MISTY CONTACT & CIRCUIT BOARD CLEANER III 16N11 12CT

Version 2.2 Revision Date 10/01/2023 Print Date 10/02/2023

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Material name : MISTY CONTACT & CIRCUIT BOARD CLEANER III 16N11

12CT

Material number : 00000000001002285

Manufacturer or supplier's details

Company : Zep Inc.

Address : 350 Joe Frank Harris Parkway, SE

Emerson, GA 30137

Telephone : Compliance Services - 877-428-9937

Emergency telephone numbers

For SDS Information : Compliance Services - 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

SECTION 2. HAZARDS IDENTIFICATION

Emergency Overview

| Appearance | Aerosol containing a compressed gas | |
|------------|-------------------------------------|--|
| Colour | colourless | |
| Odour | characteristic | |

GHS Classification

Flammable aerosols : Category 1
Gases under pressure : Compressed gas
Skin irritation : Category 2
Eye irritation : Category 2A

Specific target organ toxicity - : Category 3 (Central nervous system)

single exposure

GHS label elements

Hazard pictograms :







Flame

Gas cylinder

Signal word : Danger

Hazard statements : H222 Extremely flammable aerosol.

H280 Contains gas under pressure; may explode if heated.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

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H336 May cause drowsiness or dizziness.

Precautionary statements

: Prevention:

P210 Keep away from heat/sparks/open flames/hot surfaces. 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.

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 protective gloves/ eye protection/ face protection.

Response:

P302 + P352 IF ON SKIN: Wash with plenty of soap and water. P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON

CENTER/doctor 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.

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:

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

P405 Store locked up.

P410 + P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/ 122 °F.

Disposal:

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

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous components

| Chemical name | CAS-No. | Concentration [%] |
|---|------------|-------------------|
| Naphtha (petroleum), hydrotreated light | 64742-49-0 | >= 70 - < 90 |
| propan-2-ol | 67-63-0 | >= 10 - < 20 |
| carbon dioxide | 124-38-9 | >= 3 - < 5 |
| heptane | 142-82-5 | >= 3 - < 5 |

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

SECTION 4. FIRST AID MEASURES

General advice : Show this safety data sheet to the doctor in attendance.

Do not leave the victim unattended.

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Move out of dangerous area.

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.

Never give anything by mouth to an unconscious person.

If symptoms persist, call a physician. 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.

Causes skin irritation.

Causes serious eye irritation.

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

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

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. For safety reasons in case of fire, cans should be stored

separately in closed containments.

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Use a water spray to cool fully closed containers.

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.

Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas.

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).

Keep in suitable, closed containers 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.

Always replace cap after use.

Smoking, eating and drinking should be prohibited in the

application area.

Do not breathe vapours or spray mist.

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.

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.

Keep in a dry, cool and well-ventilated place.

Electrical installations / working materials must comply with

the technological safety standards.

Materials to avoid : Oxidizing agents

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

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| Componente | CAS-No. | Value type | Control | Poois |
|----------------|----------|------------------------|----------------------------|-----------|
| Components | CAS-NO. | Value type (Form of | parameters / | Basis |
| | | exposure) | Permissible | |
| | | CAPOSUIC) | concentration | |
| | | | Concontiation | |
| propan-2-ol | 67-63-0 | TWA | 200 ppm | ACGIH |
| | | STEL | 400 ppm | ACGIH |
| | | TWA | 400 ppm | NIOSH REL |
| | | | 980 mg/m3 | |
| | | ST | 500 ppm | NIOSH REL |
| | | | 1,225 mg/m3 | |
| | | TWA | 400 ppm | OSHA Z-1 |
| | | | 980 mg/m3 | |
| | | TWA | 400 ppm | OSHA P0 |
| | | | 980 mg/m3 | |
| | | STEL | 500 ppm | OSHA P0 |
| | | | 1,225 mg/m3 | |
| | | PEL | 400 ppm | CAL PEL |
| | | | 980 mg/m3 | |
| | | STEL | 500 ppm | CAL PEL |
| | | | 1,225 mg/m3 | |
| 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 | NIOSH REL |
| | | | 54,000 mg/m3 | |
| | | TWA | 5,000 ppm | OSHA Z-1 |
| | | | 9,000 mg/m3 | |
| | | 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 | CAL PEL |
| | | | 54,000 mg/m3 | |
| heptane | 142-82-5 | TWA | 85 ppm | NIOSH REL |
| • | | | 350 mg/m3 | |
| | | С | 440 ppm | NIOSH REL |
| | | | 1,800 mg/m3 | |
| | | TWA | 500 ppm | OSHA Z-1 |
| | | | 2,000 mg/m3 | |
| | | TWA | 400 ppm | OSHA P0 |
| | | | 1,600 mg/m3 | |
| | | STEL | 500 ppm | OSHA P0 |
| | | | 2,000 mg/m3 | |
| | | PEL | 400 ppm 1,600 mg/m3 | CAL PEL |
| | | STEL | 500 ppm 2,000 mg/m3 | CAL PEL |
| | | TWA | 400 ppm | ACGIH |
| | | STEL | 500 ppm | ACGIH |

Biological occupational exposure limits

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| 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 | | |

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 : Gloves

Remarks : The suitability for a specific workplace should be discussed

with the producers of the protective gloves.

