

Material Safety Data Sheet



Zep Inc.
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1-877-I-BUY-ZEP (428-9937)
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Section 1. Chemical Product and Company Identification

Product name ZEP POWERSOLV 5000
Product use Aerosol Solvent Degreaser
Product code 0021
Date of issue 08/12/08 **Supersedes** 03/09/05

Emergency Telephone Numbers

For MSDS Information:

Compliance Services 1-877-I-BUY-ZEP (428-9937)

For Medical Emergency

INFOTRAC: (877) 541-2016 Toll Free - All Calls Recorded

For Transportation Emergency

CHEMTREC: (800) 424-9300 - All Calls Recorded
In the District of Columbia (202) 483-7616

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Prepared By

Compliance Services
1420 Seaboard Industrial Blvd.
Atlanta, GA 30318

Section 2. Hazards Identification

Emergency overview

*Hazard Determination System (HDS): Health, Flammability, Reactivity

WARNING



CAUSES EYE AND SKIN IRRITATION.

HARMFUL IF INHALED OR ABSORBED THROUGH SKIN.

NOTE: MSDS data pertains to the product as delivered in the original shipping container(s). Risk of adverse effects are lessened by following all prescribed safety precautions, including the use of proper personal protective equipment.

Acute Effects

Routes of Entry

Dermal contact. Eye contact. Inhalation.

Eyes

Causes eye irritation. Inflammation of the eye is characterized by redness, watering and itching.

Skin

Causes skin irritation. Harmful if absorbed through the skin. Direct contact may cause irritation and redness. Prolonged or repeated contact may dry skin and cause irritation.

Inhalation

Over-exposure by inhalation may cause respiratory irritation. Can cause central nervous system (CNS) depression. Inhalation of vapor/aerosol concentrations above the recommended exposure limits causes headaches, drowsiness and nausea.

Ingestion

Unlikely in this form.

Chronic effects

Inhalation of spray mists or vapors may cause central nervous system depression characterized by headache, dizziness, nausea, stupor, weakness and/or numbness and tingling in the extremities (medical term - peripheral neuropathy). The substance may be toxic to kidneys, lungs, liver, peripheral nervous system and central nervous system (CNS).

Ingredients: Not listed as carcinogen by OSHA, NTP or IARC.

Additional Information: See Toxicological Information (Section 11)

Section 3. Composition/Information on Ingredients

1-BROMOPROPANE; n-propyl bromide	106-94-5	>90
t-butyl alcohol	75-65-0	<5
METHYLAL; dimethoxymethane	109-87-5	<5
CARBON DIOXIDE	124-38-9	<5

Section 4. First Aid Measures

Eye Contact

Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention if irritation occurs.

Skin Contact

Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Wash clothing before reuse. Get medical attention if symptoms occur.

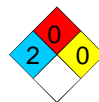
Inhalation

Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Get medical attention if adverse health effects persist or are severe.

Ingestion Aspiration hazard if swallowed. Can enter lungs and cause damage. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. Get medical attention if adverse health effects persist or are severe.

Section 5. Fire Fighting Measures

National Fire Protection Association (U.S.A.)



Flash Point Not available.

Flammable Limits Lower: 4.6% Upper: 8.5%

Flammability Non-flammable.

Fire hazard CONTENTS UNDER PRESSURE. May emit toxic fumes under fire conditions. Specific concentrations of air/vapor mixtures may be explosive.

Fire-Fighting Procedures Use dry chemical or CO₂. Do not release runoff from fire to sewers or waterways. Fire-fighters should wear appropriate protective equipment.

Section 6. Accidental Release Measures

Spill Clean up Large spills are unlikely due to packaging.

Section 7. Handling and Storage

Handling Put on appropriate personal protective equipment (see section 8). Avoid contact with eyes, skin and clothing. Do not breathe vapor or mist. Use only with adequate ventilation. Watch for accumulation in low confined areas. Wash thoroughly after handling.

