



Material Safety Data Sheet

Section 1. Chemical Product and Company Identification

Product name	ZEP POWERHOUSE	
Product use	Stripper	
Product code	0282	
Date of issue	09/16/14	Supersedes 12/06/11

Emergency Telephone Numbers

For MSDS Information:
Technical Services Group
Telephone (780) 453-8100
(Business Hours 8:00am - 5:00pm)

For Medical or Transportation Emergency
CANUTEC (24 Hours)
(613) 996-6666 - Call Collect

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Section 2. Hazards Identification

Emergency overview

DANGER !

CAUSES EYE BURNS. CAUSES SKIN IRRITATION. MAY BE HARMFUL IF ABSORBED THROUGH SKIN.

CONTENTS UNDER PRESSURE.

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 burns. Direct contact with the eyes can cause irreversible damage, including blindness.

Skin

Causes skin irritation. May be harmful if absorbed through the skin. Prolonged exposure may result in skin burns and ulcerations. Skin inflammation is characterized by itching, scaling, reddening or, occasionally, blistering.

Inhalation

Avoid breathing vapors, spray or mists. Over-exposure by inhalation may cause respiratory irritation. Can cause central nervous system (CNS) depression.

Ingestion

May be harmful if swallowed. Aspiration hazard if swallowed. Can enter lungs and cause damage. Ingestion may cause nausea, weakness and central nervous system effects.

Chronic effects

Overexposure of this product by inhalation or absorption can produce central nervous system depression resulting in headache, nausea and/or dizziness. Repeated or prolonged exposure to spray or mist may produce respiratory tract irritation leading to frequent attacks of bronchial infection. Repeated or prolonged contact with spray or mist may produce chronic eye irritation and severe skin irritation. Contains material which may cause damage to the following organs: blood, kidneys, lungs, liver, upper respiratory tract, skin, eyes, central nervous system (CNS), ears.

Additional Information: See Toxicological Information (Section 11)

Section 3. Composition/Information on Ingredients

Name of Hazardous Ingredients

	<u>CAS number</u>	<u>% by Weight</u>
ETHANOL; ethyl alcohol; grain alcohol	64-17-5	10 - 30
HYDROCARBON PROPELLANT; blend of propane and n-butane	74-98-6; 106-97-8	3 - 7
MONOETHANOLAMINE; 2-aminoethanol; MEA	141-43-5	1 - 5
ISOPROPYL ALCOHOL; ipa; dimethylcarbinol; 2-propanol	67-63-0	1 - 5
ETHYLENE GLYCOL MONOBUTYL ETHER; 2-butoxyethanol; butyl cellosolve	111-76-2	1 - 5
METHANOL; methyl alcohol; wood alcohol; columbia spirits	67-56-1	1 - 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 immediately.
Skin Contact	Flush affected 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 irritation develops.
Inhalation	Move exposed person to fresh air. If irritation persists, get medical attention.
Ingestion	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. If affected person is conscious, give plenty of water to drink. Never give anything by mouth to an unconscious person. Get medical attention immediately.

Section 5. Fire Fighting Measures

Flash Point	Closed cup: 29.4°C (84.9°F)
Flammable Limits	Not available.
Flammability	Non-flammable. (CSMA Method)
Auto-ignition Temperature	
Fire-Fighting Procedures	Use an extinguishing agent suitable for the surrounding fire. Cool closed containers exposed to fire with water. Fire-fighters should wear appropriate protective equipment.
Fire hazard	CONTENTS UNDER PRESSURE. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Bursting aerosol containers may be propelled from a fire at high speed.
Products of Combustion	carbon oxides (CO, CO ₂) and nitrogen oxides (NO, NO ₂ etc.)
Explosion hazard	

Section 6. Accidental Release Measures

Spill Clean up	Large spills are unlikely due to packaging.
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Section 7. Handling and Storage

Handling	Put on appropriate personal protective equipment (see section 8). Store and use away from heat, sparks, open flame or any other ignition source. Avoid contact with eyes. Avoid prolonged or repeated contact with skin. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Observe label precautions. Wash contaminated clothing before reusing. Wash thoroughly after handling.
Storage	CONTENTS UNDER PRESSURE. Do not puncture, incinerate or store the container at temperatures above 49°C (120°F) or in direct sunlight. Keep away from food, drink and animal feeding stuffs. Keep out of the reach of children.

