Material Safety Data Sheet
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PRODUCT NAME: $3 \mathrm{M}^{\mathrm{TM}}$ Lightweight Body Filler - PN 05800, 05801, 05803, 05804, 05805, 35801<br>MANUFACTURER: 3M<br>DIVISION: Automotive Aftermarket<br>ADDRESS: 3M Center, St. Paul, MN 55144-1000

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

Issue Date: 05/16/13
Supercedes Date: 10/02/12
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LB-K100-0692-2, 41-0003-6599-3, 41-0003-6644-7, 41-0003-6664-5, 41-0003-6730-4, 41-0003-6769-2, 60-
4550-6996-7, 60-9801-0558-3, 60-9801-0559-1, 60-9801-0561-7, 60-9801-0579-9
This product is a kit or a multipart product which consists of multiple, independently packaged components. An MSDS for each of these components is included. Please do not separate the component MSDSs from this cover page. The document numbers of the MSDSs for components of this product are:

29-5993-0, 32-1433-5

## Revision Changes:

Kit: Component document group number(s) was modified.
Copyright was modified.
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## SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

```
    PRODUCT NAME: Cream Hardener (Red, White & Blue)
    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: 10/02/12
    Supercedes Date: 10/01/12
    Document Group: 29-5993-0
    
## Product Use:

Intended Use: Automotive

## SECTION 2: INGREDIENTS

| Ingredient | C.A.S. No. | \% by Wt |
| :---: | :---: | :---: |
| BENZOYL PEROXIDE | 94-36-0 | 30-60 |
| WATER | 7732-18-5 | 10-30 |
| BENZOIC ACID, C9-11-BRANCHED ALKYL ESTERS | 131298-44-7 | 10-30 |
| ZINC STEARATE | 557-05-1 | 3-7 |
| OXIRANE, POLYMER WITH METHYLOXIRANE, MONOBUTYL ETHER | 9038-95-3 | 1-5 |
| CALCIUM SULFATE | 7778-18-9 | 1-5 |
| IRON OXIDE (FE2O3) | 1309-37-1 | 1-5 |
| FERRIC FERROCYANIDE | 14038-43-8 | 0-1 |
| FERRIC AMMONIUM FERROCYANIDE | 25869-00-5 | 0-1 |

## SECTION 3: HAZARDS IDENTIFICATION

### 3.1 EMERGENCY OVERVIEW

Specific Physical Form: Viscous
Odor, Color, Grade: Red paste with slight ester odor
General Physical Form: Solid
Immediate health, physical, and environmental hazards: 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.
May cause severe eye irritation. May cause allergic skin reaction.

### 3.2 POTENTIAL HEALTH EFFECTS

## Eye Contact:

Severe Eye Irritation: Signs/symptoms may include significant redness, swelling, pain, tearing, cloudy appearance of the cornea, and impaired vision.

## 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.

## Inhalation:

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

Prolonged or repeated exposure may cause:
Pneumoconiosis: Sign/symptoms may include persistent cough, breathlessness, chest pain, increased amounts of sputum, and changes in lung function tests.

## 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:

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.

## 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: Immediately flush eyes with large amounts of water for at least 15 minutes. Get immediate 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 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.

## SECTION 5: FIRE FIGHTING MEASURES

### 5.1 FLAMMABLE PROPERTIES

## Autoignition temperature <br> Flash Point

No Data Available

$111{ }^{\circ} \mathrm{C}$ [Test Method: Estimated]

Flammable Limits(LEL)
Flammable Limits(UEL)

## Not Applicable <br> Not Applicable

### 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: Wear full protective equipment (Bunker Gear) and a self-contained breathing apparatus (SCBA).

Unusual Fire and Explosion Hazards: 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.

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

## SECTION 6: ACCIDENTAL RELEASE MEASURES

### 6.1. Personal precautions, protective equipment and emergency procedures

Evacuate unprotected and untrained personnel from hazard area. The spill should be cleaned up by qualified personnel. 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. Remember, adding an absorbent material does not remove a toxic, corrosivity or flammability hazard.

