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# Material Safety Data Sheet

## Section 1. Chemical Product and Company Identification

**Product name** BRAKE WASH (LIQUID)  
**Product use** Non-Chlorinated Brake Parts Cleaner  
**Product code** 0505  
**Date of issue** 02/12/14 **Supersedes** 04/14/11

### 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

### Prepared By

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

## Section 2. Hazards Identification

### Emergency overview

**DANGER !**

EXTREMELY FLAMMABLE LIQUID AND VAPOR. FLAMMABLE.  
VAPOR MAY CAUSE FLASH FIRE.

Keep away from heat, sparks and flame. Do not breathe vapor or mist. Avoid contact with skin and clothing. Contains material that may cause target organ damage, based on animal data. Use only with adequate ventilation. Keep container tightly closed and sealed until ready for use.

**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

Absorbed through skin. Inhalation.

#### Eyes

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

#### Skin

May cause skin irritation. 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. Over-exposure by inhalation may cause respiratory irritation. Overexposure of this product by inhalation or absorption can produce central nervous system depression resulting in headache, nausea and/or dizziness. Medical conditions aggravated by over-exposure: Respiratory

#### Ingestion

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

Contains material which may cause damage to the following organs: kidneys, lungs, liver, heart, brain, peripheral nervous system, eyes, central nervous system (CNS), ears, pancreas. Prolonged skin contact may cause dermatitis with drying and cracking of skin. Overexposure of this product by inhalation or absorption can produce central nervous system depression resulting in headache, nausea and/or dizziness.

**Additional Information:** See Toxicological Information (Section 11)

**Section 3. Composition/Information on Ingredients**

<u>Name of Hazardous Ingredients</u>	<u>CAS number</u>	<u>% by Weight</u>
HEPTANE; n-heptane	142-82-5	60 - 100
ISOPROPYL ALCOHOL; ipa; dimethylcarbinol; 2-propanol	67-63-0	7 - 13
METHANOL; methyl alcohol; wood alcohol; columbia spirits	67-56-1	1 - 5

**Section 4. First Aid Measures**

<b>Eye Contact</b>	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.
<b>Skin Contact</b>	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.
<b>Inhalation</b>	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.
<b>Ingestion</b>	If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Aspiration hazard if swallowed. Can enter lungs and cause damage. Never give anything by mouth to an unconscious person. 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. Get medical attention.

**Section 5. Fire Fighting Measures**

<b>Flash Point</b>	Closed cup: <-18°C (<0°F) (Tagliabue.)
<b>Flammable Limits</b>	Lower: 1.2% Upper: 6.7%
<b>Flammability</b>	Extremely flammable in the presence of the following materials or conditions: open flames, sparks and static discharge, heat and oxidizing materials.
<b>Auto-ignition Temperature</b>	
<b>Fire-Fighting Procedures</b>	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Use dry chemical or CO <sub>2</sub> .
<b>Fire hazard</b>	Extremely flammable liquid. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapor/gas is heavier than air and will spread along the ground. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Runoff to sewer may create fire or explosion hazard.
<b>Products of Combustion</b>	carbon oxides (CO, CO <sub>2</sub> ) and other unidentified organic compounds
<b>Explosion hazard</b>	Not available.

**Section 6. Accidental Release Measures**

<b>Spill Clean up</b>	Eliminate all ignition sources. Put on appropriate personal protective equipment (see Section 8). Stop leak if without risk. Dilute with water and mop up if water-soluble or absorb with an inert dry material and place in an appropriate waste disposal container. Use spark-proof tools and explosion-proof equipment. To clean the floor and all objects contaminated by this material, use detergent solution. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.
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**Section 7. Handling and Storage**

<b>Handling</b>	Put on appropriate personal protective equipment (see Section 8). Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Store and use away from heat, sparks, open flame or any other ignition source. Use non-sparking tools. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Do not reuse container. Wash thoroughly after handling.
<b>Storage</b>	Store in a segregated and approved area. 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 between the following temperatures: 40°F - 120°F (4.4°C - 49°C). Eliminate all ignition sources. Separate from oxidizing materials. Do not store in unlabeled containers. Keep out of the reach of children.

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

No exposure limit value known.

**Personal Protective Equipment (PPE)****Eyes**

Splash goggles.

**Hands and Body**

Chemical-resistant gloves. Neoprene Nitrile Viton®. Synthetic apron.

**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.

**Color** Clear**pH**

Not available.

**Odor** Hydrocarbon. [Slight]**Boiling Point**

64°C (147.2°F)

**Vapor Pressure** 17.9 kPa (134 mm Hg)**Specific Gravity**

0.75 (Water = 1)

**Vapor Density** 3 [Air = 1]**Solubility**

Insoluble in the following materials: cold water and hot water.

**Evaporation Rate** 8 (Butyl acetate. = 1)**Freezing Point****VOC (Consumer)** 100% 6.25 (lb/gal) 749 (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**

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 additional remark.

**Acute toxicity**

Product/ingredient name	Result	Species	Dose	Exposure
heptane	LC50 Inhalation Gas.	Mouse	18295 ppm	2 hours
	LC50 Inhalation Gas.	Rat	48000 ppm	4 hours
	LC50 Inhalation Vapor	Rat	103 g/m <sup>3</sup>	4 hours
Isopropyl alcohol	LD50 Oral	Mouse	15000 mg/kg	-
	LC50 Inhalation Vapor	Rat	16000 ppm	4 hours
	LD50 Dermal	Rabbit	5030 mg/kg	-
	LD50 Oral	Rat	5000 mg/kg	-
methanol	LD50 Oral	Rat	5045 mg/kg	-
	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	-

**Mutagenicity****Conclusion/Summary**

: Not available.

**Teratogenicity****Conclusion/Summary**

: Not available.

**Reproductive toxicity****Conclusion/Summary**

: Not available.

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

**Section 14. Transport Information**

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label	Additional information
<b>TDG Classification</b>	1993	FLAMMABLE LIQUIDS, N. O.S. (Heptane, Isopropyl Alcohol)	3	II		<u>Explosive Limit and Limited Quantity Index</u> 1
<b>IMDG Class</b>						-

**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)**

WHMIS Class B-2: Flammable liquid with a flash point lower than 37.8°C (100°F).  
 Class D-1B: Material causing immediate and serious 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.*