

SAFETY DATA SHEET



A01734 ZEP BRAKE WASH 20N14

Version 1.0

Revision Date 10/06/2017

Print Date 05/07/2019

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Material name : A01734 ZEP BRAKE WASH 20N14

Material number : 000000000001049719

Manufacturer or supplier's details

Company : Zep Inc.

Address : 350 Joe Frank Harris Parkway, SE
Emerson, GA 30137

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

Recommended use of the chemical and restrictions on use

Recommended use : Vehicle Maintenance

Note: This product is labeled as a consumer product in accordance with the United States Consumer Product Safety Commission regulations. The warnings presented below in this Safety Data Sheet (SDS) comply with the 2012 OSHA Hazard Communication Standard (GHS - Globally Harmonized System of Classification and Labeling). The requirements for the labeling and warnings of consumer products may differ from those required for GHS based hazard communication.

SECTION 2. HAZARDS IDENTIFICATION

Emergency Overview

| | |
|------------|-------------------------------------|
| Appearance | Aerosol containing a compressed gas |
| Colour | clear |
| Odour | aliphatic, solvent-like |

GHS Classification

Flammable aerosols : Category 1

Gases under pressure : Compressed gas

Skin irritation : Category 2

Specific target organ toxicity - single exposure : Category 1

single exposure

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

single exposure

GHS label elements

Hazard pictograms :



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| | |
|--------------------------|---|
| Signal word | : Danger |
| Hazard statements | : H222 Extremely flammable aerosol. H280 Contains gas under pressure; may explode if heated. H315 Causes skin irritation. H336 May cause drowsiness or dizziness. H370 Causes damage to organs. |
| Precautionary statements | : Prevention: 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. P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray. P264 Wash skin thoroughly after handling. P270 Do not eat, drink or smoke when using this product. P271 Use only outdoors or in a well-ventilated area. P280 Wear protective gloves. 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. P307 + P311 IF exposed: Call a POISON CENTER or doctor/physician. P332 + P313 If skin irritation occurs: Get medical advice/attention. P362 Take off contaminated clothing and wash before reuse. Storage: P410 + P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/ 122 °F. P403 Store in a well-ventilated place. Disposal: Dispose of contents/container in accordance with local regulation. |

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Hazardous components

| Chemical name | CAS-No. | Concentration [%] |
|---|------------|-------------------|
| Naphtha (petroleum), hydrotreated light | 64742-49-0 | >= 70 - < 90 |
| ethanol | 64-17-5 | >= 5 - < 10 |
| carbon dioxide | 124-38-9 | >= 1 - < 5 |
| heptane | 142-82-5 | >= 1 - < 5 |
| methanol | 67-56-1 | >= 1 - < 4 |

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

SECTION 4. FIRST AID MEASURES

General advice : Move out of dangerous area.

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| | |
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| | <p>Show this safety data sheet to the doctor in attendance. Do not leave the victim unattended.</p> |
| If inhaled | <p>: Consult a physician after significant exposure. If unconscious, place in recovery position and seek medical advice.</p> |
| In case of skin contact | <p>: Wash off immediately with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Wash contaminated clothing before reuse. If skin irritation persists, call a physician.</p> |
| In case of eye contact | <p>: Remove contact lenses. Protect unharmed eye. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.</p> |
| If swallowed | <p>: DO NOT induce vomiting unless directed to do so by a physician or poison control center. Keep respiratory tract clear. Never give anything by mouth to an unconscious person. If swallowed, call a poison control centre or doctor immediately.</p> |
| Most important symptoms and effects, both acute and delayed | <p>: Effects are immediate and delayed. Symptoms may include irritation, redness, pain, and rash. Symptoms may include central nervous system depression, resulting in headache, nausea and/or dizziness. Effects are dependent on exposure (dose, concentration, contact time). Causes skin irritation. May cause drowsiness or dizziness. Review section 2 of SDS to see all potential hazards.</p> |
| Notes to physician | <p>: Treat symptomatically. Symptoms may be delayed.</p> |

SECTION 5. FIREFIGHTING MEASURES

| | |
|--------------------------------------|--|
| Suitable extinguishing media | <p>: Alcohol-resistant foam Carbon dioxide (CO2) Dry chemical</p> |
| Unsuitable extinguishing media | <p>: High volume water jet</p> |
| Specific hazards during firefighting | <p>: Do not allow run-off from fire fighting to enter drains or water courses.</p> |
| Hazardous combustion products | <p>: Carbon dioxide (CO2) Carbon monoxide Smoke</p> |

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- 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.
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.

