEROSOLS, 2.1, - Limited quantity

Transportation Regulation: IATA (Cargo Air): UN1950, Aerosols, flammable, 2.1, - Limited quantity

Transportation Regulation: IATA (Passenger Air): UN1950, Aerosols, flammable, 2.1, - Limited quantity

Transportation Regulation: TDG (Canada): UN1950, AEROSOLS, 2.1, - Limited quantity

#### SECTION 15. REGULATORY INFORMATION

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

#### **CERCLA** Reportable Quantity

| Components  | CAS-No.  | Component RQ<br>(lbs) | Calculated product RQ<br>(lbs) |
|-------------|----------|-----------------------|--------------------------------|
| cyclohexane | 110-82-7 | 1000                  | *                              |

\*: 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 : | Fire Hazard<br>Sudden Release of Pressure Hazard<br>Acute 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 :             | SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313. |
| California Prop 65     | WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.   |
| methanol               | 67-56-1   |



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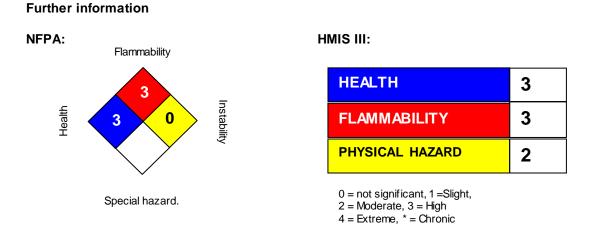
#### The components of this product are reported in the following inventories:

| 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 | Not 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



OSHA GHS Label Information:

| Hazard pictograms        |  |
|--------------------------|--|
| Signal word              | : Warning:   |
| Hazard statements        | : Flammable aerosol. Contains gas under pressure; may explode if heated. Causes serious eye irritation. May cause drowsiness or dizziness.   |
| Precautionary statements |  |
|                          | <ul> <li>Prevention: Keep aw ay from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not spray on an open flame or other ignition source.</li> <li>Pressurized container: Do not pierce or burn, even after use. Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray. Wash skin thoroughly after handling. Use only outdoors or in a w ell-ventilated area. Wear eye protection/ face protection.</li> <li><b>Response:</b> 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 unw ell. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/ attention.</li> <li><b>Storage:</b> Store locked up. Protect from sunlight. Do not expose to temperatures exceeding 50 °C/ 122 °F. Store in a w ell-ventilated place.</li> <li><b>Disposal:</b> Dispose of contents/container in accordance with local regulation.</li> </ul> |

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