Material Safety Data Sheet

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SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: 3M(TM) Throttle Plate Cleaner; PN 08182; 08185
MANUFACTURER: 3M
DIVISION: Automotive Aftermarket

ADDRESS: 3M Center
St. Paul, MN 55144-1000

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

Issue Date: 05/23/2007
Supersedes Date: 10/28/2004
Document Group: 18-2194-1

Product Use:
Intended Use: Automotive
Specific Use: Clean and lubricate throttle body assemblies.

SECTION 2: INGREDIENTS

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>C.A.S. No.</th>
<th>% by Wt</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACETONE</td>
<td>67-64-1</td>
<td>15 - 40</td>
</tr>
<tr>
<td>HYDROTREATED LIGHT NAPHTHA (PETROLEUM)</td>
<td>64742-49-0</td>
<td>10 - 30</td>
</tr>
<tr>
<td>HYDROTREATED LIGHT PETROLEUM DISTILLATES</td>
<td>64742-47-8</td>
<td>10 - 30</td>
</tr>
<tr>
<td>PROPANE</td>
<td>74-98-6</td>
<td>10 - 30</td>
</tr>
<tr>
<td>XYLENE</td>
<td>1330-20-7</td>
<td>5 - 10</td>
</tr>
<tr>
<td>METHYL ACETATE</td>
<td>79-20-9</td>
<td>3 - 7</td>
</tr>
<tr>
<td>POLYETHER AMINE</td>
<td>Trade Secret</td>
<td>1 - 5</td>
</tr>
<tr>
<td>ETHYL BENZENE</td>
<td>100-41-4</td>
<td>0.5 - 1.5</td>
</tr>
</tbody>
</table>

SECTION 3: HAZARDS IDENTIFICATION

3.1 EMERGENCY OVERVIEW

Odor, Color, Grade: Amber Liquid dispensed as an aerosol, solvent odor
General Physical Form: Liquid
Immediate health, physical, and environmental hazards: Flammable liquid and vapor. Flammable liquefied gas. Closed containers exposed to heat from fire may build pressure and explode. Extremely flammable liquid and vapor. Dust clouds of this material in combination with an ignition source may be explosive. Vapors may travel long distances along the ground or floor to an
3.2 POTENTIAL HEALTH EFFECTS

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

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

Inhalation:
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.

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

Single exposure, above recommended guidelines, may cause:
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.

May be absorbed following inhalation and cause target organ effects.

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

May be absorbed following ingestion and cause target organ effects.

Target Organ Effects:
May cause blindness.

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

Blood Effects: Signs/symptoms may include generalized weakness and fatigue, skin pallor, changes in blood clotting time, internal bleeding, and/or hemoglobinemia.

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.
Carcinogenicity:
Contains a chemical or chemicals which can cause cancer.

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>C.A.S. No.</th>
<th>Class Description</th>
<th>Regulation</th>
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<tr>
<td>ETHYLBENZENE</td>
<td>100-41-4</td>
<td>Group 2B</td>
<td>International Agency for Research on Cancer</td>
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</tbody>
</table>

SECTION 4: FIRST AID MEASURES

4.1 FIRST AID PROCEDURES
The following first aid recommendations are based on an assumption that appropriate personal and industrial hygiene practices are followed.

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

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.

Inhalation: Remove person to fresh air. Get immediate medical attention.

If Swallowed: Do not induce vomiting unless instructed to do so by medical personnel. Give victim two glasses of water. Never give anything by mouth to an unconscious person. Get medical attention.

4.2 NOTE TO PHYSICIANS
Exposure may increase myocardial irritability. Do not administer sympathomimetic drugs unless absolutely necessary.

