BRAKE KLEEN

Material Safety Data Sheet

Revision Date: 2009-12-18 15:52:36

I. PRODUCT AND COMPANY IDENTIFICATION

Product Name:	**MAG 1 NON-CHLORINATED BRAKE CLEANER**
Product Code:	MG750409
Emergency Phone:	**(800) 424-9300 (202) 483-7616 (CHEMTREC)**
Poison Control Center:	**(800) 222-1222**
Company:	Warren Distribution, Inc. 727 S. 13th St. Omaha, NE 68102
Information Phone:	(800) 825-1235 (402) 341-9397
Revision Number:	4

II. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	%	CAS #	OSHA Exposure Limits
Acetone	40 - 70	67-64-1	1000 ppm TWA; 2400 mg/m3 TWA
Heptane	15 - 40	142-82-5	500 ppm TWA; 2000 mg/m3 TWA
Isopropanol	5 - 10	67-63-0	400 ppm TWA; 980 mg/m3 TWA

Components not listed are not physical or health hazards as defined in 29 CFR 1910.1200 (Hazard Communication Standard).

III. HAZARDS IDENTIFICATION

Routes of Entry:	Inhalation, Eye contact, Skin contact, Ingestion
Target Organs Potentially Affected by Exposure:	Respiratory Tract, Skin, Eyes, Nervous System
Medical Conditions Aggravated by Exposure:	Respiratory disease including asthma and bronchitis, Skin disease including eczema and sensitization, Eye disease

Immediate (Acute) Health Effects by Route of Exposure:

Inhalation Irritation:	Can cause moderate respiratory irritation, dizziness, weakness, fatigue, nausea and headache. Irritation may be delayed for several hours.
Inhalation Toxicity:	Harmful! Can cause systemic damage (see "Target Organs") Inhalation of high concentrations may result in central nervous system (CNS) effects such as dizziness, weakness, fatigue, nausea, headache, and lack of coordination.
Skin Contact:	Can cause moderate skin irritation, defatting, and dermatitis. Not likely to cause permanent damage. Can cause moderate irritation, tearing and reddening, but not likely to permanently injure eye tissue.
Skin Absorption:	No absorption hazard in normal industrial use.
Eye Contact:	Contact with the eyes may cause moderate to severe eye injury. Eye contact may result in tearing and reddening, but not likely to permanently injure eye tissue. Temporary vision impairment (cloudy or blurred vision) is possible.
Ingestion Irritation:	Irritating to mouth, throat, and stomach. Can cause abdominal discomfort, nausea, vomiting and diarrhea. Aspiration of material into the lungs can cause chemical pneumonitis which can be fatal.
Ingestion Toxicity:	Harmful if swallowed. May cause systemic poisoning.

Long-Term (Chronic) Health Effects:

Reproductive and Developmental Toxicity:	No data available to indicate product or any components present at greater than 0.1% may cause birth defects.
Mutagenicity:	No data available to indicate product or any components present at greater than 0.1% is mutagenic or genotoxic.

Inhalation: Upon prolonged and/or repeated exposure to concentrations above permissible exposure limits, can cause moderate respiratory irritation, dizziness, weakness, fatigue, nausea and headache. Harmful! Can cause systemic damage upon prolonged and/or repeated exposure (see "Target Organs)

Skin Contact: Upon prolonged or repeated contact, can cause moderate skin irritation, defatting, and dermatitis. Not likely to cause permanent damage. Upon prolonged or repeated contact, can cause moderate irritation, tearing and reddening, but not likely to permanently injure eye tissue.

Skin Absorption: Upon prolonged or repeated exposure, no hazard in normal industrial use.

HMIS Ratings:

Health:	2
Flammability:	4
Reactivity:	0
PPE:	B

0 - Least 1 - Slight 2 - Moderate 3 - High 4 - Extreme

IV. FIRST-AID MEASURES

Inhalation: Remove to fresh air. If breathing is difficult, have a trained individual administer oxygen. If not breathing, give artificial respiration and have a trained individual administer oxygen. Get medical attention immediately.

Eyes: Immediately flush eyes with plenty of water for at least 20 minutes retracting eyelids often. Tilt the head to prevent chemical from transferring to the uncontaminated eye. Get immediate medical attention and monitor the eye daily as advised by your physician.

Skin Contact: Wash with soap and water. Remove contaminated clothing and launder. Get medical attention if irritation develops or persists. Flush eyes with plenty of water for at least 20 minutes retracting eyelids often. Tilt the head to prevent chemical from transferring to the uncontaminated eye. Get immediate medical attention.

Ingestion: Do not induce vomiting and seek medical attention immediately. Provide medical care provider with this MSDS. Induce vomiting as a last measure. Induced vomiting may lead to aspiration of the material into the lungs potentially causing chemical pneumonitis that may be fatal. Contains a harmful substance. Seek medical help immediately and contact a poison information service. Drink two glasses of water or milk to dilute.

