

CLEAN'EMS GRAFF REMOVER TOWELS OBS

Version 1.0 Revision Date 10/02/2015 Print Date 11/25/2015

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Material name : CLEAN'EMS GRAFF REMOVER TOWELS OBS

Material number : 0000000000141269

Manufacturer or supplier's details

Company : Zep Inc.

Address : 1310 Seaboard Industrial Blvd., NW

Atlanta, GA 30318

Telephone : 404-352-1680

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.

In the District of Columbia 202-483-7616

SECTION 2. HAZARDS IDENTIFICATION

Emergency Overview

| Appearance | liquid |
|------------|---------------------------|
| Colour | clear, yellow |
| Odour | mild, sweet, solvent-like |

GHS Classification

Flammable liquids : Category 4
Skin irritation : Category 2
Eye irritation : Category 2A
Reproductive toxicity : Category 1B

GHS Label element

Hazard pictograms :



Signal word : Danger

Hazard statements : H227 Combustible liquid.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H360 May damage 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.

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

No smoking.



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P264 Wash skin thoroughly after handling.

P280 Wear protective gloves/ eye protection/ face protection.

P281 Use personal protective equipment as required.

Response:

P302 + P352 IF ON SKIN: Wash with plenty of soap and water. 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. P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.

Storage:

P403 + P235 Store in a well-ventilated place. Keep cool.

P405 Store locked up.

Disposal:

Dispose of contents/container in accordance with local

regulation.

Potential Health Effects

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 identified as a carcinogen or potential

carcinogen by OSHA.

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.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Hazardous components

| Chemical Name | CAS-No. | Concentration [%] |
|-------------------------------|------------|-------------------|
| 1-methyl-2-pyrrolidone | 872-50-4 | >= 10 - < 20 |
| Alcohols, C10-14, ethoxylated | 66455-15-0 | >= 1 - < 5 |

SECTION 4. FIRST AID MEASURES

General advice : Move out of dangerous area.

Show this safety data sheet to the doctor in attendance.



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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 : If skin irritation persists, call a physician.

Wash off immediately with plenty of water for at least 15

minutes.

If on clothes, remove clothes.

Wash contaminated clothing before re-use.

In case of eye contact : Remove contact lenses.

Protect unharmed eye.

Keep eye wide open while rinsing.

If eye irritation persists, consult a specialist.

In case of contact, immediately flush eyes with plenty of water

for at least 15 minutes.

If swallowed : 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.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media : Water spray jet

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 : 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.

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, protective equipment and emergency procedures Environmental precautions : Use personal protective equipment.

: 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

Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to

local / national regulations (see section 13). Keep in suitable, closed containers for disposal.

SECTION 7. HANDLING AND STORAGE

Advice on safe handling : Avoid formation of aerosol.

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.

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 : 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 : Keep away from oxidizing 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 |
|------------------------|----------|------------|---------------|---------|
| | | (Form of | parameters / | |
| | | exposure) | Permissible | |
| | | | concentration | |
| 1-methyl-2-pyrrolidone | 872-50-4 | TWA | 10 ppm | US WEEL |

Biological occupational exposure limits

| Component | CAS-No. | Control parameters | Biological specimen | Sampling time | Permissible concentration | Basis |
|-------------|----------|--------------------|---------------------|---------------|---------------------------|-----------|
| N-METHYL-2- | 872-50-4 | 5-Hydroxy- | Urine | End of | 100 mg/l | ACGIH BEI |



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| PYRROLIDINONE | N-methyl-2- | shift (As | |
|---------------|-------------|-----------|--|
| | pyrrolidone | soon as | |
| | | possible | |
| | | after | |
| | | exposure | |
| | | ceases) | |

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 : Ensure that eyewash stations and safety showers are close to

the workstation location.

Safety glasses

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 : liquid

Colour : clear, yellow

Odour : mild, sweet, solvent-like

Odour Threshold : No data available pH : Not applicable Melting point/freezing point : No data available

Flash point

No data available

No data available

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 : 1.07 g/cm3

Solubility(ies)

Boiling point



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Water solubility : No data available 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

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 : Strong acids

Bases

Oxidizing agents

Hazardous decomposition

products

: Carbon monoxide Carbon dioxide (CO2) Organic Substances

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity

Product:

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

Method: Calculation method

Components:

1-methyl-2-pyrrolidone:

Acute oral toxicity : LD50 Oral Rat: 3,914 mg/kg

Acute dermal toxicity : LD50 Dermal Rabbit: 8,000 mg/kg

Skin corrosion/irritation

Product:



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Remarks: Irritating to skin.

Serious eye damage/eye irritation

Product:

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

1-methyl-2-pyrrolidone: Alcohols, C10-14, ethoxylated:

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-

: Remarks: No data available

octanol/water **Components**:

1-methyl-2-pyrrolidone:

Partition coefficient: n- : log Pow: -0.46



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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

: No data available

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : Do not dispose of waste into sewer.

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.

SECTION 14. TRANSPORT INFORMATION

Transportation Regulation: 49 CFR (USA):

NOT REGULATED AS DANGEROUS GOODS OR HAZARDOUS MATERIAL

Transportation Regulation: IMDG (Vessel):

NOT REGULATED AS DANGEROUS GOODS OR HAZARDOUS MATERIAL

Transportation Regulation: IATA (Cargo Air):

NOT REGULATED AS DANGEROUS GOODS OR HAZARDOUS MATERIAL

Transportation Regulation: IATA (Passenger Air):

NOT REGULATED AS DANGEROUS GOODS OR HAZARDOUS MATERIAL



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Transportation Regulation: TDG (Canada):

NOT REGULATED AS DANGEROUS GOODS OR HAZARDOUS MATERIAL

SECTION 15. REGULATORY INFORMATION

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

CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ.

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

Acute Health Hazard Chronic Health 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-methyl-2-pyrrolidone 872-50-4 15 %

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

State of California to cause birth defects or other reproductive

harm.

1-methyl-2-pyrrolidone 872-50-4

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

TSCA On TSCA Inventory

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), TCSI (Taiwan), TSCA (USA)

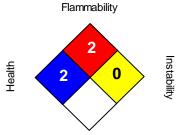
SECTION 16. OTHER INFORMATION



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Further information

NFPA:



Special hazard.

HMIS III:

| HEALTH | 2 |
|-----------------|---|
| FLAMMABILITY | 2 |
| PHYSICAL HAZARD | 0 |

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

OSHA GHS Label Information:

Hazard pictograms





Signal word : Danger:

Hazard statements : Combustible liquid. Causes skin irritation. Causes serious eye irritation. May damage

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. Keep aw ay from heat/sparks/open flames/hot surfaces. No smoking. Wash skin thoroughly after handling. Wear protective gloves/eye protection/face protection. Use personal protective equipment as required. Response: IF ON SKIN: Wash w ith plenty of soap and w ater. IF IN EYES: Rinse cautiously w ith 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. Take off contaminated clothing and w ash before reuse. In case of fire: Use dry sand, dry chemical or alcohol-resistant foamfor extinction.

Storage: Store in a well-ventilated place. Keep cool. Store locked up. Disposal: Dispose of contents/container in accordance with local regulation.

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