

Version 1.0

Revision Date 02/28/2017

Print Date 10/03/2017

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Material name : ZEP TIRELESS SHINE AERO DZ

Material number : 6301C

Manufacturer or supplier's details

| Company | : | Zep Inc. |
|-----------|---|---|
| Address | : | 11627 - 178 Street Edmonton, Alberta T5S 1N6 Canada |
| 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 | : | CHEMTREC: 800-424-9300 - All Calls Recorded. |
| Emergency | | |

Recommended use of the chemical and restrictions on use

Recommended use : Vehicle Maintenance

SECTION 2. HAZARDS IDENTIFICATION

Emergency Overview

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

GHS Classification

| Flammable aerosols Gases under pressure Skin irritation Specific target organ toxicity - single exposure | Category 1 Compressed gas Category 2 Category 3 (Central nervous system) |
|--|---|
| GHS label elements | |
| Hazard pictograms | |
| Signal word | : Danger |
| Hazard statements | H222 Extremely flammable aerosol. H280 Contains gas under pressure; may explode if heated. H315 Causes skin irritation. |



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| | H336 May cause drowsiness or | dizziness. |
| Precautionary statements | Prevention: P210 Keep away from heat, hot and other ignition sources. No s P211 Do not spray on an open f P251 Do not pierce or burn, ever P261 Avoid breathing dust/ fume P264 Wash skin thoroughly after P271 Use only outdoors or in a v P280 Wear protective gloves. Response: P302 + P352 IF ON SKIN: Wash P304 + P340 + P312 IF INHALE and keep comfortable for breathin CENTER/doctor if you feel unwe P332 + P313 If skin irritation occ attention. P362 + P364 Take off contamination reuse. Storage: P403 + P233 Store in a well-ventitightly closed. P410 + P412 Protect from sunlightly closed. Dispose of contents/container in regulation. | moking. lame or other ignition source. n after use. e/ gas/ mist/ vapours/ spray. r handling. well-ventilated area. h with plenty of water. D: Remove person to fresh air ing. Call a POISON ell. curs: Get medical advice/ ated clothing and wash it befor tilated place. Keep container ght. Do not expose to 122 °F. |

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture

: Mixture

Hazardous components

| Chemical name | CAS-No. | Concentration [%] |
|---|------------|-------------------|
| Naphtha (petroleum), hydrotreated light | 64742-49-0 | >= 50 - < 70 |
| carbon dioxide | 124-38-9 | >= 1 - < 5 |
| heptane | 142-82-5 | >= 1 - < 5 |

SECTION 4. FIRST AID MEASURES

| General advice | : Move out of dangerous area. 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. |



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| In case of eye contact | Flush eyes with water as a precat Remove contact lenses. Protect unharmed eye. Keep eye wide open while rinsing If eye irritation persists, consult a Rinse immediately with plenty of | j. specialist. |
| If swallowed | : Keep respiratory tract clear. Never give anything by mouth to If symptoms persist, call a physic DO NOT induce vomiting unless physician or poison control center | ian. directed to do so by a |
| Most important symptoms and effects, both acute and delayed | : Effects are immediate and delaye Symptoms of overexposure may dizziness; and confusion. May pr paralysis, and convulsions. | include disorientation; |
| | Symptoms may include irritation, Effects are dependent on exposu contact time). Causes serious eye irritation. May cause drowsiness or dizzine Review section 2 of SDS to see a | re (dose, concentration, |
| Notes to physician | : Treat symptomatically. Symptom | ns 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 Silicon oxides |
| 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. |

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| Special protective equipment for firefighters | : Wear self-contained breathing apparatu necessary. | s for firefighting if |

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). 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 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. Always replace cap after use. |
|-----------------------------|---|---|
| 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 cool, well-ventilated place. Observe label precautions. 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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| Components | CAS-No. | Value type | Control | Basis |
|----------------|----------|------------|------------------------|-----------|
| | | (Form of | parameters / | |
| | | exposure) | Permissible | |
| | | | concentration | |
| carbon dioxide | 124-38-9 | TWA | 5,000 ppm | CA AB OEL |
| | | | 9,000 mg/m3 | |
| | | STEL | 30,000 ppm | CA AB OEL |
| | | | 54,000 mg/m3 | |
| | | TWA | 5,000 ppm | CA BC OEL |
| | | STEL | 15,000 ppm | CA BC OEL |
| | | STEV | 30,000 ppm | CA QC OEL |
| | | | 54,000 mg/m3 | |
| | | TWAEV | 5,000 ppm | CA QC OEL |
| | | | 9,000 mg/m3 | |
| | | TWA | 5,000 ppm | ACGIH |
| | | STEL | 30,000 ppm | ACGIH |
| | | TWA | 5,000 ppm | NIOSH REL |
| | | | 9,000 mg/m3 | |
| | | 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 | OSHA P0 |
| | | | 18,000 mg/m3 | |
| | | STEL | 30,000 ppm | OSHA P0 |
| | | | 54,000 mg/m3 | |
| | | PEL | 5,000 ppm | CAL PEL |
| | | | 9,000 mg/m3 | |
| | Ī | STEL | 30,000 ppm | CAL PEL |
| | | | 54,000 mg/m3 | |
| heptane | 142-82-5 | TWA | 400 ppm | CA BC OEL |
| · · | | STEL | 500 ppm | CA BC OEL |
| | | TWAEV | 400 ppm | CA QC OEL |
| | | | 1,640 mg/m3 | 5E |
| | | STEV | | CA QC OEL |
| | | 0.2. | | |
| | | STEV | 500 ppm 2,050 mg/m3 | CA QC OI |

| 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 | : | Eye wash bottle with pure water 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. |



