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Material Safety Data Sheet
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1 Product Identification

Tradename:
3M(TM) High Power Brake Cleaner; PN 08180
Product ID:
60-4100-0974-4 CS-0406-7085-6 60-4550-3009-2 XS-0414-1770-9
Intended Use of Product:
Automotive
Division:
BK - Automotive Aftermarket

2 Composition/Information on Ingredients

Ingredient Name	CAS Number	Percentage
ACETONE	67-64-1	40 - 60
SOLVENT NAPHTHA (PETROLEUM), LIGHT ALIPHATIC	64742-89-8	15 - 30
PROPANE	74-98-6	7 - 13
XYLENE	1330-20-7	5 - 10
ETHYLBENZENE	100-41-4	1 - 2

NOTE:

Each percentage is expressed as the ratio of the weight of the ingredient to the weight of the controlled product.

3 Hazards Identification

Critical Hazards:

Aerosol container contains flammable gas under pressure.

Moderate Eye Irritation: Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.

Moderate Skin Irritation: Signs/symptoms can include localized redness, swelling, itching, and dryness.

May be absorbed through skin and cause target organ effects.

May be absorbed following inhalation and cause target organ effects.

May be absorbed following ingestion and cause target organ effects.

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

High exposures to xylenes in some animal studies have been reported to cause health effects on the developing embryo/fetus. These effects were often at levels toxic to the mother. The significance of these findings to humans has not been determined.

See Sections 7 and 11 for further information.

4 First Aid Measures

Instructions for Eye Contact:

Flush eyes with large amounts of water. If signs/symptoms persist, get medical attention.

Instructions for Skin Contact:

Remove contaminated clothing and shoes. Immediately flush skin with large amounts of water. Get medical attention. Wash contaminated clothing and clean shoes before reuse.

Instructions for Inhalation:

Remove person to fresh air. Get immediate medical attention.

Instructions for Ingestion:

Do not induce vomiting. Give victim two glasses of water. Never give anything by mouth to an unconscious person. Get immediate medical attention.

Special Instructions:

Exposure may increase myocardial irritability. Do not administer sympathomimetic drugs unless absolutely necessary.

5 Fire Fighting Measures

Flash point:	-104.44 C TCC (Based on propellant)
Lower Explosive Limit (%):	Not Available
Upper Explosive Limit (%):	Not Available
Autoignition temperature:	Not Available
Suitable Extinguishing Media:	Use fire extinguishers with class B extinguishing agents (e.g., dry

chemical, carbon dioxide).

Exposure Hazards during Fire:

Closed containers exposed to heat from fire may build pressure and explode. Vapours may travel long distances along the ground or floor to an ignition source and flash back.

Combustion Products from Fire:

- Carbon Monoxide;
- Carbon Dioxide;

Unusual Fire and Explosion Hazards

Flammable liquid and vapour. Flammable liquified gas.

Fire Fighting Procedures:

Water may not effectively extinguish fire; however, it should be used to keep fire-exposed containers and surfaces cool and prevent explosive rupture. Wear full protective equipment (Bunker Gear) and

a self-contained breathing apparatus (SCBA).

NFPA: Health	2
NFPA: Fire	2
NFPA: Reactivity	0
NFPA: Unusual Reaction Hazard	none

Special Instructions:

Aerosol container contains flammable material under pressure.

6 Accidental Release Measures

Personal Precautions:

Refer to other sections of this MSDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment. Call 3M-HELPS line (1-800-364-3577) for more information on handling and managing the spill.

Spill Response:

Evacuate unprotected and untrained personnel from hazard area. The spill should be cleaned up by qualified personnel. Remove all ignition sources such as flames, smoking materials, and electrical spark sources. Use only non-sparking tools. Ventilate the area with fresh air. For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust vapors, in accordance with good industrial hygiene practice. Warning! A motor could be an ignition source and could cause flammable gases or vapors in the spill area to burn or explode. Contain spill. For larger spills, cover drains and build dikes to prevent entry into sewer systems or bodies of water. If possible, seal leaking container. Place leaking containers in a well-ventilated area, preferably an operating exhaust hood, or if necessary outdoors on an impermeable surface until appropriate packaging for the leaking container or its contents is available. Cover spill area with a fire-extinguishing foam designed for use on solvents, such as alcohols and acetone, that can dissolve in water. An AR - AFFF type foam is recommended. Working from around the edges of the

spill inward, cover with bentonite, vermiculite, or commercially available inorganic absorbent material. Mix in sufficient

absorbent until it appears dry. Remember, adding an absorbent material does not remove a toxic, corrosivity or flammability hazard. Collect as much of the spilled material as possible using non-sparking tools. Clean up residue with detergent and water. Collect the resulting residue containing solution. Place in an approved metal container. Seal the container. Dispose of collected material as soon as possible.

