



## Material Safety Data Sheet

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### SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** 3M (TM) Injector Cleaner, P.N. 08812  
**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:** 10/10/2007  
**Supersedes Date:** 10/05/2007

**Document Group:** 23-4964-5

**Product Use:**

Intended Use: Automotive

### SECTION 2: INGREDIENTS

| <u>Ingredient</u>   | <u>C.A.S. No.</u> | <u>% by Wt</u> |
|---------------------|-------------------|----------------|
| KEROSENE            | 8008-20-6         | 60 - 100       |
| HYDROCARBYL AMINE   | Trade Secret      | < 3            |
| HYDROCARBON SOLVENT | 64741-86-2        | < 3            |
| POLYETHER AMINE     | Trade Secret      | < 1.5          |
| NAPHTHALENE         | 91-20-3           | < 0.1          |
| PETROLEUM NAPHTHA   | 64742-94-5        | < 1.5          |

### SECTION 3: HAZARDS IDENTIFICATION

#### 3.1 EMERGENCY OVERVIEW

**Odor, Color, Grade:** Clear liquid, Solvent/kerosene odor

**General Physical Form:** Liquid

**Immediate health, physical, and environmental hazards:** Combustible liquid and vapor. 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. May cause allergic skin reaction. May cause target organ effects. Contains a chemical or chemicals which can cause cancer.

#### 3.2 POTENTIAL HEALTH EFFECTS

**Eye Contact:**

Mild Eye Irritation: Signs/symptoms may include redness, pain, and tearing.

**Skin Contact:**

Mild Skin Irritation: Signs/symptoms may include localized redness, swelling, and itching.

Allergic Skin Reaction (non-photo induced): Signs/symptoms may include redness, swelling, blistering, and itching.

May be absorbed through skin and cause target organ effects.

**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.

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.

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

May be absorbed following ingestion and cause target organ effects.

**Target Organ Effects:**

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.

**Carcinogenicity:**

Contains a chemical or chemicals which can cause cancer.

| <u><b>Ingredient</b></u> | <u><b>C.A.S. No.</b></u> | <u><b>Class Description</b></u> | <u><b>Regulation</b></u>                    |
|--------------------------|--------------------------|---------------------------------|---------------------------------------------|
| NAPHTHALENE              | 91-20-3                  | Group 2B                        | International Agency for Research on Cancer |
| NAPHTHALENE              | 91-20-3                  | Anticipated human carcinogen    | National Toxicology Program Carcinogens     |

## 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. If signs/symptoms develop, get medical attention.

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

## SECTION 5: FIRE FIGHTING MEASURES

### 5.1 FLAMMABLE PROPERTIES

|                                          |                                                                                      |
|------------------------------------------|--------------------------------------------------------------------------------------|
| <b>Autoignition temperature</b>          | 489 °F [ <i>Details:</i> based on kerosene's MSDS]                                   |
| <b>Flash Point</b>                       | 120 °F [ <i>Test Method:</i> Closed Cup] [ <i>Details:</i> based on kerosene's MSDS] |
| <b>Flammable Limits - LEL</b>            | No Data Available                                                                    |
| <b>Flammable Limits - UEL</b>            | No Data Available                                                                    |
| <b>OSHA Flammability Classification:</b> | Class II Combustible Liquid                                                          |

### 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:** Combustible liquid and vapor. Vapors may travel long distances along the ground or floor to an ignition source and flash back.

**Note:** See STABILITY AND REACTIVITY (SECTION 10) for hazardous combustion and thermal decomposition information.

## 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-HELPS 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. 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. 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. Avoid breathing of vapors, mists or spray. Keep out of the reach of children. Avoid contact with oxidizing agents. Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below Occupational Exposure Limits. If ventilation is not adequate, use respiratory protection equipment.

### 7.2 STORAGE

Store away from acids. Store away from heat. Store away from oxidizing agents.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 ENGINEERING CONTROLS

Use in a well-ventilated area.

### 8.2 PERSONAL PROTECTIVE EQUIPMENT (PPE)

#### 8.2.1 Eye/Face Protection

Avoid eye contact.

The following eye protection(s) are recommended: Safety Glasses with side shields.

#### 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: Neoprene.

#### 8.2.3 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 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.

### 8.3 EXPOSURE GUIDELINES

| <u>Ingredient</u>             | <u>Authority</u> | <u>Type</u>                               | <u>Limit</u>        | <u>Additional Information</u> |
|-------------------------------|------------------|-------------------------------------------|---------------------|-------------------------------|
| PETROLEUM NAPHTHA<br>KEROSENE | CMRG<br>ACGIH    | TWA<br>TWA, as total<br>hydrocarbon vapor | 17 ppm<br>200 mg/m3 | Skin Notation*; Table A3      |
| KEROSENE                      | CMRG             | TWA                                       | 500 ppm             |                               |
| NAPHTHALENE                   | ACGIH            | TWA                                       | 10 ppm              | Skin Notation*; Table A4      |
| NAPHTHALENE                   | ACGIH            | STEL                                      | 15 ppm              | Skin Notation*; Table A4      |
| NAPHTHALENE                   | OSHA             | TWA                                       | 10 ppm              | Table Z-1A                    |
| NAPHTHALENE                   | OSHA             | STEL                                      | 15 ppm              | Table Z-1A                    |

