

ZEPSTART AERO

Version 2.0

Revision Date 02/15/2017

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SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Material name : ZEPSTART AERO
 Material number : 00000000000030600

Manufacturer or supplier's details

Company : Zep Inc.
 Address : 1310 Seaboard Industrial Blvd., NW
 Atlanta, GA 30318
 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 Emergency	: CHEMTREC: 800-424-9300 - All Calls Recorded. In the District of Columbia 202-483-7616

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	colourless
Odour	odourless

GHS Classification

Flammable aerosols : Category 1
 Acute toxicity (Oral) : Category 4
 Gases under pressure : Compressed gas
 Aspiration hazard : Category 1
 Skin irritation : Category 2
 Specific target organ toxicity - single exposure : Category 3 (Central nervous system, Respiratory Tract)

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.
 H336 May cause drowsiness or dizziness.
 H335 May cause respiratory irritation.

ZEPSTART AERO

Version 2.0

Revision Date 02/15/2017

Print Date 10/30/2017

H302 Harmful if swallowed.

H304 May be fatal if swallowed and enters airways.

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.

P270 Do not eat, drink or smoke when using this product.

Response:

P302 + P352 IF ON SKIN: Wash with plenty of soap and water.

P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician.

P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.

P332 + P313 If skin irritation occurs: Get medical advice/ attention.

P362 Take off contaminated clothing and wash before reuse.

P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.

P331 Do NOT induce vomiting.

P330 Rinse mouth.

P362 Take off contaminated clothing.

P312 Call a POISON CENTER or doctor/ physician if you feel unwell.

Storage:

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

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

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 [%]
heptane	142-82-5	>= 40 - < 70
diethyl ether	60-29-7	>= 15 - < 40
carbon dioxide	124-38-9	>= 5 - < 10

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

SECTION 4. FIRST AID MEASURES

General advice : Move out of dangerous area.

ZEPSTART AERO

Version 2.0

Revision Date 02/15/2017

Print Date 10/30/2017

Show this safety data sheet to the doctor in attendance.
Symptoms of poisoning may appear several hours later.
Do not leave the victim unattended.

- If inhaled : If breathed in, move person into fresh air.
If breathing is difficult, give oxygen.
If not breathing, give artificial respiration.
Call a physician or poison control centre immediately.
- In case of skin contact : In case of contact, immediately flush skin with plenty of water.
Wash clothing before reuse.
Remove contaminated clothing and shoes.
Call a physician if irritation develops or persists.
- In case of eye contact : In case of contact, immediately flush eyes with plenty of water
for at least 15 minutes.
If easy to do, remove contact lens, if worn.
If eye irritation persists, consult a specialist.
- If swallowed : If swallowed, DO NOT induce vomiting unless directed to do
so by medical personnel.
Never give anything by mouth to an unconscious person.
If swallowed, call a poison control centre or doctor
immediately.
- Most important symptoms
and effects, both acute and
delayed : Effects are immediate and delayed.
Aspiration may cause pulmonary oedema and pneumonitis.
Symptoms may include irritation, redness, pain, and rash.
Effects are dependent on exposure (dose, concentration,
contact time).
Causes serious eye damage.
Harmful if swallowed.
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 : Foam
Carbon dioxide (CO₂)
Dry powder
- 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
- Specific extinguishing
methods : Standard procedure for chemical fires.
- Further information : Collect contaminated fire extinguishing water separately. This
must not be discharged into drains.
Fire residues and contaminated fire extinguishing water must

ZEPSTART AERO

Version 2.0

Revision Date 02/15/2017

Print Date 10/30/2017

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.
Refer to protective measures listed in sections 7 and 8.
Remove all sources of ignition.
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 : Shovel into suitable container for disposal.

SECTION 7. HANDLING AND STORAGE

Advice on safe handling : Keep away from fire, sparks and heated surfaces.
For personal protection see section 8.
Avoid exposure - obtain special instructions before use.
Smoking, eating and drinking should be prohibited in the application area.
Always replace cap after use.
Avoid contact with skin and eyes.
Take precautionary measures against static discharges.
Provide sufficient air exchange and/or exhaust in work rooms.
Do not breathe vapours or spray mist.
Do not burn.

Conditions for safe storage : Electrical installations / working materials must comply with the technological safety standards.
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.
Observe label precautions.

Materials to avoid : Strong oxidizing agents
Do not store near acids.

Storage temperature : 4.4 - 49 °C

ZEPSTART AERO

Version 2.0

Revision Date 02/15/2017

Print Date 10/30/2017

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
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
		STEL	500 ppm 2,000 mg/m ³	CAL PEL
diethyl ether	60-29-7	TWA	400 ppm	ACGIH
		STEL	500 ppm	ACGIH
		TWA	400 ppm 1,200 mg/m ³	OSHA Z-1
		TWA	400 ppm 1,200 mg/m ³	OSHA P0
		STEL	500 ppm 1,500 mg/m ³	OSHA P0
		PEL	400 ppm 1,200 mg/m ³	CAL PEL
		STEL	500 ppm 1,500 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	

Engineering measures : effective ventilation in all processing areas

Personal protective equipment

Respiratory protection : Use respiratory protection unless adequate local exhaust

ZEPSTART AERO

Version 2.0

Revision Date 02/15/2017

Print Date 10/30/2017

ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines.

