

Material Safety Data Sheet



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

Product name BRAKE FLUSH (AEROSOL)
Product use Aerosol Brake Parts Cleaner.
Product code 0207
Date of issue 02/10/09 **Supersedes** 08/30/07

Emergency Telephone Numbers

For MSDS Information:
Compliance Services 1-877-I-BUY-ZEP (428-9937)

For Medical Emergency
(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

Prepared By

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Section 2. Hazards Identification

Emergency overview

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

DANGER !

1 4 0

EXTREMELY FLAMMABLE LIQUID AND VAPOR. VAPOR MAY CAUSE FLASH FIRE. KEEP AWAY FROM SOURCES OF IGNITION. NO SMOKING. CAUSES EYE AND SKIN IRRITATION. HARMFUL IF INHALED. HARMFUL OR FATAL IF SWALLOWED.

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. Inhalation.

Eyes

Contact may cause eye irritation. Inflammation of the eye is characterized by redness, watering and itching.

Skin

Direct contact may cause irritation and redness. Skin inflammation is characterized by itching, scaling, or reddening. Product may be dermal absorbed. Defatting properties, may aggravate an existing dermatitis

Inhalation

Avoid breathing vapors, spray or mists. Over-exposure by inhalation may cause respiratory irritation. Can cause central nervous system (CNS) depression. High vapor concentrations can cause headaches, dizziness and nausea and may lead to unconsciousness.

Ingestion

Harmful if swallowed. Aspiration hazard if swallowed. Can enter lungs and cause damage. Vomiting increases risk of chemical pneumonia or pulmonary edema caused by aspiration of hydrocarbon solvents.

Chronic effects

Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis. Repeated or prolonged exposure to the substance can produce damage to kidneys, lungs, liver, heart, brain, central nervous system (CNS), .

Carcinogenicity

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

Additional Information: See Toxicological Information (Section 11)

Section 3. Composition/Information on Ingredients

Name of Hazardous Ingredients	CAS number	% by Weight
ACETONE; dimethyl ketone	67-64-1	40 - 50
HEPTANE; n-heptane	142-82-5	30 - 40
ETHANOL; ethyl alcohol; grain alcohol	64-17-5	5 - 15
ISOPROPYL ALCOHOL; ipa; dimethylcarbinol; 2-propanol	67-63-0	0 - 5
CARBON DIOXIDE	124-38-9	5 - 15

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	Immediately wash with water and soap and rinse thoroughly. Wash clothing before reuse. Get medical attention if irritation develops.
Inhalation	Move exposed person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
Ingestion	ASPIRATION HAZARD. 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 immediately.

Section 5. Fire Fighting Measures

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



Flash Point	Closed cup: <-18°C (<0°F) (Tagliabue.)
Flammable Limits	Lower: 1.2% Upper: 6.7%
Flammability	Extremely flammable. (CSMA) Aerosol that may flash back.
Fire hazard	FLAMMABLE LIQUID AND VAPOR. Vapor may cause flash fire. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. 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.
Fire-Fighting Procedures	Use dry chemical or CO ₂ . Fire-fighters should wear appropriate protective equipment. Cool containers with water jet in order to prevent pressure build-up, auto-ignition or explosion.

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	Extremely flammable liquid and vapor. Store and use away from heat, sparks, open flame or any other ignition source. 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. Do not ingest. Wash thoroughly after handling. Wash contaminated clothing before reusing. Observe label precautions.
Storage	CONTENTS UNDER PRESSURE. Do not puncture or incinerate. Do not store above the following temperature: 49°C (120.2°F). Store away from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Eliminate all ignition sources. Keep out of the reach of children.

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

ACETONE; dimethyl ketone

Exposure limits

ACGIH TLV / OSHA PEL (United States).

TWA: 750 ppm 8 hour(s).

ACGIH / OSHA (United States).

STEL: 1000 ppm 15 minute(s).

ACGIH/OSHA (United States).

TWA: 400 ppm 8 hour(s).

ACGIH/OSHA (United States).

STEL: 400 ppm 15 minute(s).

ACGIH TLV / OSHA PEL (United States).

TWA: 1000 ppm 8 hour(s).

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).

ACGIH TLV (United States).

TWA: 5000 ppm 8 hour(s).

STEL: 30000 ppm 15 minute(s).

HEPTANE; n-heptane

ETHANOL; ethyl alcohol; grain alcohol

ISOPROPYL ALCOHOL; ipa; dimethylcarbinol; 2-propanol

CARBON DIOXIDE

Personal Protective Equipment (PPE)**Eyes** Safety glasses.**Body** Wear appropriate protective clothing to prevent skin contact. Recommended Viton gloves. Nitrile gloves. Neoprene 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. Wear appropriate respirator when ventilation is inadequate.

Section 9. Physical and Chemical Properties

Physical State	Liquid. [Aerosol.]	Color	Clear , Colorless.
pH	Not applicable	Odor	Solvent. [Slight]
Boiling Point	Not available.	Vapor Pressure	Not available.
Specific Gravity	0.74	Vapor Density	>1 [Air = 1]
Solubility	insoluble in water.	Evaporation Rate	8 (Butyl acetate. = 1)
		VOC (Consumer)	44.9% 2.77 (lb/gal) 332 (g/l).

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.
Hazardous Polymerization	Will not occur.
Hazardous Decomposition Products	carbon oxides (CO, CO ₂)

Section 11. Toxicological Information

Acute Toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Acetone	LD50 Dermal LD50 Oral LC50 Inhalation Vapor	Rabbit Mouse Rat	20000 mg/kg 9750 mg/kg 16000 ppm	- - 4 hours
Heptane	LD50 Oral LC50 Inhalation Gas.	Mouse	15000 mg/kg 18295 ppm	- 2 hours
Ethanol	LD50 Oral LC50 Inhalation Vapor	Rat	7060 mg/kg 20000 mg/m ³	- 4 hours
Isopropyl Alcohol	LD50 Dermal LD50 Oral LC50 Inhalation Vapor	Rabbit Rat Rat	5030 mg/kg 5045 mg/kg 16000 ppm	- - 4 hours

Section 12. Ecological Information

Environmental Effects	No known significant effects or critical hazards.
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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: D001 Classification: - [Hazardous waste.] Origin: - [RCRA waste.]
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Section 14. Transport Information

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label
DOT Classification		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

No products were found.

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. :
Toluene

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.*