7 Handling and Storage

Storage Requirements:

Do not store containers on their sides.

Incompatible Materials:

Store away from acids;

Store away from heat;

Store out of direct sunlight.

Store away from oxidizing agents.

Ventilation:

No data available.

Fire Prevention:

No smoking while handling this material. Do not spray near flames or sources of ignition. Aerosol container contains flammable gas under pressure.

Explosion Prevention:

Keep away from heat, sparks, open flame, pilot lights and other sources of ignition. Aerosol container contains flammable gas under pressure.

Static Prevention:

Avoid static discharge.

Use Instructions:

Keep container tightly closed. Do not pierce or burn container, even after use. Avoid contact with oxidizing agents.

8 Exposure Controls/Personal Protection

Personal Protection

Eye Protection:

Avoid eye contact with vapours, mists, or spray.

The following should be worn alone or in combination, as appropriate, to prevent eye contact:

Safety glasses with side shields

Indirect vented goggles;

Hand Protection:

Wear appropriate gloves when handling this material.

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The following glove material(s) are recommended:

butyl rubber;

Skin Protection:

Avoid skin contact.

Select and use gloves and/or protective clothing to prevent skin contact based on the results of an exposure assessment. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible materials.

Respiratory Protection:

Avoid breathing of vapours, mists or spray.

Under normal use conditions, airborne exposures are not expected to be significant enough to require respiratory protection.

Select one of the following approved respirators based on airborne concentration of contaminants and in accordance with regulations: Half facepiece or fullface air-purifying respirator with organic vapor cartridges.

Ingestion (Prevention):

Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water.

Keep out of the reach of children.

Recommended Ventilation:

Use with functioning spray booth or local exhaust.

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

Do not remain in area where available oxygen may be reduced.

Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below Occupational Exposure Limits and/or control mist, vapor, or spray. If ventilation is not adequate, use respiratory protection equipment.

Ingredient Exposure Data

ACETONE (67-64-1)

LD50 (rat, oral)

5800 mg/kg

LC50 (rat, inhalation/4 hours) No data available.
Exposure Limits
ACGIH: TWA 500 ppm (Table A4)
ACGIH: TWA 1780 mg/m3 (Table A4)
ACGIH: STEL 750 ppm (Table A4)
ACGIH: STEL 2380 mg/m3 (Table A4)
SOLVENT NAPHTHA (PETROLEUM), LIGHT ALIPHATIC (64742-89-8)
Specific Ingredient Data
No data available.
LD50 (rat, oral) No data available.
LC50 (rat, inhalation/4 hours) 3400 ppm
Exposure Limits
CMRG: TWA 300 ppm
PROPANE (74-98-6)
Specific Ingredient Data

No data available.
LD50 (rat, oral) No data available.
LC50 (rat, inhalation/4 hours) No data available.
Exposure Limits
ACGIH: TWA 1000 ppm
XYLENE (1330-20-7)
LD50 (rat, oral) 4300 mg/kg
LD50 (dermal, rabbit) > 1700 mg/kg
LC50 (rat, inhalation/4 hours) 5000 ppm
Exposure Limits
ACGIH: TWA 100 ppm (Table A4)
ACGIH: TWA 434 mg/m3 (Table A4)
ACGIH: STEL 150 ppm (Table A4)
ACGIH: STEL 651 mg/m3 (Table A4)
ETHYLBENZENE (100-41-4)
LD50 (rat, oral) 3500 mg/kg
LC50 (rat, inhalation/4 hours) No data available.
Exposure Limits
ACGIH: TWA 100 ppm (Table A3)
ACGIH: STEL 125 ppm (Table A3)
ACGIH: TWA 434 mg/m3 (Table A3)
ACGIH: STEL 543 mg/m3 (Table A3)

9 Physical and Chemical Properties

Physical form,Color,Odour:	Liquid; Aerosol; Clear; citrus odour; acetone odour;
Odour Threshold:	No data available.
pH:	Not applicable
Boiling point/boiling range:	Not Available
Melting point/melting range:	Not applicable
Vapour pressure:	Not Available
Water Solubility:	Appreciable
Specific gravity:	0.88 Water=1
Vapour density:	Not Available
Volatile organic compounds:	44 % by weight CARB
Evaporation rate:	Not Available
Viscosity:	Not Available
Percent Volatile:	100 % by weight

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10 Stability and Reactivity

Conditions to Avoid:
Store away from heat;
Store out of direct sunlight.

Materials to Avoid:
Strong oxidizing agents;
Store away from acids;

Hazardous Decomposition:
Carbon Monoxide;
Carbon Dioxide;

Stability and Reactivity:
Stable. Hazardous polymerization will not occur.

