MATERIAL SAFETY 3M

DATA SHEET 3M Center

St. Paul, Minnesota

55144-1000

1-800-364-3577 or (651) 737-6501 (24 hours)

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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: November 09, 2001 SUPERSEDES: August 08, 2001

DOCUMENT: 06-5214-9

1. INGREDIENT	C.A.S. NO.			
XYLENE	1330-20-7	10.0	- 30.0	
HEPTANE	142-82-5	10.0	- 30.0	
PROPANE	74-98-6	10.0	- 30.0	
3-METHYLHEXANE	589-34-4	10.0	- 30.0	
METHYL ALCOHOL	67-56-1	7.0	- 13.0	
2-METHYLHEXANE	591-76-4	5.0	- 10.0	
ETHYLBENZENE	100-41-4	3.0	- 7.0	
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	
TOLUENE	108-88-3		< 0.30	

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:

XYLENE

METHYL ALCOHOL ETHYLBENZENE

TOLUENE

November 09, 2001 ______ 2. PHYSICAL DATA ______ VAPOR PRESSURE:...... 40 psi VAPOR DENSITY:..... > 1.0 Air=1 EVAPORATION RATE:..... N/D SOLUBILITY IN WATER:.... nil SPECIFIC GRAVITY:..... 0.699 Water=1 PERCENT VOLATILE:..... 100 % VISCOSITY:.....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

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4. REACTIVITY DATA (continued)

INCOMPATIBILITY - MATERIALS/CONDITIONS TO AVOID:
 Heat.

HAZARDOUS POLYMERIZATION: 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 ATC foam usage, contact 3M Fire Protection Systems.) Collect using non-sparking tools. Clean up residue. Place in an approved metal container. Seal the container. Place leaking containers in a well-ventilated area, preferrably in an exhaust hood, if available, or outdoors.

RECOMMENDED DISPOSAL:

Incinerate in a permitted hazardous waste incinerator. Do not puncture or burn cans in a household incinerator. Facility must be capable of handling aerosol cans. Dispose of empty cans in a sanitary landfill.

ENVIRONMENTAL DATA:

Not determined.

REGULATORY INFORMATION:

Volatile Organic Compounds: 699 gms/liter calculated per SCAQMD rule 443.1.

VOC Less H2O & Exempt Solvents: 699 gms/liter calculated per SCAQMD rule 443.1.

Since regulations vary, consult applicable regulations or authorities before disposal. In the event of an uncontrolled release of this material, the user should determine if the release qualifies as a reportable quantity. U.S. EPA Hazardous Waste Number = D001 (Ignitable)

EPCRA HAZARD CLASS:

FIRE HAZARD: Yes PRESSURE: Yes REACTIVITY: No ACUTE: Yes CHRONIC: Yes

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6. SUGGESTED FIRST AID

EYE CONTACT:

Immediately flush eyes with large amounts of water. Get immediate medical attention.

SKIN CONTACT:

Flush skin with large amounts of water. If irritation persists, get medical attention.

TNHALATTON:

Remove person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, get immediate medical attention.

IF SWALLOWED:

If swallowed, call a physician immediately. Only induce vomiting at the instruction of a physician. Never give anything by mouth to an unconscious person.

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7. PRECAUTIONARY INFORMATION

EYE PROTECTION:

Avoid eye contact. Avoid eye contact with vapor, spray, or mist. The following should be worn alone or in combination, as appropriate, to prevent eye contact: 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: polyethylene/ethylene vinyl alcohol, polytetrafluoroethylene (Teflon), fluoroelastomer (Viton).

RECOMMENDED VENTILATION:

Do not use in a confined area or areas with little or no air movement. 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.

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7. PRECAUTIONARY INFORMATION (continued)

PREVENTION OF ACCIDENTAL INGESTION:

Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water. Wash hands after handling and before eating. Do not ingest.

RECOMMENDED STORAGE:

Store away from heat. Store at temperatures below 120 degrees F (49 degrees C). Store out of direct sunlight. Keep out of the reach of children.

FIRE AND EXPLOSION AVOIDANCE:

Aerosol container contains flammable gas under pressure. Prevent all sources of ignition. Extremely flammable liquid and vapor. Do not pierce or burn container, even after use. No smoking while handling this material. Vapors may ignite explosively. Avoid static discharge.

EXPOSURE LIMITS

INGREDIENT	VALUE	UNIT	TYPE	AUTH	SKIN*
XYLENE	100	PPM	TWA	ACGIH	
XYLENE	150	PPM	STEL	ACGIH	
XYLENE	100	PPM	TWA	OSHA	
XYLENE	150	PPM	STEL	OSHA	
HEPTANE	400	PPM	TWA	ACGIH	
HEPTANE	500	PPM	STEL	ACGIH	
HEPTANE	400	PPM	TWA	OSHAV	
	OSHA	VACATED PE	L		
HEPTANE	500	PPM	STEL	OSHAV	
	OSHA	VACATED PE	L		
HEPTANE	500	PPM	TWA	OSHA	
PROPANE	1000	PPM	TWA	OSHA	
PROPANE	2500	PPM	TWA	ACGIH	
3-METHYLHEXANE	NONE	NONE	NONE	NONE	
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	
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	

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EXPOSURE LIMITS (continued)

INGREDIENT	VALUE	UNIT			SKIN*
		. VACATED PE			
METHYLCYCLOHEXANE	500	PPM	TWA	OSHA	
TOLUENE	50	PPM	TWA	ACGIH	Y
TOLUENE	100	PPM	TWA	OSHAV	
	OSHA	. VACATED PE	L		
TOLUENE	150	PPM	STEL	OSHAV	
	OSHA	VACATED PE	L		
TOLUENE	200	PPM	TWA	OSHA	
TOLUENE	300	PPM	CEIL	OSHA	
TOLUENE	75	PPM	STEL	CMRG	Y

* 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
- CMRG: Chemical Manufacturer Recommended Exposure Guidelines 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

8. HEALTH HAZARD DATA

EYE CONTACT:

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

SKIN CONTACT:

Moderate Skin Irritation (after prolonged or repeated contact): signs/symptoms can include redness, swelling, itching, and dryness.

Prolonged or repeated exposure may cause:

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

INHALATION:

May be harmful if inhaled.

Intentional concentration and inhalation may be harmful or fatal.

Irritation (upper respiratory): signs/symptoms can include soreness ______

8. HEALTH HAZARD DATA (continued)

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.

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.

Prolonged or repeated overexposure, above recommended guidelines, may cause:

Blindness.

Kidney Effects: signs/symptoms can include reduced urine volume, blood in urine and back pain.

Liver Effects: signs/symptoms can include yellow skin(jaundice) and tenderness of upper abdomen.

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.

Ingestion may cause:

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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8. HEALTH HAZARD DATA (continued)

CANCER:

WARNING: Contains a chemical which can cause cancer. (100-41-4) (IARC possible human carcinogen 2B)

REPRODUCTIVE/DEVELOPMENTAL TOXINS:

WARNING: Contains a chemical which can cause birth defects. (108-88-3)

SECTION CHANGE DATES

PRECAUTIONARY INFO. SECTION CHANGED SINCE August 08, 2001 ISSUE

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

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