SECTION 5: FIRE FIGHTING MEASURES

5.1 FLAMMABLE PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Autoignition temperature</td>
<td>No Data Available</td>
</tr>
<tr>
<td>Flash Point</td>
<td>-150 °F</td>
</tr>
<tr>
<td>Flammable Limits - LEL</td>
<td>No Data Available</td>
</tr>
<tr>
<td>Flammable Limits - UEL</td>
<td>No Data Available</td>
</tr>
</tbody>
</table>

5.2 EXTINGUISHING MEDIA
Use fire extinguishers with class B extinguishing agents (e.g., dry chemical, carbon dioxide).

5.3 PROTECTION OF FIRE FIGHTERS

Special 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).

Unusual Fire and Explosion Hazards: Flammable liquid and vapor. Flammable liquefied gas. Closed containers exposed to heat from fire may build pressure and explode. Dust clouds of this material in combination with an ignition source may be explosive.
Vapors may travel long distances along the ground or floor to an ignition source and flash back.

**SECTION 6: ACCIDENTAL RELEASE MEASURES**

Accidental Release Measures: Refer to other sections of this MSDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment. Call 3M-HELP line (1-800-364-3577) for more information on handling and managing the spill. 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. 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 a metal container approved for transportation by appropriate authorities. Seal the container. Dispose of collected material as soon as possible.

In the event of a release of this material, the user should determine if the release qualifies as reportable according to local, state, and federal regulations.

**SECTION 7: HANDLING AND STORAGE**

7.1 HANDLING
Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water. Contents may be under pressure, open carefully. Keep away from heat, sparks, open flame, pilot lights and other sources of ignition. Ground containers securely when transferring contents. Wear low static or properly grounded shoes. No smoking while handling this material. Do not spray near flames or sources of ignition. Avoid breathing of vapors, mists or spray. Avoid static discharge. Avoid eye contact with vapors, mists, or spray. Keep out of the reach of children. Avoid contact with oxidizing agents.

7.2 STORAGE

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

8.1 ENGINEERING CONTROLS
Provide appropriate local exhaust ventilation on open containers. 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. Provide ventilation adequate to maintain dust concentration below minimum explosive concentrations. 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.

8.2 PERSONAL PROTECTIVE EQUIPMENT (PPE)

8.2.1 Eye/Face Protection
Avoid eye contact with vapors, mists, or spray.
The following eye protection(s) are recommended: Indirect Vented Goggles.

8.2.2 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. Gloves made from the following material(s) are recommended: Polyvinyl Alcohol (PVA).

8.2.3 Respiratory Protection
Avoid breathing of vapors, mists or spray. Consult the current 3M Respirator Selection Guide for additional information or call 1-800-243-4630 for 3M technical assistance.

Select one of the following NIOSH approved respirators based on airborne concentration of contaminants and in accordance with OSHA regulations: Half facepiece or fullface air-purifying respirator with organic vapor cartridges. Consult the current 3M Respiratory Selection Guide for additional information or call 1-800-243-4630 for 3M technical assistance.