Hand protection	
Material	: Solvent-resistant gloves
Eye protection	: Safety glasses Ensure that eyewash stations and safety showers are close to the workstation location. 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	: colourless
Odour	: odourless
Odour Threshold	: No data available
pH	: No data available
Melting point/freezing point	: No data available
Boiling point	: 95 - 200 °C
Flash point	: No data available
Evaporation rate	: > 1 n-Butyl Acetate = 1.0
Upper explosion limit	: No data available
Lower explosion limit	: No data available
Vapour pressure	: No data available
Relative vapour density	: No data available
Density	: 0.7 g/cm ³
Solubility(ies)	
Water solubility	: slightly soluble
Partition coefficient: n-octanol/water	: No data available
Auto-ignition temperature	: not determined
Thermal decomposition	: No data available
Viscosity	

ZEPSTART AERO

Version 2.0

Revision Date 02/15/2017

Print Date 10/30/2017

Viscosity, kinematic : No data available

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 : Amines
Strong oxidizing agents
Nitrous acid and other nitrosating 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.
Aspiration may cause pulmonary oedema and pneumonitis.
Symptoms may include irritation, redness, pain, and rash.
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.

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.

Acute toxicity**Components:**

heptane:
Acute inhalation toxicity : LC50 Rat: 103 mg/l

ZEPSTART AERO

Version 2.0

Revision Date 02/15/2017

Print Date 10/30/2017

Exposure time: 4 h

Skin corrosion/irritation

Product:

Remarks: Irritating to skin.

Serious eye damage/eye irritation

Product:

Remarks: Irritating to eyes.

Respiratory or skin sensitisation

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

No data available

Reproductive toxicity

No data available

heptane:
diethyl ether:
carbon dioxide:

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

ZEPSTART AERO

Version 2.0

Revision Date 02/15/2017

Print Date 10/30/2017

No data available

Bioaccumulative potential**Product:**

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

Components:**heptane :**

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

diethyl ether :

Partition coefficient: n-octanol/water : log Pow: 1.1

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., Very toxic to aquatic life., May cause long lasting harmful effects to aquatic life.

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

: Do not re-use empty containers.
Do not burn, or use a cutting torch on, the empty drum.
Empty remaining contents.
Dispose of as unused product.
Empty containers retain residue and can be dangerous.

SECTION 14. TRANSPORT INFORMATION

SAFETY DATA SHEET



ZEPSTART AERO

Version 2.0

Revision Date 02/15/2017

Print Date 10/30/2017

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

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.
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)
diethyl ether	60-29-7	100	100

SARA 304 Extremely Hazardous Substances Reportable Quantity

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

SARA 311/312 Hazards : Acute Health Hazard
Sudden Release of Pressure Hazard
Fire Hazard

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 This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other

ZEPSTART AERO

Version 2.0

Revision Date 02/15/2017

Print Date 10/30/2017

reproductive harm.

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.

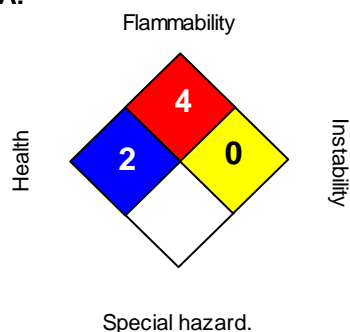
Inventory Acronym and Validity Area Legend:

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

SECTION 16. OTHER INFORMATION

Further information

NFPA:



HMIS III:

HEALTH	3
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

Hazard statements

Precautionary statements

: **Danger:**
 : Extremely flammable aerosol. Contains gas under pressure; may explode if heated.
 : Causes skin irritation. May cause drowsiness or dizziness. May cause respiratory irritation. Harmful if swallowed. May be fatal if swallowed and enters airways.

: **Prevention:** Keep away 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 protective gloves. Do not eat, drink or smoke when using this product.
Response: IF ON SKIN: Wash with plenty of soap and water. IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse. IF SWALLOWED: Immediately call a POISON CENTER/doctor. Do NOT induce vomiting. Rinse mouth. Take off contaminated clothing. Call a POISON CENTER or doctor/physician if you feel unwell.
Storage: Store in a well-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.

SAFETY DATA SHEET



ZEPSTART AERO

Version 2.0

Revision Date 02/15/2017

Print Date 10/30/2017

Version:	2.0
Revision Date:	02/15/2017
Print Date:	10/30/2017

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