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| | | |

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, colourless |
| Odour | : slight, solvent-like |
| Odour Threshold | : No data available |
| рН | : Not applicable |
| Melting point/freezing point | : Not applicable |
| Boiling point | : Not applicable |
| Flash point | : <-18 °C |
| Evaporation rate | : No data available |
| Flammability (solid, gas) | : Extremely flammable aerosol. |
| Upper explosion limit | : No data available |
| Lower explosion limit | : No data available |
| Vapour pressure | : No data available |
| Relative vapour density | : No data available |
| Density | : 0.73 g/cm3 |
| Solubility(ies) | |
| Water solubility | : insoluble |
| 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 | : 45.93 kJ/g |

SECTION 10. STABILITY AND REACTIVITY

Reactivity



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| Chemical stability | : Stable under normal conditions. | |
| Possibility of hazardous reactions | : Vapours may form explosive mixtu No decomposition if stored and ap | |
| Conditions to avoid | : Heat, flames and sparks. Extremes of temperature and direct | st sunlight. |
| Incompatible materials | : Strong oxidizing agents | |
| Hazardous decomposition products | : Carbon monoxide, carbon dioxide hydrocarbons (smoke). Organic Substances | and unburned |

SECTION 11. TOXICOLOGICAL INFORMATION

| | Potential Health Effects Aggravated Medical Condition | : None known. | |
|-----|---|---|---------|
| | Symptoms of Overexposure | : Effects are immediate and delayed. Symptoms of overexposure may include disorientation; dizziness; and confusion. May progress to unconsciou paralysis, and convulsions. | |
| | | Symptoms may include irritation, redness, pain, and ra Effects are dependent on exposure (dose, concentration contact time). | |
| | Carcinogenicity: | | |
| | IARC | No component of this product present at levels greater th equal to 0.1% is identified as probable, possible or confirm human carcinogen by IARC. | |
| | ACGIH | Confirmed animal carcinogen with unknown relevance to humans | |
| | | ethanol | 64-17-5 |
| Acu | ite toxicity | | |
| | Product: | | |
| | Acute oral toxicity | : Acute toxicity estimate : > 5,000 mg/kg Method: Calculation method | |
| | <u>Components:</u> | | |
| | heptane: | | |
| | Acute inhalation toxicity | : LC50 Rat: 103 mg/l Exposure time: 4 h | |



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Skin corrosion/irritation

Product:

Remarks: May cause skin irritation in susceptible persons.

Serious eye damage/eye irritation

Product:

Remarks: Severe eye irritation

Respiratory or skin sensitisation

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

No data available

Reproductive toxicity

No data available

Naphtha (petroleum), hydrotreated light: carbon dioxide: heptane:

STOT - single exposure

No data available

STOT - repeated exposure

No data available

Aspiration toxicity

No data available

Further information

Product:

Remarks: No data available

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



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| Persistence and degradability | | |
| No data available Bioaccumulative potential | | |
| Product: | | |
| Partition coefficient: n- octanol/water <u>Components:</u> heptane : | : Remarks: No data available | |
| Partition coefficient: n- octanol/water | : log Pow: 5 | |
| Mobility in soil | | |
| No data available | | |
| Other adverse effects | | |
| No data available <u>Product:</u> | | |
| Additional ecological information | : An environmental hazard cannot be event of unprofessional handling or aquatic life with long lasting effects | disposal., Toxic to |

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 (TDG) / Règlement Pour Le Transport (TMD): (Canada): UN1950, AEROSOLS, FLAMMABLE, 2.1, - Limited quantity

Transportation Regulation / Règlement Pour Le Transport: IMDG (Vessel): UN1950, AEROSOLS, FLAMMABLE, 2.1, - Limited quantity

Transportation Regulation / Règlement Pour Le Transport: IATA (Cargo Air): UN1950, AEROSOLS, FLAMMABLE, 2.1, - Limited quantity

Transportation Regulation / Règlement Pour Le Transport: IATA (Passenger Air): UN1950, AEROSOLS, FLAMMABLE, 2.1, - Limited quantity

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Transportation Regulation / Règlement Pour Le Transport: 49 CFR (USA): UN1950, AEROSOLS, FLAMMABLE, 2.1, - Limited quantity

The product as delivered to the customer conforms to packaging requirements for shipment by road under Transport Dangerous Goods (TDG) Canada 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

This product has been classified according to the hazard criteria of the HPR and the SDS contains all of the information required by the HPR.

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

WHMIS - GHS Label Information:

| Hazard pictograms | |
|--------------------------|---|
| Signal w ord | : Danger: |
| Hazard statements | Extremely flammable aerosol. Contains gas under pressure; may explode if heated. Causes skin irritation. May cause drow siness or dizziness. |
| Precautionary statements | ; |
| | 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. 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 protective gloves. Response: IF ON SKIN: Wash with plenty of w ater. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unw ell. If skin irritation occurs: Get medical advice/ attention. Take off contaminated clothing and w ash it before reuse. Storage: Store in a w ell-ventilated place. Keep container tightly closed. 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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