

**ZEP POWER SOLV II AERO DZ**

Version 2.0

Revision Date 02/09/2018

Print Date 05/08/2018

**SECTION 1. PRODUCT AND COMPANY IDENTIFICATION**

Material name : ZEP POWER SOLV II AERO DZ

Material number : 00000000000020301

**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 : Degreaser

**SECTION 2. HAZARDS IDENTIFICATION****Emergency Overview**

Appearance	Aerosol containing a compressed gas
Colour	colourless, clear
Odour	Chlorine, hydrocarbon-like

**GHS Classification**Gases under pressure : Compressed gas  
Skin irritation : Category 2  
Eye irritation : Category 2A  
Carcinogenicity : Category 1B  
Specific target organ toxicity - single exposure : Category 3 (Central nervous system)**GHS label elements**

Hazard pictograms :



Signal word : Danger

Hazard statements : H280 Contains gas under pressure; may explode if heated.  
H315 Causes skin irritation.  
H319 Causes serious eye irritation.  
H336 May cause drowsiness or dizziness.  
H350 May cause cancer.

**ZEP POWER SOLV II AERO DZ**

Version 2.0

Revision Date 02/09/2018

Print Date 05/08/2018

Precautionary statements : **Prevention:**  
 P201 Obtain special instructions before use.  
 P202 Do not handle until all safety precautions have been read and understood.  
 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/ protective clothing/ 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.  
 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.

**Storage:**  
 P403 Store in a well-ventilated place.  
 P410 + P403 Protect from sunlight. Store in a well-ventilated place.

**Disposal:**  
 P501 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 [%]
trichloroethylene	79-01-6	>= 90 - < 100
carbon dioxide	124-38-9	>= 1 - < 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.

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.

**ZEP POWER SOLV II AERO DZ**

Version 2.0

Revision Date 02/09/2018

Print Date 05/08/2018

- 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.  
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 : Keep respiratory tract clear.  
If symptoms persist, call a physician.  
Do NOT induce vomiting.
- 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 : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- 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 (CO<sub>2</sub>)  
Carbon monoxide  
Chlorine 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 must not be discharged into drains.  
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
- 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.

**ZEP POWER SOLV II AERO DZ**

Version 2.0

Revision Date 02/09/2018

Print Date 05/08/2018

- 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.  
Smoking, eating and drinking should be prohibited in the application area.  
Provide sufficient air exchange and/or exhaust in work rooms.  
Container may be opened only under exhaust ventilation hood.
- 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.  
Keep container tightly closed in a dry and well-ventilated place.  
Observe label precautions.  
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 (Form of exposure)	Control parameters / Permissible concentration	Basis
trichloroethylene	79-01-6	TWA	10 ppm	ACGIH
		STEL	25 ppm	ACGIH
		TWA	100 ppm	OSHA Z-2
		CEIL	200 ppm	OSHA Z-2
		Peak	300 ppm	OSHA Z-2
		TWA	50 ppm 270 mg/m <sup>3</sup>	OSHA P0
		STEL	200 ppm 1,080 mg/m <sup>3</sup>	OSHA P0
		STEL	100 ppm 537 mg/m <sup>3</sup>	CAL PEL
		C	300 ppm	CAL PEL

**ZEP POWER SOLV II AERO DZ**

Version 2.0

Revision Date 02/09/2018

Print Date 05/08/2018

		PEL	25 ppm 135 mg/m <sup>3</sup>	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 <sup>3</sup>	NIOSH REL
		ST	30,000 ppm 54,000 mg/m <sup>3</sup>	NIOSH REL
		TWA	5,000 ppm 9,000 mg/m <sup>3</sup>	OSHA Z-1
		TWA	10,000 ppm 18,000 mg/m <sup>3</sup>	OSHA P0
		STEL	30,000 ppm 54,000 mg/m <sup>3</sup>	OSHA P0
		PEL	5,000 ppm 9,000 mg/m <sup>3</sup>	CAL PEL
		STEL	30,000 ppm 54,000 mg/m <sup>3</sup>	CAL PEL

**Biological occupational exposure limits**

Component	CAS-No.	Control parameters	Biological specimen	Sampling time	Permissible concentration	Basis
TRICHLOROETHENE	79-01-6	Trichloroacetic acid	Urine	End of shift at end of workweek	15 mg/l	ACGIH BEI
TRICHLOROETHENE		Trichloroethanol	In blood	End of shift at end of workweek	0.5 mg/l	ACGIH BEI
TRICHLOROETHENE		Trichloroethylene	In end-exhaled air	End of shift at end of workweek		ACGIH BEI

**Engineering measures** : effective ventilation in all processing areas

**Personal protective equipment**

Respiratory protection : In the case of vapour formation use a respirator with an approved filter.  
In the case of dust or aerosol formation use respirator with an approved filter.

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  
Wear face-shield and protective suit for abnormal processing problems.

**ZEP POWER SOLV II AERO DZ**

Version 2.0

Revision Date 02/09/2018

Print Date 05/08/2018

- 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, clear
- Odour : Chlorine, hydrocarbon-like
- Odour Threshold : No data available
- pH : No data available
- Melting point/freezing point : No data available
- Boiling point : 87.2 °C
- Flash point :  
Not applicable
- Evaporation rate : 3.1
- Flammability (solid, gas) : Not classified as a flammability hazard
- Upper explosion limit : 10 %(V)
- Lower explosion limit : 8 %(V)
- Vapour pressure : 80 hPa
- Relative vapour density : No data available
- Density : 1.45 g/cm<sup>3</sup>
- Solubility(ies)
- Water solubility : No data available
- Solubility in other solvents : 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

**ZEP POWER SOLV II AERO DZ**

Version 2.0

Revision Date 02/09/2018

Print Date 05/08/2018

Heat of combustion : &lt; 20 kJ/g

---

**SECTION 10. STABILITY AND REACTIVITY**

Reactivity : Stable

Chemical stability : Stable under normal conditions.