Notes to Doctor: No additional first aid information available

V. FIRE FIGHTING MEASURES

Flammability Summary: **Extremely Flammable**

Extinguishing Media: Use alcohol resistant foam, carbon dioxide, or dry chemical extinguishing agents. Water spray or fog may also be effective for extinguishing if swept across the base of the fire. Water can also be used to absorb heat and keep exposed material from being damaged by fire. Water may be ineffective in fire fighting due the material (or component(s) low flash point, low solvent density, and limited miscibility with water.

Fire and/or Explosion Hazards: Vapors may be ignited by heat, sparks, flames or other sources of ignition at or above the low flash point giving rise to a Class B fire. Vapors are heavier than air and may travel to a source of ignition and flash back Mists or sprays may be flammable below its normal flash point.

Empty containers that retain product residue (liquid, solid/sludge, or vapor) can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose container to heat, flame, sparks, static electricity,

	or other sources of ignition. Any of these actions can potentially cause an explosion that may lead to injury or death.
Fire Fighting Methods and Protection:	Do not enter fire area without proper protection including self-contained toxic breathing apparatus and full protective equipment. Fight fire from a safe distance and a protected location due to the potential of hazardous vapors and decomposition products. Flammable component(s) of this material may be lighter than water and burn while floating on the surface. Use water spray/fog for cooling. Flammable component(s) of this material may be lighter than water and burn while floating on the surface. Fight fire from a safe distance and a protected location due to the potential of hazardous vapors and decomposition products.
Hazardous Combustion Products:	Carbon dioxide, Carbon monoxide

VI. ACCIDENTAL RELEASE MEASURES

Personal Precautions and Equipment:	Exposure to the spilled material may be irritating or harmful. Follow personal protective equipment recommendations found in Section VIII of this MSDS. Additional precautions may be necessary based on special circumstances created by the spill including; the material spilled, the quantity of the spill, the area in which the spill occurred. Also consider the expertise of employees in the area responding to the spill. Evaporation of volatile substances can lead to the displacement of air creating an environment that can cause asphyxiation.
Methods for Clean-up:	Prevent the spread of any spill to minimize harm to human health and the environment if safe to do so. Wear complete and proper personal protective equipment following the recommendation of Section VIII at a minimum. Dike with suitable absorbent material like granulated clay. Gather and store in a sealed container pending a waste disposal evaluation. Shut off ignition sources; including electrical equipment and flames. Do not allow smoking in the area.

VII. HANDLING AND STORAGE

Handling Technical Measures and Precautions:	Harmful or irritating material. Avoid contacting and avoid breathing the material. Use only in a well ventilated area. Empty containers may retain product residues/ vapors. Use proper bonding and grounding during bulk product transfer. Use spark-proof tools and explosion-proof equipment Ground and bond containers when transferring material Do not use pressure to empty container. "Empty" containers retain product residue (liquid and/or vapor) and can be dangerous. Wash thoroughly after handling Use with adequate ventilation Do not get in eyes, on skin and clothing
Storage Technical Measures and Conditions:	Store in a cool dry ventilated location. Isolate from incompatible materials and conditions. Keep container(s) closed. Keep away from sources of ignition Store in a tightly closed container Keep away from heat, sparks, and flame

VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Measures:	No exposure limits exist for the constituents of this product. Use local exhaust ventilation or other engineering controls to minimize exposures and maintain operator comfort. Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits

Respiratory Protection: Respiratory protection may be required to avoid overexposure when handling this product. General or local exhaust ventilation is the preferred means of protection. Use a respirator if general room ventilation is not available or sufficient to eliminate symptoms. Respirators should be selected by and used under the direction of a trained health and safety professional following requirements found in OSHA's respirator standard (29 CFR 1910.134) and ANSI's standard for respiratory protection (Z88.2-1992). A written respiratory protection program, including provisions for medical certification, training, fit testing, exposure assessments, maintenance, inspection, cleaning, and convenient, sanitary storage must be implemented.

Respirator Type(s): NIOSH approved air purifying respirator with organic vapor cartridge and HEPA filter. Air purifying respirators should not be used in oxygen deficient or IDLH atmospheres If airborne concentrations are above the applicable exposure limits, use NIOSH/MSHA approved respiratory protection. A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.

Eye Protection: Wear chemically resistant safety glasses with side shields when handling this product. Wear additional eye protection such as chemical splash goggles and/or face shield when the possibility exists for eye contact with splashing or spraying liquid, or airborne material. Do not wear contact lenses. Have an eye wash station available.

Skin Protection: Wear protective gloves. Inspect gloves for chemical break-through and replace at regular intervals. Clean protective equipment regularly. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work Wear chemically resistant safety glasses with side shields when handling this product. Do not wear contact lenses.