### 6.2. Environmental precautions

For larger spills, cover drains and build dikes to prevent entry into sewer systems or bodies of water. Place in a metal container approved for use in transportation by appropriate authorities. The container must be lined with polyethylene plastic or contain a plastic drum liner made of polyethylene. Dispose of collected material as soon as possible.

## Clean-up methods

Refer to other sections of this MSDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment. Contain spill. Cover spill area with a fire-extinguishing foam. An aqueous film forming foam (AFFF) 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. Collect as much of the spilled material as possible using non-sparking tools. Clean up residue with an appropriate solvent selected by a qualified and authorized person. Ventilate the area with fresh air. Read and follow safety precautions on the solvent label and MSDS. Seal the container.

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. Avoid static discharge. Avoid eye contact with vapors, mists, or spray. Keep out of the reach of children. Avoid breathing of dust created by cutting, sanding, grinding or machining. Avoid eye contact with dust or airborne particles.

### 7.2 STORAGE

Store away from heat. Store out of direct sunlight. Keep container tightly closed. Do not heat under confinement to avoid risk of explosion

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 ENGINEERING CONTROLS

Provide appropriate local exhaust for cutting, grinding, sanding or machining. Do not use in a confined area or areas with little or no air movement. Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below Occupational Exposure Limits and/or control dust, fume, or airborne particles. 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: Safety Glasses with side shields
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: Polymer laminate

### 8.2.3 Respiratory Protection

Avoid breathing of vapors, mists or spray. Avoid breathing of dust created by cutting, sanding, grinding or machining.
An exposure assessment may be needed to decide if a respirator is required. If a respirator is needed, use respirators as part of a full respiratory protection program. Based on the results of the exposure assessment, select from the following respirator type(s) to reduce inhalation exposure:
Half facepiece or full facepiece air-purifying respirator suitable for organic vapors and particulates
For questions about suitability for a specific application, consult with your respirator manufacturer.

### 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

| Ingredient | Authority | $\underline{\text { Type }}$ | $\underline{\underline{\text { Limit }}}$ | Additional Information |
| :--- | :--- | :--- | :--- | :--- |
| BENZOYL PEROXIDE | ACGIH | TWA <br> BENZOYL PEROXIDE | OSHA | TWA |

ZINC STEARATE $\quad$ OSHA TWA, as total dust $15 \mathrm{mg} / \mathrm{m} 3$

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

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Specific Physical Form:
Odor, Color, Grade:
General Physical Form:
Autoignition temperature
Flash Point
Flammable Limits(LEL)
Flammable Limits(UEL)
Boiling Point
Density
Vapor Density
Vapor Pressure
Specific Gravity
pH
Melting point
Solubility in Water
Evaporation rate
Hazardous Air Pollutants
Volatile Organic Compounds
Volatile Organic Compounds
Volatile Organic Compounds
Kow - Oct/Water partition coef
Percent volatile
VOC Less H2O \& Exempt Solvents
Viscosity

Viscous
Red paste with slight ester odor
Solid
No Data Available
$111{ }^{\circ} \mathrm{C}$ [Test Method: Estimated]
Not Applicable
Not Applicable
No Data Available
$1.2 \mathrm{~g} / \mathrm{cm} 3$
Not Applicable
Not Applicable
1.2 [@ $25^{\circ} \mathrm{C}$ ] [Ref Std: WATER=1]

No Data Available
No Data Available
Negligible
No Data Available
$0 \%$ weight [Test Method: Calculated]
$0 \mathrm{lb} / \mathrm{gal}$ [Test Method: calculated SCAQMD rule 443.1]
$0 \mathrm{~g} / 1$ [Test Method: calculated SCAQMD rule 443.1]
$0 \%$ weight [Test Method: calculated per CARB title 2]
No Data Available
$20 \%$ [Details: Water is the volatile component]
$0 \mathrm{~g} / 1$ [Test Method: calculated SCAQMD rule 443.1]
No Data Available

## SECTION 10: STABILITY AND REACTIVITY

Stability: Stable. Stable unless exposed to heat, flames and drying conditions.