8.2.4 Prevention of Swallowing
Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water. Not applicable.

8.3 EXPOSURE GUIDELINES

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Authority</th>
<th>Type</th>
<th>Limit</th>
<th>Additional Information</th>
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<tr>
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<td>TWA</td>
<td>500 ppm</td>
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</tr>
<tr>
<td>ACETONE</td>
<td>ACGIH</td>
<td>STEL</td>
<td>750 ppm</td>
<td>Table A4</td>
</tr>
<tr>
<td>ACETONE</td>
<td>OSHA</td>
<td>TWA, Vacated</td>
<td>750 ppm</td>
<td></td>
</tr>
<tr>
<td>ACETONE</td>
<td>OSHA</td>
<td>TWA</td>
<td>1000 ppm</td>
<td>Table Z-1</td>
</tr>
<tr>
<td>ACETONE</td>
<td>OSHA</td>
<td>STEL, Vacated</td>
<td>1000 ppm</td>
<td></td>
</tr>
<tr>
<td>ETHYLBENZENE</td>
<td>ACGIH</td>
<td>TWA</td>
<td>100 ppm</td>
<td>Table A3</td>
</tr>
<tr>
<td>ETHYLBENZENE</td>
<td>ACGIH</td>
<td>STEL</td>
<td>125 ppm</td>
<td>Table A3</td>
</tr>
<tr>
<td>ETHYLBENZENE</td>
<td>OSHA</td>
<td>TWA</td>
<td>100 ppm</td>
<td>Table Z-1A</td>
</tr>
<tr>
<td>ETHYLBENZENE</td>
<td>OSHA</td>
<td>STEL</td>
<td>125 ppm</td>
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<tr>
<td>HYDROTREATED LIGHT NAPHTHA (PETROLEUM)</td>
<td>CMRG</td>
<td>TWA</td>
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<tr>
<td>HYDROTREATED LIGHT PETROLEUM DISTILLATES</td>
<td>CMRG</td>
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<td>300 ppm</td>
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<td>TWA</td>
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<td>Table Z-1A</td>
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<td>METHYL ACETATE</td>
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<tr>
<td>METHYL ACETATE</td>
<td>OSHA</td>
<td>TWA</td>
<td>200 ppm</td>
<td>Table Z-1A</td>
</tr>
<tr>
<td>METHYL ACETATE</td>
<td>OSHA</td>
<td>STEL</td>
<td>250 ppm</td>
<td>Table Z-1A</td>
</tr>
<tr>
<td>PROPANE</td>
<td>ACGIH</td>
<td>TWA</td>
<td>1000 ppm</td>
<td>Table Z-1</td>
</tr>
<tr>
<td>PROPANE</td>
<td>OSHA</td>
<td>TWA</td>
<td>1000 ppm</td>
<td>Table Z-1</td>
</tr>
<tr>
<td>XYLENE</td>
<td>ACGIH</td>
<td>TWA</td>
<td>100 ppm</td>
<td>Table A4</td>
</tr>
<tr>
<td>XYLENE</td>
<td>ACGIH</td>
<td>STEL</td>
<td>150 ppm</td>
<td>Table A4</td>
</tr>
<tr>
<td>XYLENE</td>
<td>OSHA</td>
<td>TWA</td>
<td>100 ppm</td>
<td>Table Z-1A</td>
</tr>
<tr>
<td>XYLENE</td>
<td>OSHA</td>
<td>STEL</td>
<td>150 ppm</td>
<td>Table Z-1A</td>
</tr>
</tbody>
</table>

VAC Vacated PEL: Vacated Permissible Exposure Limits [PEL] are enforced as the OSHA PEL in some states. Check with your local regulatory agency.

SOURCE OF EXPOSURE LIMIT DATA:
ACGIH: American Conference of Governmental Industrial Hygienists
CMRG: Chemical Manufacturer Recommended Guideline
OSHA: Occupational Safety and Health Administration
AIHA: American Industrial Hygiene Association Workplace Environmental Exposure Level (WEEL)

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES
Odor, Color, Grade: Amber Liquid dispensed as an aerosol, solvent odor
General Physical Form: Liquid
Autoignition temperature
Flash Point
Flammable Limits - LEL
Flammable Limits - UEL
Boiling point
Density
Vapor Density >=1 [Ref Std: AIR=1]
Vapor Pressure 35 psi
Specific Gravity 0.88
pH Not Applicable
Melting point Not Applicable
Solubility in Water Moderate
Volatile Organic Compounds 44.5 % weight [Test Method: calculated per CARB title 2]

SECTION 10: STABILITY AND REACTIVITY

Stability: Stable.

Materials and Conditions to Avoid: Heat

Hazardous Polymerization: Hazardous polymerization will not occur,

Hazardous Decomposition or By-Products

<table>
<thead>
<tr>
<th>Substance</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formaldehyde</td>
<td>Not Specified</td>
</tr>
<tr>
<td>Carbon monoxide</td>
<td>Not Specified</td>
</tr>
<tr>
<td>Carbon dioxide</td>
<td>Not Specified</td>
</tr>
</tbody>
</table>

SECTION 11: TOXICOLOGICAL INFORMATION

Please contact the address listed on the first page of the MSDS for Toxicological Information on this material and/or its components.

