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MATERIAL SAFETY
DATA SHEET



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DIVISION: AUTOMOTIVE AFTERMARKET

TRADE NAME:

3M(TM) High Power Brake Cleaner, P.N. 08880

ID NUMBER/U.P.C.: 60-9800-2110-3 00-51135-08880-7 60-9800-3309-0 00-51135-08880-7

ISSUED: JULY 24, 2000

SUPERSEDES: OCTOBER 13, 1999

DOCUMENT: 06-5214-9

1. INGREDIENT	C.A.S. NO.	PERCENT	
HEPTANE	142-82-5	20.0	- 30.0
3-METHYLHEXANE	589-34-4	10.0	- 20.0
M-XYLENE	108-38-3	5.0	- 15.0
METHYL ALCOHOL	67-56-1	1.0	- 10.0
2-METHYLHEXANE	591-76-4	1.0	- 10.0
ETHYLBENZENE	100-41-4	1.0	- 10.0
P-XYLENE	106-42-3	1.0	- 10.0
O-XYLENE	95-47-6	1.0	- 5.0
2,3-DIMETHYLPENTANE	565-59-3	1.0	- 5.0
3-ETHYLPENTANE	617-78-7	1.0	- 5.0
DIMETHYLCYCLOPENTANE	28729-52-4	1.0	- 5.0
METHYLCYCLOHEXANE	108-87-2	1.0	- 5.0
2,2-DIMETHYLHEXANE	590-73-8		< 2.0
TOLUENE	108-88-3		< 0.2

NOTE: The components of this product are in compliance with the chemical notification requirements of TSCA. All applicable chemical ingredients in this material are listed on the European Inventory of Existing Chemical Substances (EINECS), or are exempt polymers whose monomers are listed on EINECS.

THIS PRODUCT CONTAINS THE FOLLOWING TOXIC CHEMICAL OR CHEMICALS SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 OF TITLE III OF THE EMERGENCY PLANNING AND COMMUNITY RIGHT-TO-KNOW ACT OF 1986 AND 40 CFR PART 372:

- M-XYLENE
- METHYL ALCOHOL
- ETHYLBENZENE
- P-XYLENE
- O-XYLENE
- TOLUENE

2. PHYSICAL DATA

BOILING POINT:..... N/D

Abbreviations: N/D - Not Determined N/A - Not Applicable CA - Approximately

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2. PHYSICAL DATA (continued)

VAPOR PRESSURE:..... 40 psi
@ 70 F
VAPOR DENSITY:..... > 1.0 Air = 1
EVAPORATION RATE:..... N/D
SOLUBILITY IN WATER:..... nil
SP. GRAVITY:..... 0.699 Water = 1
PERCENT VOLATILE:..... 100 %
pH:..... N/A
VISCOSITY:..... N/D
MELTING POINT..... N/D
APPEARANCE AND ODOR: Liquid in aerosol container, clear, colorless, solvent odor

3. FIRE AND EXPLOSION HAZARD DATA

FLASH POINT:..... -50.00 F
FLAMMABLE LIMITS - LEL:..... N/D
FLAMMABLE LIMITS - UEL:..... N/D
AUTOIGNITION TEMPERATURE: ... N/D
EXTINGUISHING MEDIA:
Carbon dioxide, Dry chemical, Foam
SPECIAL FIRE FIGHTING PROCEDURES:
Wear full protective clothing, including helmet, self-contained, positive pressure or pressure demand breathing apparatus, bunker coat and pants, bands around arms, waist and legs, face mask, and protective covering for exposed areas of the head.
UNUSUAL FIRE AND EXPLOSION HAZARDS:
Closed containers exposed to heat from fire may build pressure and explode. Vapors may travel long distances along the ground or floor to an ignition source and flash back.
NFPA HAZARD CODES: HEALTH: 2 FIRE: 4 REACTIVITY: 0 AEROSOL STORAGE: 2
UNUSUAL REACTION HAZARD: none

4. REACTIVITY DATA

STABILITY: Stable
INCOMPATIBILITY - MATERIALS TO AVOID:
Heat.
HAZARDOUS POLYMERIZATION: Will Not Occur
HAZARDOUS DECOMPOSITION PRODUCTS:
Carbon Monoxide and Carbon Dioxide, Toxic Vapors, Gases or Particulates.