Gloves: Nitrile Neoprene Polyvinylalcohol

Control Parameters:

Chemical Name	ACGIH TLV-TWA	ACGIH STEL	IDLH
Acetone	500 ppm TWA; 1188 mg/m3 TWA	750 ppm STEL; 1782 mg/m3 STEL	2500 ppm IDLH (10% LEL)
Heptane	400 ppm TWA; 1640 mg/m3 TWA	500 ppm STEL; 2050 mg/m3 STEL	750 ppm IDLH
Isopropanol	(400) ppm TWA; (983) mg/m3 TWA	(500) ppm STEL; (1230) mg/m3 STEL	2000 ppm IDLH (10% LEL)

IX. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Liquid
Color: Colorless
Odor: Moderate
pH: ND
Solubility in Water: Complete; 100%
Specific Gravity: 0.75
Bulk Density: 8.345

X. STABILITY AND REACTIVITY

Stability: Stable under normal conditions.
Conditions to Avoid: Sparks, open flame, other ignition sources, and elevated temperatures. Contamination
Materials to Avoid/Chemical Incompatibility: Strong oxidizing agents Strong acids

XI. TOXICOLOGICAL INFORMATION

Component Toxicology Data (NIOSH):

Chemical Name	CAS Number	LD50/LC50
Acetone	67-64-1	Inhalation LC50 Rat : 50100 mg/m3/8H; Inhalation LC50 Mouse : 44 gm/m3/4H; Ora
Heptane	142-82-5	Inhalation LC50 Rat : 103 gm/m3/4H
Isopropyl alcohol	67-63-0	Inhalation LC50 Rat : 16000 ppm/8H; Oral LD50 Rat : 5045 mg/kg; Oral LD50 Mous

XII. ECOLOGICAL INFORMATION

Overview: This material is not expected to be harmful to the ecology.
Mobility: No data
Persistence: No data
Bioaccumulation: No data
Degradability: No data

XIII. DISPOSAL CONSIDERATIONS

Disposal of Packaging: Containers of this material may be hazardous when emptied.
Disposal Methods: Dispose of by incineration following Federal, State, Local, or Provincial regulations.
Waste Disposal Code(s): D001

XIV. TRANSPORTATION INFORMATION

DOT Basic Description: CONSUMER COMMODITY
DOT Hazard Class: ORM-D

IMDG Basic Description: AEROSOLS
IMDG Hazard Class: 2.1
IMDG UN Number: UN1950
IMDG Exceptions: LTD QTY
IMDG EmS: F-D,S-U

IATA Basic Description: AEROSOLS
IATA Hazard Class: 2.1
IATA UN Number: UN1950

XV. REGULATORY INFORMATION

NAFTA Tariff Code: 3824.90.0000

Chemical Name	CAS #	Regulation	% Range
Acetone CERCLA RQ	67-64-1	5000 lb final RQ; 2270 kg final RQ	
Isopropyl alcohol	67-63-0	SARA 313	5 - 10
Heptane (n-)	142-82-5	TSCA 12b export notif	15 - 40
Acetone	67-64-1	Canadian WHMIS list	40 - 70
Heptane (n-)	142-82-5	Canadian WHMIS list	15 - 40
Isopropanol	67-63-0	Canadian WHMIS list	5 - 10
Acetone	67-64-1	Massachusetts RTK List	40 - 70
Heptane (n-Heptane)	142-82-5	Massachusetts RTK List	15 - 40
Isopropyl alcohol	67-63-0	Massachusetts RTK List	5 - 10
Acetone	67-64-1	New Jersey RTK List	40 - 70
n-Heptane	142-82-5	New Jersey RTK List	15 - 40
Isopropyl alcohol	67-63-0	New Jersey RTK List	5 - 10
2-Propanone	67-64-1	Pennsylvania RTK List	40 - 70
Heptane	142-82-5	Pennsylvania RTK List	15 - 40

Consumer Product Safety Improvement Act of 2008 General Conformity Certification:
The Supplier identified in Section 1 of this MSDS has evaluated this product and certifies it to be labeled and packaged in compliance with the applicable provisions of the Federal Hazardous Substance Act as stated in 16 CFR 1500 and enforced by the Consumer Product Safety Commission, and where applicable the products that require Child Resistant Closures are packaged in accordance with the Poison Prevention Packaging Act as stated in 16 CFR 1700 and enforced by the Consumer Product Safety Commission. All closures have been tested in accordance with the latest protocols. No other testing is required to certify compliance with the above. The date of manufacture is stamped on the product container.

XVI. ADDITIONAL INFORMATION

Disclaimer: This material safety data sheet and the information it contains is offered to you in good faith as accurate. We have reviewed any information contained in the data sheet which we have received from outside sources and we believe the information to be correct, but cannot guarantee its accuracy or completeness. Health and safety precautions in this data sheet may not be adequate for all individuals and/or situations. It is the user's obligation to evaluate and use this product in a safe manner and to comply with all applicable laws and regulations. No statement made in this data sheet shall be construed as permission or recommendation for the use of any product in a manner that might infringe existing patents. No warranty is made, either expressed or implied.