ZEP PROFESSIONAL BROMINATED SOLVENT DEGREASER

Version 4.1 Revision Date 10/01/2023 Print Date 04/25/2025

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Material name ZEP PROFESSIONAL BROMINATED SOLVENT

DEGREASER

Material number 00000000001041593

Manufacturer or supplier's details

Company Zep Inc.

Address 350 Joe Frank Harris Parkway, SE

Emerson, GA 30137

Telephone : Compliance Services - 877-428-9937

Emergency telephone numbers

For SDS Information Compliance Services - 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

SECTION 2. HAZARDS IDENTIFICATION

Emergency Overview

Appearance	liquid	
Colour	colourless, clear	
Odour	characteristic	

GHS Classification

Skin irritation : Category 2 Eye irritation : Category 2A Carcinogenicity : Category 2 Reproductive toxicity : Category 1B

single exposure

Specific target organ toxicity - : Category 3 (Respiratory system, Central nervous system)

repeated exposure

Specific target organ toxicity - : Category 2

(Inhalation)

GHS label elements

Hazard pictograms



Health hazard

Exclamation mark

Signal word Danger

Hazard statements : H315 Causes skin irritation.

Version 4.1 Revision Date 10/01/2023 Print Date 04/25/2025

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

H336 May cause drowsiness or dizziness.

H351 Suspected of causing cancer.

H360 May damage fertility or the unborn child.

H373 May cause damage to organs through prolonged or

repeated exposure if inhaled.

Precautionary statements

Prevention:

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P260 Do not breathe 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 + P233 Store in a well-ventilated place. Keep container tightly closed.

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 [%]
1-bromopropane	106-94-5	>= 90 - < 100
propan-1-ol	71-23-8	>= 3 - < 5
1,2-epoxybutane	106-88-7	>= 0.1 - < 1

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

Version 4.1 Revision Date 10/01/2023 Print Date 04/25/2025

SECTION 4. FIRST AID MEASURES

General advice : Move out of dangerous area.

Consult a physician.

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.

Remove contaminated clothing and shoes. Wash contaminated clothing before reuse.

In case of eye contact : Rinse immediately with plenty of water, also under the eyelids,

for at least 15 minutes. Remove contact lenses. Protect unharmed eye.

Keep eye wide open while rinsing.

If eye irritation persists, consult a specialist.

If swallowed : Keep respiratory tract clear.

DO NOT induce vomiting unless directed to do so by a

physician or poison control center.

Never give anything by mouth to an unconscious person.

If symptoms persist, call a physician. Take victim immediately to hospital.

Most important symptoms and effects, both acute and

delayed

: Effects are dependent on exposure (dose, concentration,

contact time).

Effects are immediate and delayed.

Chronic effects are delayed and symptoms may not be

observed during an exposure.

Symptoms may include irritation, redness, pain, and rash.

Causes serious eye damage.

Causes skin irritation.

Suspected of causing cancer.

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 : 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.

Version 4.1 Revision Date 10/01/2023 Print Date 04/25/2025

Hazardous combustion

products

: Carbon dioxide (CO2) Carbon monoxide

Smoke

Bromine 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. 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.

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).

SECTION 7. HANDLING AND STORAGE

Technical measures : This product has no measured flash point and is non-

flammable per OSHA, CPSC, and DOT regulations. However, the vapors of this product will form a flammable mixture in a narrow concentration range of 4.6 % to 8.5 % by volume in air based on n-propyl bromide. Do not weld or cut any drum with a torch that contains this product because residual vapors in the drum could be in the flammable range and an explosion

could occur.

Advice on safe handling : Avoid formation of aerosol.

Do not breathe vapours or spray mist.

Version 4.1 Revision Date 10/01/2023 Print Date 04/25/2025

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 : No smoking.