SECTION 7. HANDLING AND STORAGE

- Advice on safe handling : Do not breathe vapours or spray mist.
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.
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.
Keep in a dry, cool and well-ventilated place.
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 : Strong oxidizing agents

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SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION
Components with workplace control parameters

| Components | CAS-No. | Value type (Form of exposure) | Control parameters / Permissible concentration | Basis |
|----------------|----------|----------------------------------|---|-----------|
| ethanol | 64-17-5 | TWA | 1,000 ppm | ACGIH |
| | | TWA | 1,000 ppm 1,900 mg/m ³ | NIOSH REL |
| | | TWA | 1,000 ppm 1,900 mg/m ³ | OSHA Z-1 |
| | | TWA | 1,000 ppm 1,900 mg/m ³ | OSHA P0 |
| | | STEL | 1,000 ppm | ACGIH |
| | | PEL | 1,000 ppm 1,900 mg/m ³ | CAL PEL |
| carbon dioxide | 124-38-9 | TWA | 5,000 ppm | ACGIH |
| | | STEL | 30,000 ppm | ACGIH |
| | | TWA | 5,000 ppm 9,000 mg/m ³ | NIOSH REL |
| | | ST | 30,000 ppm 54,000 mg/m ³ | NIOSH REL |
| | | TWA | 5,000 ppm 9,000 mg/m ³ | OSHA Z-1 |
| | | TWA | 10,000 ppm 18,000 mg/m ³ | OSHA P0 |
| | | STEL | 30,000 ppm 54,000 mg/m ³ | OSHA P0 |
| | | PEL | 5,000 ppm 9,000 mg/m ³ | CAL PEL |
| | | STEL | 30,000 ppm 54,000 mg/m ³ | CAL PEL |
| heptane | 142-82-5 | TWA | 85 ppm 350 mg/m ³ | NIOSH REL |
| | | C | 440 ppm 1,800 mg/m ³ | NIOSH REL |
| | | TWA | 500 ppm 2,000 mg/m ³ | OSHA Z-1 |
| | | TWA | 400 ppm 1,600 mg/m ³ | OSHA P0 |
| | | STEL | 500 ppm 2,000 mg/m ³ | OSHA P0 |
| | | PEL | 400 ppm 1,600 mg/m ³ | CAL PEL |
| methanol | 67-56-1 | STEL | 500 ppm 2,000 mg/m ³ | CAL PEL |
| | | TWA | 200 ppm | ACGIH |
| | | STEL | 250 ppm | ACGIH |
| | | TWA | 200 ppm 260 mg/m ³ | NIOSH REL |
| | | ST | 250 ppm | NIOSH REL |

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| | | | 325 mg/m3 | |
| | | TWA | 200 ppm 260 mg/m3 | OSHA Z-1 |
| | | STEL | 250 ppm 325 mg/m3 | OSHA P0 |
| | | TWA | 200 ppm 260 mg/m3 | OSHA P0 |
| | | C | 1,000 ppm | CAL PEL |
| | | PEL | 200 ppm 260 mg/m3 | CAL PEL |
| | | STEL | 250 ppm 325 mg/m3 | CAL PEL |

Biological occupational exposure limits

| Component | CAS-No. | Control parameters | Biological specimen | Sampling time | Permissible concentration | Basis |
|-----------|---------|--------------------|---------------------|--|---------------------------|-----------|
| Methanol | 67-56-1 | Methanol | Urine | End of shift (As soon as possible after exposure ceases) | 15 mg/l | ACGIH BEI |