Materials and Conditions to Avoid:
10.1 Conditions to avoid

Heat
10.2 Materials to avoid

Accelerators

Hazardous Polymerization: Hazardous polymerization will not occur.

## Hazardous Decomposition or By-Products

## Substance

Carbon monoxide
Carbon dioxide
Toxic Vapor, Gas, Particulate

## Condition

Not Specified
Not Specified
Not Specified

## 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.
This product has been classified on the basis that it is stable as sold. Material may become unstable if allowed to dry out. Classify appropriately before disposal.

EPA Hazardous Waste Number (RCRA): D001 (Ignitable)
Since regulations vary, consult applicable regulations or authorities before disposal.

## SECTION 14:TRANSPORT INFORMATION

## ID Number(s):

LB-K100-0965-7, LB-K100-0965-8, LB-K100-0965-9, LB-K100-0966-0, LB-K100-0966-1, LB-K100-0966-2, LB-K100-0966-3, LB-K100-1035-6, LB-K100-1045-4, LB-K100-1286-7, 41-0003-7987-9, 60-4550-6614-6, 60-4550-6617-9, 60-4550-6830-8, 60-4550-6981-9, 60-4550-6982-7

For Transport Information, please visit http://3M.com/Transportinfo or call 1-800-364-3577 or 651-737-6501.

## SECTION 15: REGULATORY INFORMATION

## US FEDERAL REGULATIONS

Contact 3M for more information.
311/312 Hazard Categories:
Fire Hazard - No Pressure Hazard - No Reactivity Hazard - Yes Immediate Hazard - Yes Delayed Hazard - Yes

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

| Ingredient | C.A.S. No |  | \% by Wt |
| :--- | :--- | :--- | :--- |
|  |  |  | $3-7$ |
| ZINC STEARATE (ZINC COMPOUNDS) |  | $957-05-1$ |  |
| BENZOYL PEROXIDE | $94-36-0$ |  | $30-60$ |
| FERRIC FERROCYANIDE (CYANIDES) | $14038-43-8$ |  | $0-1$ |

## STATE REGULATIONS

Contact 3M for more information.

## CHEMICAL INVENTORIES

The components of this product are in compliance with the chemical notification requirements of TSCA.
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: 1 Reactivity: 1 Special Hazards: Oxidizer

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.

## HMIS Hazard Classification

Health: 2 Flammability: 1 Reactivity: 1 Protection: X - See PPE section.
Hazardous Material Identification System (HMIS®) hazard ratings are designed to inform employees of chemical hazards in the workplace. These ratings are based on the inherent properties of the material under expected conditions of normal use and are not intended for use in emergency situations. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint and Coatings Association (NPCA).

Revision Changes:
Section 14: ID Number(s) Template 1 was modified.
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## SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: $3 \mathrm{M}^{\mathrm{TM}}$ 3M Lightweight Body Filler 5800, 5801, 5804, 5805
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: 05/16/13
Supercedes Date: 05/09/13
Document Group: 32-1433-5

## Product Use:

Intended Use: Automotive
Specific Use: Body Repair

## SECTION 2: INGREDIENTS

| Ingredient | C.A.S. No. | $\mathbf{\%}$ by Wt |
| :--- | :--- | :--- |
| PROPRIETARY RESIN | Trade Secret | $15-40$ |
| TALC | $14807-96-6$ | $10-30$ |
| STYRENE MONOMER | $100-42-5$ | $10-30$ |
| MAGNESIUM CARBONATE | $546-93-0$ | $7-15$ |
| OXIDE GLASS CHEMICALS | $65997-17-3$ | $3-7$ |
| LIMESTONE | $1317-65-3$ | $1-5$ |
| SYNTHETIC CRYSTALLINE-FREE SILICA GEL | $112926-00-8$ | $1-5$ |
| CHLORITE (MINERAL) | $1318-59-8$ | $0.5-1.5$ |
| TITANIUM DIOXIDE | $13463-67-7$ | $0.1-1.0$ |
| QUARTZ SILICA | $14808-60-7$ | $<0.1$ |

## SECTION 3: HAZARDS IDENTIFICATION

### 3.1 EMERGENCY OVERVIEW

Specific Physical Form: Paste<br>Odor, Color, Grade: Pungent Styrene Odor Grey Paste

## General Physical Form: Liquid

Immediate health, physical, and environmental hazards: Flammable 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. Contains a chemical or chemicals which can cause cancer. May cause target organ effects.

