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Material Safety Data Sheet

Section 1. Chemical Product and Company Identification

Product name BRAKE WASH AEROSOL
Product use Aerosol Brake Cleaner.
Product code 0287
Date of issue 09/16/14 **Supersedes** 04/16/12

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

Prepared By

Technical Services Group
11627 178th Street
Edmonton, Alberta T5S 1N6

Section 2. Hazards Identification

Emergency overview

DANGER!

EXTREMELY FLAMMABLE.

Flammable aerosol. Avoid contact with skin and clothing. May cause target organ damage, based on animal data.

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

Inhalation. Absorbed through skin.

Eyes

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

Skin

Irritating to skin. permeator Skin inflammation is characterized by itching, scaling, or reddening. Product may be dermal absorbed. Defatting properties, may aggravate an existing dermatitis

Inhalation

Harmful by inhalation. Avoid breathing vapors, spray or mists. Over-exposure by inhalation may cause respiratory irritation. Can cause central nervous system (CNS) depression. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness.

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

May cause damage to the following organs: peripheral nervous system.
Contains material which may cause damage to the following organs: kidneys, liver, heart, brain, central nervous system (CNS), ears. Prolonged skin contact may cause dermatitis with drying and cracking of skin.

Additional Information: See Toxicological Information (Section 11)

Section 3. Composition/Information on Ingredients

Name of Hazardous Ingredients

HEPTANE; n-heptane

CAS number

142-82-5

% by Weight

60 - 100

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.

Skin Contact

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

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.

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 immediately.

Section 5. Fire Fighting Measures

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.
Auto-ignition Temperature	Not determined.
Fire-Fighting Procedures	Use dry chemical or CO ₂ . Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Cool containers with water jet in order to prevent pressure build-up, auto-ignition or explosion.
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. Container explosion may occur under fire conditions or when heated.
Products of Combustion	carbon oxides (CO, CO ₂) and Other Unspecified Organic chemicals.
Explosion hazard	Not available.

Section 6. Accidental Release Measures

Spill Clean up Large spills are unlikely due to packaging.

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. Avoid contact with eyes, skin and clothing. Avoid breathing gas. Use only with adequate ventilation. Do not ingest. Wash thoroughly after handling.
Storage	Do not store above the following temperature: 49°C (120.2°F). Store in a segregated and approved area. 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. CONTENTS UNDER PRESSURE. Do not puncture or incinerate container. Keep out of the reach of children.

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

heptane

Exposure limits**CA Alberta Provincial (Canada, 4/2009).**

15 min OEL: 2050 mg/m³ 15 minute(s).
8 hrs OEL: 1640 mg/m³ 8 hour(s).
8 hrs OEL: 400 ppm 8 hour(s).
15 min OEL: 500 ppm 15 minute(s).

CA British Columbia Provincial (Canada, 9/2010).

TWA: 400 ppm 8 hour(s).
STEL: 500 ppm 15 minute(s).


CA Ontario Provincial (Canada, 7/2010).

TWA: 400 ppm 8 hour(s).
TWA: 1640 mg/m³ 8 hour(s).
STEL: 500 ppm 15 minute(s).
STEL: 2050 mg/m³ 15 minute(s).

CA Quebec Provincial (Canada, 6/2008).

TWAEV: 400 ppm 8 hour(s).
TWAEV: 1640 mg/m³ 8 hour(s).
STEV: 500 ppm 15 minute(s).
STEV: 2050 mg/m³ 15 minute(s).

Personal Protective Equipment (PPE)

Eyes	Splash goggles.	
Hands and Body	Chemical-resistant 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. Approved/certified respirator with organic vapor cartridge.	

Section 9. Physical and Chemical Properties

Physical State Liquid. [Aerosol.]
pH Not available.
Boiling Point Not determined.
Specific Gravity 0.75 (Water = 1)
Solubility Insoluble in the following materials: cold water.
Freezing Point

Color Clear
Odor Hydrocarbon. [Slight]
Vapor Pressure 17.9 kPa (134 mm Hg) [20°C]
Vapor Density >1 [Air = 1]
Evaporation Rate Not determined.
VOC (Consumer) 95.3% 5.97 (lb/gal) 715 (g/l)

Section 10. Stability and Reactivity

Stability and Reactivity The product is stable.
Incompatibility Avoid contact with strong oxidizers, excessive heat, sparks or open flame.
Hazardous Polymerization Under normal conditions of storage and use, hazardous polymerization will not occur.
Hazardous Decomposition Products Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological Information

Carcinogenicity No known significant effects or critical hazards.

Acute Toxicity

Product/ingredient name	Result	Species	Dose	Exposure
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Section 12. Ecological Information

Environmental Effects No known significant effects or critical hazards.

Aquatic Ecotoxicity


Product/ingredient name	Result	Species	Dose	Exposure
heptane	-	Acute LC50 375000 ug/L Fresh water	Fish - Mozambique tilapia - Oreochromis mossambicus - 99 mm - 10 g	96 hours

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 Code: D001
Classification: - [Hazardous waste.]
Origin: - [RCRA waste.]

Section 14. Transport Information

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label	Additional information
TDG Classification	1950	Aerosols, flammable (heptane)	2.1	-		Explosive Limit and Limited Quantity Index 1
IMDG Class				-		-

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 B-5: Flammable aerosol.
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.