Keep container tightly closed in a dry 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 : 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
1-bromopropane	106-94-5	TWA	0.1 ppm	ACGIH
		PEL	5 ppm 25 mg/m3	CAL PEL
propan-1-ol	71-23-8	TWA	100 ppm	ACGIH
		TWA	200 ppm 500 mg/m3	NIOSH REL
		ST	250 ppm 625 mg/m3	NIOSH REL
		TWA	200 ppm 500 mg/m3	OSHA Z-1
		STEL	250 ppm 625 mg/m3	OSHA P0
		TWA	200 ppm 500 mg/m3	OSHA P0
		PEL	200 ppm 500 mg/m3	CAL PEL
		STEL	250 ppm 625 mg/m3	CAL PEL
1,2-epoxybutane	106-88-7	TWA	2 ppm	US WEEL

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

ZEP PROFESSIONAL BROMINATED SOLVENT DEGREASER

Version 4.1 Revision Date 10/01/2023 Print Date 04/25/2025

that exposures are within recommended exposure guidelines.

Hand protection

Material : Protective gloves

Remarks : The suitability for a specific workplace should be discussed

with the producers of the protective gloves.

Eye protection : Tightly fitting safety goggles

Wear face-shield and protective suit for abnormal processing

problems.

Access to clean water to rinse eyes must be available, options include: eye wash stations or showers, or eye wash bottles

with pure water.

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 : colourless, clear
Odour : characteristic
Odour Threshold : No data available
pH : No data available
Melting point/freezing point : No data available

Boiling point : 70 °C

Flash point :

does not flash

Evaporation rate : > 1

Upper explosion limit : 8.5 %(V)

Lower explosion limit : 4.6 %(V)

Vapour pressure : 147.72 hPa

Relative vapour density : No data available

Density : 1.316 g/cm3

Bulk density : No data available

Solubility(ies)

Water solubility : insoluble

ZEP PROFESSIONAL BROMINATED SOLVENT DEGREASER

Version 4.1 Revision Date 10/01/2023 Print Date 04/25/2025

Solubility in other solvents : insoluble

Partition coefficient: n-

octanol/water

: No data available

Auto-ignition temperature : No data available
Thermal decomposition : No data available

Viscosity

Viscosity, dynamic : No data available Viscosity, kinematic : 2.1 mm2/s (20 °C)

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.

Vapours may form explosive mixture with air.

Conditions to avoid : Heat, flames and sparks.

Incompatible materials : Oxidizing agents

Metals Acids

Alkali metals Aluminium

Zinc

Hazardous decomposition

products

: Carbon monoxide, carbon dioxide and unburned

hydrocarbons (smoke).

Bromine

SECTION 11. TOXICOLOGICAL INFORMATION

Potential Health Effects

Aggravated Medical

Condition

: None known.

Symptoms of Overexposure :

: Effects are dependent on exposure (dose, concentration,

contact time).

Effects are immediate and delayed.

Chronic effects are delayed and symptoms may not be

observed during an exposure.

Symptoms may include irritation, redness, pain, and rash.

ZEP PROFESSIONAL BROMINATED SOLVENT DEGREASER

Version 4.1 Revision Date 10/01/2023 Print Date 04/25/2025

Causes serious eye damage.

Causes skin irritation.

Suspected of causing cancer.

Review section 2 of SDS to see all potential hazards. Treat symptomatically. Symptoms may be delayed.

Carcinogenicity:

IARC Group 2B: Possibly carcinogenic to humans

1-bromopropane 106-94-5 1,2-epoxybutane 106-88-7

ACGIH Confirmed animal carcinogen with unknown relevance to

humans

1-bromopropane 106-94-5

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 Reasonably anticipated to be a human carcinogen

1-bromopropane 106-94-5

Acute toxicity

Components:

propan-1-ol:

Acute dermal toxicity : LD50 Dermal Rabbit: 5,040 mg/kg

Skin corrosion/irritation

Product:

Remarks: Irritating to skin.