Section 8. Exposure Controls/Personal Protection**Product name**

Ethanol	
Propellant; Blend of Isobutane, Propane and n-Butane	
Monoethanolamine	
Ethylene Glycol Monobutyl Ether	
Isopropyl Alcohol	

Exposure limits

ACGIH TLV / OSHA PEL (United States).
TWA: 1000 ppm 8 hour(s).
ACGIH TLV / OSHA PEL (United States). Notes: Propane
TWA: 1000 ppm 8 hour(s).
OSHA PEL / ACGIH TLV (United States).
TWA: 3 ppm 8 hour(s).
OSHA /ACGIH (United States).
STEL: 6 ppm 15 minute(s).
ACGIH TLV (United States).
TWA: 20 ppm 8 hour(s). Form:
OSHA PEL (United States). Skin
TWA: 50 ppm 8 hour(s). Form:
ACGIH TLV (United States).
TWA: 200 ppm 8 hour(s).
OSHA PEL (United States).
TWA: 400 ppm 8 hour(s).
ACGIH/OSHA (United States).
STEL: 400 ppm 15 minute(s).

Personal Protective Equipment (PPE)

Eyes	Safety glasses.
Hands and Body	Recommended: Neoprene gloves. Nitrile gloves. Rubber gloves.

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.
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Section 9. Physical and Chemical Properties

Physical State	Liquid. [Aerosol.]	Color	Clear. Colorless.
pH	10.5 - 11.5	Odor	Pine.
Boiling Point	98.3°C (208.9°F)	Vapor Pressure	Not determined.
Specific Gravity	0.97	Vapor Density	Not determined.
Solubility	Easily soluble in the following materials: cold water and hot water.	Evaporation Rate	<1 (Water = 1)
Freezing Point		VOC (Consumer)	286 (g/l). 2.39 lbs/gal (29.6%)

Section 10. Stability and Reactivity

Stability and Reactivity	The product is stable.
Incompatibility	Keep away from heat, sparks and flame. Reactive or incompatible with the following materials: oxidizing materials and acids.
Hazardous Polymerization	Will not occur.
Hazardous Decomposition Products	carbon oxides (CO, CO ₂), oxides of nitrogen

Section 11. Toxicological Information

Carcinogenicity No known significant effects or critical hazards.

Acute Toxicity

Product/ingredient name	Result	Species	Dose	Exposure
ethanol	LC50 Inhalation Vapor	Rat	20000 mg/m ³	4 hours
HYDROCARBON PROPELLANT; blend of propane and n-butane	LD50 Oral	Rat	7 g/kg	-
	LC50 Inhalation Vapor	Rat	658000 mg/m ³	4 hours
2-aminoethanol	LD50 Dermal	Rabbit	>1000 mg/kg	-
	LD50 Oral	Rat	1720 mg/kg	-
	LD50 Oral	Rat	1720 mg/kg	-
propan-2-ol	LC50 Inhalation Vapor	Rat	16000 ppm	4 hours
	LD50 Dermal	Rabbit	5030 mg/kg	-
	LD50 Oral	Rat	5000 mg/kg	-
	LD50 Oral	Rat	5045 mg/kg	-
2-butoxyethanol	LC50 Inhalation Gas.	Rat	450 ppm	4 hours
	LC50 Inhalation Vapor	Guinea pig	>633 ppm	1 hours
	LD50 Dermal	Guinea pig	>2000 mg/kg	-
	LD50 Dermal	Rabbit	220 mg/kg	-
	LD50 Oral	Guinea pig	1200 mg/kg	-
	LD50 Oral	Rat	250 mg/kg	-
methanol	LC50 Inhalation Gas.	Rat	145000 ppm	1 hours
	LC50 Inhalation Gas.	Rat	64000 ppm	4 hours
	LC50 Inhalation Vapor	Rat	64000 ppm	4 hours
	LD50 Dermal	Rabbit	15800 mg/kg	-
	LD50 Oral	Rat	5600 mg/kg	-
	LD50 Oral	Rat	5628 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 applicable regulations. Consult your local or regional authorities for additional information.

Waste Stream Non-hazardous waste

Section 14. Transport Information

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label	Additional information
TDG Classification	1950	Aerosols, non-flammable	2.2	-		Explosive Limit and Limited Quantity Index 1
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. Limited Quantity: Small quantities of controlled goods are not regulated as Dangerous Goods according to TDG regulations.

PG* : Packing group

Section 15. Regulatory Information

Canada

WHMIS (Canada)

Class A: Compressed gas.

Class D-2B: Material causing other toxic effects (Toxic).

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

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.