Eye protection : Tightly fitting safety goggles

Wear face-shield and protective suit for abnormal processing

problems.

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 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

Not applicable

Flammability (solid, gas,

liquid)

: Extremely flammable aerosol.

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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

Auto-ignition temperature : not determined

Thermal decomposition : No data available

Viscosity

Viscosity, kinematic : No data available

Heat of combustion : 42.56 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.

Extremes of temperature and direct sunlight.

Incompatible materials : Oxidizing agents

Hazardous decomposition

products

: Carbon oxides

SECTION 11. TOXICOLOGICAL INFORMATION

Potential Health Effects

Aggravated Medical

Condition

: None known.

Symptoms of Overexposure : Effects are immediate and delayed.

Symptoms may include irritation, redness, pain, and rash.

Causes skin irritation.

Causes serious eye irritation.

Review section 2 of SDS to see all potential hazards. Treat symptomatically. Symptoms may be delayed.

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Carcinogenicity:

IARC No component of this product present at levels greater than or

equal to 0.1% is identified as probable, possible or confirmed

human carcinogen by IARC.

ACGIH No component of this product present at levels greater than or

equal to 0.1% is identified as a carcinogen or potential

carcinogen by ACGIH.

OSHA No component of this product present at levels greater than or

equal to 0.1% is on OSHA's list of regulated carcinogens.

NTP No component of this product present at levels greater than or

equal to 0.1% is identified as a known or anticipated carcinogen

by NTP.

Acute toxicity

Product:

Acute oral toxicity : Acute toxicity estimate : > 5,000 mg/kg

Method: Calculation method

Components:

propan-2-ol:

Acute oral toxicity : LD50 Oral Rat: 4,396 mg/kg

Method: Calculation method

heptane:

Acute inhalation toxicity : LC50 Rat: 103 mg/l

Exposure time: 4 h

Skin corrosion/irritation

Product:

Remarks: Irritating to skin.

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

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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 Components:
propan-2-ol:

Partition coefficient: n-

octanol/water

heptane:

Partition coefficient: n-

octanol/water

: log Pow: 0.05

: log Pow: 5

a tition coemcient. II-

Mobility in soil

No data available

Other adverse effects

No data available

Product:

Regulation 40 CFR Protection of Environment; Part 82 Protection of

: Remarks: No data available

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).

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Additional ecological information

 An environmental hazard cannot be excluded in the event of unprofessional handling or disposal., Very toxic to aquatic life., Harmful to aquatic life with long lasting

effects.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : Dispose of in accordance with local regulations.

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.

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):

UN1950, AEROSOLS, FLAMMABLE, 2.1, - Limited quantity

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, FLAMMABLE, 2.1, - 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.

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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 | Calculated product RQ |
|------------|----------|--------------|-----------------------|
| | | (lbs) | (lbs) |
| toluene | 108-88-3 | 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 : Flammable (gases, aerosols, liquids, or solids)

Gases under pressure Skin corrosion or irritation

Serious eye damage or eye irritation

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 : 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 can expose you to chemicals including toluene, 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

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Further information

NFPA:

| HEALTH | 2 |
|-----------------|---|
| FLAMMABILITY | 4 |
| INSTABILITY | 0 |
| SPECIAL HAZARD. | |

- 0 = not significant, 1 = Slight,
- 2 = Moderate, 3 = High
- 4 = Extreme

HMIS III:

| HEALTH | 2 |
|-----------------|---|
| FLAMMABILITY | 4 |
| PHYSICAL HAZARD | 3 |

- 0 = not significant, 1 = Slight,
- 2 = Moderate, 3 = High
- 4 = Extreme, * = Chronic

OSHA - GHS Label Information:

Hazard pictograms



Gas cy linder



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Signal w ord Hazard statements

Extremely flammable aerosol. Contains gas under pressure; may explode if heated. Causes skin irritation. Causes serious eye irritation. May cause drowsiness or

Precautionary statements

Prevention: Keep aw ay from heat/sparks/open flames/hot surfaces. No smoking. Do not spray on an open flame or other ignition source. 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 well-ventilated area. Wear protection/face protection.

Wear protective gloves/eye protection/face protection.

Response: IF ON SKIN: Wash with plenty of soap and w ater. 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 skin irritation occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Take

SAFETY DATA SHEET MISTY CONTACT & CIRCUIT BOARD CLEANER III 16N11 12CT

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off contaminated clothing and wash before reuse.

Storage: Store in a w ell-ventilated place. Keep container tightly closed. Store locked up. 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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| Print Date: | 10/02/2023 |

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