Components:

propan-1-ol:

Species: human skin Exposure time: 24 h Result: Mild skin irritation

Serious eye damage/eye irritation

Product:

Remarks: Irritating to eyes.

Components:

propan-1-ol: Species: Rabbit Exposure time: 24 h

Result: Moderate eye irritation

Respiratory or skin sensitisation

No data available

Germ cell mutagenicity

No data available

ZEP PROFESSIONAL BROMINATED SOLVENT DEGREASER

Version 4.1 Revision Date 10/01/2023 Print Date 04/25/2025

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

No data available

Bioaccumulative potential

Product:

Partition coefficient: n-

: Remarks: No data available

octanol/water Components: 1-bromopropane:

Partition coefficient: n-

octanol/water

1,2-epoxybutane:

: Pow: 2.1

Partition coefficient: n- : Pow: 0.68

octanol/water

Mobility in soil

No data available

Other adverse effects

No data available

Product:

ZEP PROFESSIONAL BROMINATED SOLVENT DEGREASER

Version 4.1 Revision Date 10/01/2023 Print Date 04/25/2025

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.

The vapors of this product will form a flammable mixture in a narrow concentration range of 4.6 % to 8.5 % by volume in air based on n-propyl bromide. Do not weld or cut any drum with a torch that contains this product because residual vapors in the drum could be in the flammable range and an explosion

could occur.

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

Transportation Regulation: TDG (Canada):

NOT REGULATED AS DANGEROUS GOODS OR HAZARDOUS MATERIAL

Version 4.1 Revision Date 10/01/2023 Print Date 04/25/2025

Transportation Notes

This product does not have a flashpoint that can be measured, therefore this product does not meet the criteria as a flammable liquid under the regulations of the US DOT special provisions (CFR 172.101 (c)(12)(iv)) and Canadian TDG (SOR/2017-137, 2.18 (1)(a)), and does not meet the definition of any other hazard class. Based on this information and conventions used by our supplier(s), this product is not regulated for transport in the United States and Canada. As noted above, a transport classification of UN2344 - Bromopropanes, should be used for shipments by air (IATA) or by sea (IMDG).

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)
1-bromopropane	106-94-5	1	1

SARA 304 Extremely Hazardous Substances Reportable Quantity

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

SARA 311/312 Hazards : Skin corrosion or irritation

Serious eye damage or eye irritation

Carcinogenicity
Reproductive toxicity

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:

1-bromopropane 106-94-5 95 % 1,2-epoxybutane 106-88-7 0.9999 %

California Prop. 65

Version 4.1 Revision Date 10/01/2023 Print Date 04/25/2025



WARNING: This product can expose you to chemicals including 1-bromopropane, 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.

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

Version 4.1 Revision Date 10/01/2023 Print Date 04/25/2025

Further information

NFPA:

HEALTH	2
FLAMMABILITY	0
INSTABILITY	0
SPECIAL HAZARD.	

0 = not significant, 1 = Slight,

2 = Moderate, 3 = High

4 = Extreme

HMIS III:

HEALTH	2*
FLAMMABILITY	0
PHYSICAL HAZARD	0

0 = not significant, 1 = Slight,

2 = Moderate, 3 = High

4 = Extreme, * = Chronic

OSHA - GHS Label Information:

Hazard pictograms



Health hazard



Exclamation

Signal word Hazard statements

: Dange

Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation. May cause drowsiness or dizziness. Suspected of causing cancer. May damage fertility or the unborn child. May cause damage to organs through prolonged or repeated exposure if inhaled.

Precautionary statements

Prevention: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe 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

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:

SAFETY DATA SHEET ZEP PROFESSIONAL BROMINATED SOLVENT DEGREASER

Version 4.1 Revision Date 10/01/2023 Print Date 04/25/2025

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

Version:	4.1
Revision Date:	10/01/2023
Print Date:	04/25/2025

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.