\* Substance(s) 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 Guideline

OSHA: Occupational Safety and Health Administration

AIHA: American Industrial Hygiene Association Workplace Environmental Exposure Level (WEEL)

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

|                                           |                                                                                      |
|-------------------------------------------|--------------------------------------------------------------------------------------|
| <b>Odor, Color, Grade:</b>                | Clear liquid, Solvent/kerosene odor                                                  |
| <b>General Physical Form:</b>             | Liquid                                                                               |
| <b>Autoignition temperature</b>           | 489 °F [ <i>Details:</i> based on kerosene's MSDS]                                   |
| <b>Flash Point</b>                        | 120 °F [ <i>Test Method:</i> Closed Cup] [ <i>Details:</i> based on kerosene's MSDS] |
| <b>Flammable Limits - LEL</b>             | No Data Available                                                                    |
| <b>Flammable Limits - UEL</b>             | No Data Available                                                                    |
| <b>Boiling point</b>                      | 360 - 550 °F [ <i>Details:</i> Based on Kerosene's MSDS]                             |
| <b>Density</b>                            | 6.83 lb/gal                                                                          |
| <b>Vapor Density</b>                      | No Data Available                                                                    |
| <b>Vapor Pressure</b>                     | No Data Available                                                                    |
| <b>Specific Gravity</b>                   | 0.82 [ <i>Ref Std:</i> WATER=1]                                                      |
| <b>pH</b>                                 | No Data Available                                                                    |
| <b>Melting point</b>                      | No Data Available                                                                    |
| <b>Solubility In Water</b>                | No Data Available                                                                    |
| <b>Volatile Organic Compounds</b>         | 10 % [ <i>Details:</i> Based on Kerosene's MSDS]                                     |
| <b>Percent volatile</b>                   | No Data Available                                                                    |
| <b>VOC Less H2O &amp; Exempt Solvents</b> | No Data Available                                                                    |
| <b>Viscosity</b>                          | 14.2 centipoise                                                                      |

## SECTION 10: STABILITY AND REACTIVITY

**Stability:** Stable.

**Materials and Conditions to Avoid:** Sparks and/or flames, strong oxidizing agents, and strong acids

**Hazardous Polymerization:** Hazardous polymerization will not occur.

### Hazardous Decomposition or By-Products

**Substance**

Carbon monoxide  
Carbon dioxide

**Condition**

During Combustion  
During Combustion

## 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

**Waste Disposal Method:** Incinerate in a permitted hazardous waste incinerator. As a disposal alternative, dispose of waste product in a permitted hazardous waste facility.

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

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

## SECTION 14: TRANSPORT INFORMATION

**ID Number(s):**

60-4550-3266-8

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 - No 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):**

| <u><b>Ingredient</b></u> | <u><b>C.A.S. No</b></u> | <u><b>% by Wt</b></u> |
|--------------------------|-------------------------|-----------------------|
| NAPHTHALENE              | 91-20-3                 | < 0.1                 |

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

| <u><b>Ingredient (Category if applicable)</b></u> | <u><b>C.A.S. No</b></u> | <u><b>Regulation</b></u>                                  | <u><b>Status</b></u> |
|---------------------------------------------------|-------------------------|-----------------------------------------------------------|----------------------|
| NAPHTHALENE                                       | 91-20-3                 | Toxic Substances Control Act (TSCA) 4 Test Rule Chemicals | Applicable           |

**STATE REGULATIONS**

Contact 3M for more information.

**CALIFORNIA PROPOSITION 65**

| <u><b>Ingredient</b></u> | <u><b>C.A.S. No.</b></u> | <u><b>Classification</b></u> |
|--------------------------|--------------------------|------------------------------|
| NAPHTHALENE              | 91-20-3                  | **Carcinogen                 |

\*\* WARNING: contains a chemical which can cause cancer.

**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:** 2 **Reactivity:** 1 **Special Hazards:** None

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 5: OSHA flammability data was modified.  
Section 5: Fire fighting procedures information was modified.  
Section 7: Handling information was modified.  
Section 10: Materials and conditions to avoid physical property was modified.  
Section 3: Immediate other hazard(s) was modified.  
Section 2: Ingredient table was modified.  
Section 15: EPCRA 313 information was modified.  
Section 9: Specific gravity information was modified.  
Section 3: Carcinogenicity phrase was added.  
Section 8: Skin protection - protective clothing recommendations was deleted.  
Section 8: Skin protection - protective clothing information was deleted.  
Section 8: Skin protection - protective clothing - punctuation was deleted.

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