5. ENVIRONMENTAL INFORMATION**SPILL RESPONSE:**

Refer to other sections of this MSDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment. Ventilate area. Extinguish all ignition sources. Contain spill. Evacuate unprotected personnel from hazard area. Cover with absorbent material. Cover spill area with Light Water Brand or other ATC foam. (For further information on

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7. PRECAUTIONARY INFORMATION**EYE PROTECTION:**Avoid eye contact with vapor, spray, or mist. Wear vented goggles.
Wear safety glasses with side shields.**SKIN PROTECTION:**

Avoid skin contact. Wear appropriate gloves when handling this material. A pair of gloves made from the following material(s) are recommended: polytetrafluoroethylene (Teflon), fluoroelastomer (Viton).

VENTILATION PROTECTION:

Use in a well-ventilated area. Provide sufficient ventilation to maintain emissions below recommended exposure limits. If exhaust ventilation is not adequate, use appropriate respiratory protection.

RESPIRATORY PROTECTION:

Avoid breathing of vapors, mists or spray. Select one of the following NIOSH approved respirators based on airborne concentration of contaminants and in accordance with OSHA regulations: half-mask organic vapor respirator, full-face organic vapor respirator.

PREVENTION OF ACCIDENTAL INGESTION:

Wash hands after handling and before eating. Do not ingest.

RECOMMENDED STORAGE:

Store at temperatures below 120 degrees F (49 degrees C). Keep out of the reach of children.

FIRE AND EXPLOSION AVOIDANCE:

Aerosol container contains flammable gas under pressure. Keep away from heat, sparks, open flame, and other sources of ignition. Extremely flammable liquid and vapor. Do not pierce or burn container, even after use. Avoid static discharge.

INGREDIENTS	EXPOSURE LIMITS			TYPE AUTH	SKIN*
	VALUE	UNIT			
HEPTANE	400	ppm	TWA	ACGIH	
HEPTANE	500	ppm	STEL	ACGIH	
HEPTANE	400	ppm	TWA	OSHAV	
HEPTANE	OSHA VACATED	PEL			
HEPTANE	500	ppm	STEL	OSHAV	
HEPTANE	OSHA VACATED	PEL			
HEPTANE	500	ppm	TWA	OSHA	
3-METHYLHEXANE	NONE	NONE	NONE	NONE	
M-XYLENE	100	ppm	TWA	OSHA	
M-XYLENE	150	ppm	STEL	OSHA	
M-XYLENE	100	ppm	TWA	ACGIH	
M-XYLENE	150	ppm	STEL	ACGIH	

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7. PRECAUTIONARY INFORMATION (continued)

INGREDIENTS	EXPOSURE LIMITS		TYPE	AUTH	SKIN*
	VALUE	UNIT			
METHYL ALCOHOL	200	ppm	TWA	ACGIH	Y
METHYL ALCOHOL	250	ppm	STEL	ACGIH	Y
METHYL ALCOHOL	200	ppm	TWA	OSHA	Y
METHYL ALCOHOL	250	ppm	STEL	OSHA	Y
2-METHYLHEXANE	NONE	NONE	NONE	NONE	
ETHYLBENZENE	100	ppm	TWA	ACGIH	
ETHYLBENZENE	125	ppm	STEL	ACGIH	
ETHYLBENZENE	100	ppm	TWA	OSHA	
ETHYLBENZENE	125	ppm	STEL	OSHA	
P-XYLENE	100	ppm	TWA	OSHA	
P-XYLENE	150	ppm	STEL	OSHA	
P-XYLENE	100	ppm	TWA	ACGIH	
P-XYLENE	150	ppm	STEL	ACGIH	
O-XYLENE	100	ppm	TWA	OSHA	
O-XYLENE	150	ppm	STEL	OSHA	
O-XYLENE	100	ppm	TWA	ACGIH	
O-XYLENE	150	ppm	STEL	ACGIH	
2,3-DIMETHYLPENTANE	NONE	NONE	NONE	NONE	
3-ETHYLPENTANE	NONE	NONE	NONE	NONE	
DIMETHYLCYCLOPENTANE	NONE	NONE	NONE	NONE	
METHYLCYCLOHEXANE	400	ppm	TWA	ACGIH	
METHYLCYCLOHEXANE	400	ppm	TWA	OSHAV	
METHYLCYCLOHEXANE	OSHA	VACATED	PEL		
METHYLCYCLOHEXANE	500	ppm	TWA	OSHA	
2,2-DIMETHYLHEXANE	NONE	NONE	NONE	NONE	
TOLUENE	50	ppm	TWA	ACGIH	Y
TOLUENE	100	ppm	TWA	OSHAV	
TOLUENE	OSHA	VACATED	PEL		
TOLUENE	150	ppm	STEL	OSHAV	
TOLUENE	OSHA	VACATED	PEL		
TOLUENE	200	ppm	TWA	OSHA	
TOLUENE	300	ppm	CEIL	OSHA	