Storage CONTENTS UNDER PRESSURE. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Store and use away from heat, sparks, open flame or any other ignition source. Store between the following temperatures: 40°F - 120°F (4.4°C - 49°C). Do not puncture or incinerate. Keep away from food, drink and animal feeding stuffs. Keep out of the reach of children.

Section 8. Exposure Controls/Personal Protection

Product name

1-BROMOPROPANE; n-propyl bromide

t-butyl alcohol

METHYLAL; dimethoxymethane

CARBON DIOXIDE

Exposure limits

US EPA (United States).

TWA: 25 ppm 8 hour(s).

Supplier (United States).

TWA: 100 ppm 8 hour(s).

ACGIH TLV (United States).

TWA: 100 ppm

OSHA PEL (United States).


TWA: 1000 ppm

ACGIH TLV (United States).

TWA: 5000 ppm 8 hour(s).

STEL: 30000 ppm 15 minute(s).

Personal Protective Equipment (PPE)

Eyes Recommended: Safety glasses. 

Body Recommended: Viton. Do not use natural rubber (latex).

Respiratory Use with adequate ventilation. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective occupational exposure limits. Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary.

Section 9. Physical and Chemical Properties

Physical State Liquid. [Aerosol.]

pH Not applicable.

Boiling Point 71.111°C (160°F)

Specific Gravity 1.353 Water = 1

Solubility Very slightly soluble in the following materials: cold water and hot water.

Color Colorless to light yellow.

Odor [Strong]

Vapor Pressure 15.5 kPa (116 mm Hg) (at 20°C)

Vapor Density <1 [Air = 1]

Evaporation Rate >1 compared with Butyl acetate.

VOC (Consumer) 1303 (g/l). 10.88 (lbs/gal) 96.5%

Section 10. Stability and Reactivity

Stability and Reactivity	The product is stable.
Incompatibility	Reactive or incompatible with the following materials: oxidizing materials, metals, acids and alkalis
Hazardous Polymerization	Will not occur.
Hazardous Decomposition Products	Carbon dioxide (CO ₂), Carbon monoxide and Hydrogen Bromide (HBr).

Section 11. Toxicological Information**Acute Toxicity**

Product/ingredient name	Result	Species	Dose	Exposure
1-Bromopropane	LD50 Oral	Rat	4260 mg/kg	-
	LC50 Inhalation Vapor	Rat	14374 ppm	4 hours
2-methyl-2-propanol	LD50 Oral	Rat	2743 mg/kg	-
	LC50 Inhalation Vapor	Rat	>10000 ppm	4 hours
METHYLAL	LD50 Oral	Rat	>7950 mg/kg	-
	LD50 Oral	Rabbit	5708 mg/kg	-

Section 12. Ecological Information

Environmental Effects No known significant effects or critical hazards.

Aquatic Ecotoxicity

Not available.

Section 13. Disposal Considerations**Waste Information**

Waste must be disposed of in accordance with federal, state and local environmental control regulations. Consult your local or regional authorities for additional information.

Waste Stream Code: - (Not applicable.)
Classification: - (Non-hazardous waste)

Section 14. Transport Information

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label
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DOT Classification	None.	Consumer commodity ORM-D			
IMDG Class	Not determined.				

NOTE: DOT classification applies to most package sizes. For specific container size classifications or for size exceptions, refer to the Bill of Lading with your shipment.

PG* : Packing group

Section 15. Regulatory Information**U.S. Federal Regulations**

SARA 313 toxic chemical notification and release reporting:

Product name

2-methyl-2-propanol

Clean Water Act (CWA) 307: No products were found.

Clean Water Act (CWA) 311: No products were found.

Clean Air Act (CAA) 112 regulated toxic substances: No products were found.

All Components of this product are listed or exempt from listing on TSCA Inventory.

State Regulations**California Prop 65**

WARNING: This product contains a chemical or chemicals known to the state of California to cause cancer, birth defects or other reproductive harm.: 1-Bromopropane

Section 16. Other Information

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

*NOTE: Hazard Determination System (HDS) ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although these ratings are not required on MSDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HDS ratings are to be used with a fully implemented program to relay the meanings of this scale.