Possibility of hazardous reactions : No hazards to be specially mentioned.

Conditions to avoid : Heat, flames and sparks.

Incompatible materials : Oxidizing agents  
Alkali metals

Hazardous decomposition products : Phosgene  
Hydrogen chloride gas  
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.

**Carcinogenicity:**

<b>IARC</b>	Group 1: Carcinogenic to humans trichloroethylene	79-01-6
<b>ACGIH</b>	Suspected human carcinogen trichloroethylene	79-01-6
<b>OSHA</b>	No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.	
<b>NTP</b>	Known to be human carcinogen trichloroethylene	79-01-6

**Acute toxicity****Product:**

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

**Components:**

**ZEP POWER SOLV II AERO DZ**

Version 2.0

Revision Date 02/09/2018

Print Date 05/08/2018

**trichloroethylene:**

Acute oral toxicity : LD50 Oral Rat: 4,920 mg/kg

Acute inhalation toxicity : LC50 Mouse: 8450 ppm  
Exposure time: 4 h

Acute dermal toxicity : LD50 Dermal Rabbit: &gt; 20,000 mg/kg

**Skin corrosion/irritation****Product:**

Remarks: Irritating to skin.

**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

**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**

**ZEP POWER SOLV II AERO DZ**

Version 2.0

Revision Date 02/09/2018

Print Date 05/08/2018

**Ecotoxicity**

No data available

**Persistence and degradability**

No data available

**Bioaccumulative potential**
**Product:**

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

**Components:**

**trichloroethylene :**  
 Partition coefficient: n-octanol/water : log Pow: 2.29

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

---

**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.

**ZEP POWER SOLV II AERO DZ**

Version 2.0

Revision Date 02/09/2018

Print Date 05/08/2018

**SECTION 14. TRANSPORT INFORMATION**

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

Transportation Regulation: IMDG (Vessel):  
UN1950, Aerosols, non-flammable, 2.2, - Limited quantity

Transportation Regulation: IATA (Cargo Air):  
UN1950, Aerosols, non-flammable, 2.2, - Limited quantity

Transportation Regulation: IATA (Passenger Air):  
UN1950, Aerosols, non-flammable, 2.2, - Limited quantity

Transportation Regulation: TDG (Canada):  
UN1950, Aerosols, non-flammable, 2.2, - 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** : The following substance(s) is/are subject to a Significant New Use Rule:  
trichloroethylene 79-01-6

The following substance(s) is/are subject to TSCA 12(b) export notification requirements:  
trichloroethylene 79-01-6

**EPCRA - Emergency Planning and Community Right-to-Know Act**
**CERCLA Reportable Quantity**

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
trichloroethylene	79-01-6	100	103

**SARA 304 Extremely Hazardous Substances Reportable Quantity**

This material does not contain any components with a section 304 EHS RQ.

**SARA 311/312 Hazards** : Gases under pressure  
Skin corrosion or irritation  
Serious eye damage or eye irritation  
Carcinogenicity  
Specific target organ toxicity (single or repeated exposure)

**ZEP POWER SOLV II AERO DZ**

Version 2.0

Revision Date 02/09/2018

Print Date 05/08/2018

**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:  
 trichloroethylene 79-01-6 96.83 %

**California Prop. 65**



**WARNING:** This product can expose you to chemicals including trichloroethylene, which is/are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://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.

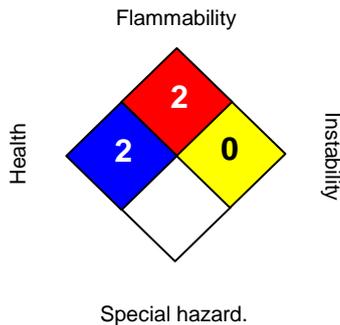
**Inventory Acronym and Validity Area Legend:**

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

**SECTION 16. OTHER INFORMATION**

**Further information**

**NFPA:**



**HMIS III:**

<b>HEALTH</b>	<b>2*</b>
<b>FLAMMABILITY</b>	<b>2</b>
<b>PHYSICAL HAZARD</b>	<b>3</b>

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

**OSHA - GHS Label Information:**

## ZEP POWER SOLV II AERO DZ

Version 2.0

Revision Date 02/09/2018

Print Date 05/08/2018

Hazard pictograms



Signal word

: **Danger:**

Hazard statements

: Contains gas under pressure; may explode if heated. Causes skin irritation. Causes serious eye irritation. May cause drowsiness or dizziness. May cause cancer.

Precautionary statements

**Prevention:** Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray. Wash skin thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear protective gloves/ protective clothing/ eye protection/ face protection.

**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 IN EYES: Rinse cautiously with 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 wash before reuse.

**Storage:** Store in a well-ventilated place. Protect from sunlight. Store in a well-ventilated place.

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

Version:	2.0
Revision Date:	02/09/2018
Print Date:	05/08/2018

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.