SECTION 12: ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION

Not determined.

CHEMICAL FATE INFORMATION
Not determined.

SECTION 13: DISPOSAL CONSIDERATIONS


EPA Hazardous Waste Number (RCRA): D001 (Ignitable)

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

SECTION 14: TRANSPORT INFORMATION

ID Number(s): 60-4550-3159-5, 60-9800-3834-7

Please contact the emergency numbers listed on the first page of the MSDS for Transportation Information for this material.

SECTION 15: REGULATORY INFORMATION

US FEDERAL REGULATIONS
Contact 3M for more information.

311/312 Hazard Categories:
Fire Hazard - Yes  Pressure Hazard - Yes  Reactivity Hazard - No  Immediate Hazard - Yes  Delayed Hazard - Yes

Section 313 Toxic Chemicals subject to the reporting requirements of that section and 40 CFR part 372 (EPCRA):

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>C.A.S. No</th>
<th>% by Wt</th>
</tr>
</thead>
<tbody>
<tr>
<td>XYLENE</td>
<td>1330-20-7</td>
<td>5 - 10</td>
</tr>
<tr>
<td>ETHYLBENZENE</td>
<td>100-41-4</td>
<td>0.5 - 1.5</td>
</tr>
</tbody>
</table>

This material contains a chemical which requires export notification under TSCA Section 12[b]:

<table>
<thead>
<tr>
<th>Ingredient (Category if applicable)</th>
<th>C.A.S. No</th>
<th>Regulation</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACETONE</td>
<td>67-64-1</td>
<td>Toxic Substances Control Act (TSCA) 4 Test Rule Chemicals</td>
<td>Applicable</td>
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<tr>
<td>METHYL ACETATE</td>
<td>79-20-9</td>
<td>Toxic Substances Control Act (TSCA) 4 Test Rule Chemicals</td>
<td>Applicable</td>
</tr>
</tbody>
</table>

STATE REGULATIONS
Contact 3M for more information.
CHEMICAL INVENTORIES
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.

Contact 3M for more information.

INTERNATIONAL REGULATIONS
Contact 3M for more information.

WHMIS: Hazardous

This MSDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.

SECTION 16: OTHER INFORMATION

NFPA Hazard Classification
Health: 2  Flammability: 3  Reactivity: 0  Special Hazards: None  
Aerosol Storage Code: 3

National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response personnel to address the hazards that are presented by short-term, acute exposure to a material under conditions of fire, spill, or similar emergencies. Hazard ratings are primarily based on the inherent physical and toxic properties of the material but also include the toxic properties of combustion or decomposition products that are known to be generated in significant quantities.

Revision Changes:
Section 1: Product name was modified.
Section 1: Product use information was modified.
Copyright was modified.
Section 3: Immediate physical hazard(s) was modified.
Section 3: Potential effects from skin contact information was modified.
Section 3: Potential effects from inhalation information was modified.
Section 3: Potential effects from ingestion information was modified.
Section 5: Unusual fire and explosion hazard information was modified.
Section 6: Release measures information was modified.
Section 7: Handling information was modified.
Section 7: Storage information was modified.
Section 8: Engineering controls information was modified.
Section 8: Skin protection phrase was modified.
Section 8: Prevention of swallowing information was modified.
Section 13: Waste disposal method information was modified.
Section 4: First aid for skin contact - decontamination - was modified.
Section 4: First aid for skin contact - medical assistance - was modified.
Section 4: First aid for inhalation - medical assistance - was modified.
Section 4: First aid for ingestion (swallowing) - decontamination - was modified.
Section 3: Immediate other hazard(s) was modified.
Section 3: Other health effects information was modified.
Section 14: ID Number(s) was modified.
Page Heading: Product name was modified.
Section 15: Inventories information was modified.
Section 4: Note to physicians heading was added.
Section 4: First aid for skin contact - termination of exposure - was added.
Section 4: First aid for skin contact - handling - was added.
Section 4: Note to physicians was added.

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