11 Toxicological Information

Effects from Eye Contact:
Moderate Eye Irritation: Signs/symptoms may include redness,

swelling, pain, tearing, and blurred or hazy vision.

Effects from Skin Contact:

Moderate Skin Irritation: Signs/symptoms can include localized redness, swelling, itching, and dryness.

May be absorbed through skin and cause target organ effects.

Effects from Inhalation:

May be absorbed following inhalation and cause target organ effects. Intentional concentration and inhalation may be harmful or fatal.

Respiratory Tract Irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

Simple Asphyxiation: Signs/symptoms may include increased heart rate, rapid respirations, drowsiness, headache, incoordination, altered judgement, nausea, vomiting, lethargy, seizures, coma, and may be fatal.

Cardiac Sensitization: Signs/symptoms may include irregular heartbeat (arrhythmia), faintness, chest pain, and may be fatal.

Effects from Ingestion:

May be absorbed following ingestion and cause target organ effects.

Chemical (Aspiration) Pneumonitis: Signs/symptoms can include coughing, gasping, choking, burning of the mouth, difficulty breathing, bluish colored skin (cyanosis), and possibly death.

Gastrointestinal Irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea.

Sensitization Information:

Cardiac Sensitization: Signs/symptoms may include irregular heartbeat (arrhythmia), faintness, chest pain, and may be fatal.

Carcinogenicity:

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

Mutagenicity:

No data available.

Reproductive Effects:

High exposures to xylenes in some animal studies have been reported to cause health effects on the developing embryo/fetus. These effects were often at levels toxic to the mother. The significance of these findings to humans has not been determined.

Component Based Information:

No data available.

Product Based Information:

No data available.

Other Effects & Information:

Central Nervous System (CNS) Depression: Signs/symptoms may include headache, dizziness, drowsiness, incoordination, nausea, slowed reaction time, slurred speech, giddiness, and unconsciousness.

Prolonged or repeated exposure may cause:

Liver Effects: Signs/symptoms may include loss of appetite, weight loss, fatigue, weakness, abdominal tenderness and jaundice.

Kidney/Bladder Effects: Signs/symptoms may include changes in urine production, abdominal or lower back pain, increased protein in urine, increased blood urea nitrogen (BUN), blood in urine, and painful urination.

12 Ecological Information

Environmental Data:

Ecotoxicity Data:

Not determined.

Ecofate Data:

Not determined.

13 Disposal Considerations

Product as Sold:

Incinerate in a permitted hazardous waste incinerator. As a disposal alternative, dispose of waste product in a permitted hazardous waste facility. Facility must be capable of handling aerosol cans. Dispose of empty product containers in a sanitary landfill. Benzene concentration < 0.006 % by weight

Product Packaging:

No data available.

Special Instructions:

Since regulations vary, consult applicable regulations or authorities before disposal.

14 Transport Information

Transportation of Dangerous Goods

TDG Classification: Consumer Commodity

Special Information:: Contact 3M for more information.

These transportation classifications are provided as a customer service. As the shipper YOU remain responsible for complying with all applicable laws and regulations, including proper transportation classification and packaging. 3M's transportation classifications are based on product formulation, packaging, 3M policies and 3M's understanding of applicable current regulations. 3M does not guarantee the accuracy of this classification information. This information applies only to transportation classification and not the packaging, labeling, or marking requirements. The original 3M package is certified for Canadian ground shipment only. If you are shipping by air or ocean, the package may not meet applicable regulatory requirements.

International Dangerous Goods Classification

15 Regulatory Information

WHMIS Classification: A, B5, D2A, D2B

NOTE:

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

Product Certifications:

The product on this MSDS, or all its components, is included on the following countries' chemical inventories, as noted:

- AICS - Australian Inventory of Chemical Substances
- DSL - Domestic Substances List (Canada)
- CICS - Chinese Inventory of Chemical Substances
- EINECS - European Inventory of Existing Commercial Chemical Substances
- KECI - Korean Existing Chemicals Inventory
- PICCS - Philippines Inventory of Commercial Chemical Substances
- TSCA - Toxic Substances Control Act (USA)

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16 Other Information

Reason for Reissue:

The following Sections and topics have been updated or revised:
Added product id(s) to the MSDS;

The information in this Material Safety Data Sheet (MSDS) is believed to be correct as of the date issued. 3M MAKES NO WARRANTIES, EXPRESSED OR IMPLIED, STATUTORY OR OTHERWISE, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OR CONDITION OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR COURSE OF PERFORMANCE OR USAGE OF TRADE. User is responsible for determining whether the 3M product is fit for a particular purpose and suitable for user's method of use or application. Given the variety of factors that can affect the use and application of a 3M product, some of which are uniquely within the user's knowledge and control, it is essential that the user evaluate the 3M product to determine whether it is fit for a particular purpose and suitable for user's method of use or application.

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