* SKIN NOTATION: Listed substances indicated with "Y" under SKIN refer to the potential contribution to the overall exposure by the cutaneous route including mucous membrane and eye, either by airborne or, more particularly, by direct contact with the substance. Vehicles can alter skin absorption.

SOURCE OF EXPOSURE LIMIT DATA:

- ACGIH: American Conference of Governmental Industrial Hygienists
- OSHA: Occupational Safety and Health Administration
- OSHAV: Occupational Safety and Health Administration Vacated PEL. Vacated Permissible Exposure Limits (PEL) are enforced as the OSHA PEL in some states. Check with your local regulatory authority.
- NONE: None Established

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8. HEALTH HAZARD DATA

EYE CONTACT:

Moderate Eye Irritation: signs/symptoms can include redness, swelling, pain, tearing, and hazy vision.

SKIN CONTACT:

Mild Skin Irritation: signs/symptoms can include redness, swelling, and itching.

Prolonged or repeated exposure may cause:

May be absorbed through the skin and produce effects similar to those caused by inhalation and/or ingestion.

INHALATION:

Intentional concentration and inhalation may be harmful or fatal.

Irritation (upper respiratory): signs/symptoms can include soreness of the nose and throat, coughing and sneezing.

Single overexposure, above recommended guidelines, may cause:

Central Nervous System Depression: signs/symptoms can include headache, dizziness, drowsiness, incoordination, slowed reaction time, slurred speech, giddiness and unconsciousness.

IF SWALLOWED:

Ingestion is not a likely route of exposure to this product.

WHILE THE FOLLOWING EFFECTS ARE ASSOCIATED WITH ONE OR MORE OF THE INDIVIDUAL INGREDIENTS IN THIS PRODUCT AND ARE REQUIRED TO BE INCLUDED ON THE MSDS BY THE U.S. OSHA HAZARD COMMUNICATION STANDARD, THEY ARE NOT EXPECTED EFFECTS DURING FORESEEABLE USE OF THIS PRODUCT.

Harmful or fatal if swallowed.

Blindness.

Irritation of Gastrointestinal Tissues: signs/symptoms can include pain, vomiting, abdominal tenderness, nausea, blood in vomitus, and blood in feces.

Central Nervous System Depression: signs/symptoms can include headache, dizziness, drowsiness, muscular weakness, incoordination, slowed reaction time, fatigue, blurred vision, slurred speech, giddiness, tremors and convulsions.

Aspiration Pneumonitis: signs/symptoms can include coughing, difficulty breathing, wheezing, coughing up blood and pneumonia, which can be fatal.

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SECTION CHANGE DATES

INGREDIENTS	SECTION CHANGED SINCE	OCTOBER 13, 1999 ISSUE
PRECAUT. INFO.	SECTION CHANGED SINCE	OCTOBER 13, 1999 ISSUE

Abbreviations: N/D - Not Determined N/A - Not Applicable CA - Approximately

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