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

Remarks

: Protective gloves

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

Eye protection

: Tightly fitting safety goggles

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

: clear

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| | |
|--|--------------------------------|
| Odour | : aliphatic, solvent-like |
| Odour Threshold | : No data available |
| pH | : No data available |
| Melting point/freezing point | : No data available |
| Boiling point | : Not applicable |
| Flash point | : Not applicable |
| Evaporation rate | : not determined |
| Flammability (solid, gas) | : Extremely flammable aerosol. |
| Upper explosion limit | : not determined |
| Lower explosion limit | : not determined |
| Vapour pressure | : No data available |
| Relative vapour density | : No data available |
| Density | : No data available |
| Solubility(ies) | |
| Water solubility | : Not applicable |
| 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 | : 40.52 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 | : Strong acids and strong bases Strong oxidizing agents |
| Hazardous decomposition products | : No hazardous decomposition products are known. |

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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.
Symptoms may include central nervous system depression, resulting in headache, nausea and/or dizziness.
Effects are dependent on exposure (dose, concentration, contact time).

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 Confirmed animal carcinogen with unknown relevance to humans
ethanol 64-17-5

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 : 2,636 mg/kg
Method: Calculation method

Acute inhalation toxicity : Acute toxicity estimate : 13.18 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:
ethanol:

Acute oral toxicity : LD50 Oral Rat: 7,060 mg/kg

Acute inhalation toxicity : LC50 Rat: 124.7 mg/l
Exposure time: 4 h
Test atmosphere: vapour

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heptane:

Acute inhalation toxicity : LC50 Rat: 103 mg/l
Exposure time: 4 h

Skin corrosion/irritation

Product:

Remarks: May irritate skin.

Serious eye damage/eye irritation

Product:

Remarks: May irritate eyes.

Respiratory or skin sensitisation

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

No data available

Reproductive toxicity

No data available

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.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

No data available

Persistence and degradability

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No data available

Bioaccumulative potential

Product:

Partition coefficient: n-octanol/water : Remarks: No data available

Components:

ethanol :

Partition coefficient: n-octanol/water : Remarks: No data available

heptane :

Partition coefficient: n-octanol/water : log Pow: 5

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 : 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.

SECTION 14. TRANSPORT INFORMATION

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

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Transportation Regulation: IMDG (Vessel):
UN1950, AEROSOLS, FLAMMABLE, 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.

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 (lbs) | Calculated product RQ (lbs) |
|------------|---------|--------------------|-----------------------------|
| methanol | 67-56-1 | 5000 | * |

*: 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
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 : The following components are subject to reporting levels established by SARA Title III, Section 313:
methanol 67-56-1 3.7943 %

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California Prop. 65



WARNING: This product can expose you to chemicals including methanol, 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:

TSCA On TSCA Inventory
DSL All components of this product are on the Canadian DSL

For information on the country notification status for other regions please contact the manufacturer's regulatory group.

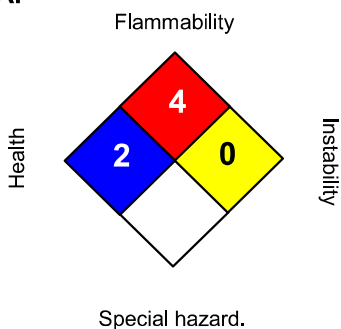
Inventory Acronym and Validity Area Legend:

TSCA (USA), DSL (Canada), NDSL (Canada)

SECTION 16. OTHER INFORMATION

Further information

NFPA:



HMIS III:

| | |
|------------------------|----------|
| HEALTH | 2 |
| FLAMMABILITY | 4 |
| 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 :

Extremely flammable aerosol. Contains gas under pressure; may explode if heated.
Causes skin irritation. May cause drowsiness or dizziness. Causes damage to organs.

Precautionary statements :

Prevention: 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. Do not breathe dust/ fume/ gas/ mist/ vapours/ spray. Wash skin thoroughly after handling. Do not eat, drink

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or smoke when using this product. Use only outdoors or in a well-ventilated area. Wear protective gloves.

Response: IF ON SKIN: Wash with plenty of soap and water. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell. IF exposed: Call a POISON CENTER or doctor/ physician. If skin irritation occurs: Get medical advice/ attention. Take off contaminated clothing and wash before reuse.

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

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

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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.