### 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:

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

Prolonged or repeated exposure may cause:
Pneumoconiosis: Sign/symptoms may include persistent cough, breathlessness, chest pain, increased amounts of sputum, and changes in lung function tests.

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:

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

Auditory Effects: Signs/symptoms may include hearing impairment, balance dysfunction and ringing in the ears.
Liver Effects: Signs/symptoms may include loss of appetite, weight loss, fatigue, weakness, abdominal tenderness and jaundice.
Prolonged or repeated exposure may cause:
Immunological Effects: Signs/symptoms may include alterations in the number of circulating immune cells, allergic skin and /or respiratory reaction, and changes in immune function.

Neurological Effects: Signs/symptoms may include personality changes, lack of coordination, sensory loss, tingling or numbness of the extremities, weakness, tremors, and/or changes in blood pressure and heart rate.

Ocular Effects: Signs/symptoms may include blurred or significantly impaired vision.

## Carcinogenicity:

Contains a chemical or chemicals which can cause cancer.

| Ingredient | C.A.S. No. | Class Description | Regulation |
| :---: | :---: | :---: | :---: |
| QUARTZ SILICA | 14808-60-7 | Grp. 1: Carcinogenic to humans | International Agency for Research on Cancer |
| SILICA, CRYSTALLINE (AIRBORNE | SEQ677 | Grp. 1: Carcinogenic to | International Agency for Research on Cancer |
| PARTICLES OF RESPIRABLE SIZE) |  | humans |  |
| SILICA, CRYSTALLINE (AIRBORNE | SEQ677 | Known human carcinogen | National Toxicology Program Carcinogens |

Grp. 2B: Possible human carc.
Anticipated human carcinogen Grp. 2B: Possible human carc.

International Agency for Research on Cancer National Toxicology Program Carcinogens International Agency for Research on Cancer

## 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 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.

## SECTION 5: FIRE FIGHTING MEASURES

### 5.1 FLAMMABLE PROPERTIES

Autoignition temperature
Flash Point
Flammable Limits(LEL)
Flammable Limits(UEL)

No Data Available<br>$88^{\circ} \mathrm{F}$ [Test Method: Closed Cup]<br>0.9 \% [Details: based on styrene]<br>6.8 \% [Details: based on styrene]

### 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. Water may be used to blanket the fire. Wear full protective equipment (Bunker Gear) and a self-contained breathing apparatus (SCBA).

Unusual Fire and Explosion Hazards: Flammable 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.

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

## SECTION 6: ACCIDENTAL RELEASE MEASURES

### 6.1. Personal precautions, protective equipment and emergency procedures

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.

### 6.2. Environmental precautions

Collect the resulting residue containing solution. Place in a metal container approved for transportation by appropriate authorities. Dispose of collected material as soon as possible.

## Clean-up methods

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. 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. Collect as much of the spilled material as possible using non-sparking tools. Clean up residue with an appropriate solvent selected by a qualified and authorized person. Ventilate the area with fresh air. Read and follow safety precautions on the solvent label and MSDS. Seal the container.

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. Avoid breathing of vapors, mists or spray. Avoid skin contact. Do not ingest. Avoid static discharge. Avoid eye contact with vapors, mists, or spray. Keep out of the reach of children. Keep container closed when not in use. Avoid breathing of dust created by cutting, sanding, grinding or machining. 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 out of direct sunlight. Keep container tightly closed. Do not store containers on their sides. Store away from areas where product may come into contact with food or pharmaceuticals. Store away from oxidizing agents. Store in a cool, dry place.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 ENGINEERING CONTROLS

Use in an enclosed process area is recommended. Provide appropriate local exhaust for cutting, grinding, sanding or machining. Use in a well-ventilated area. Do not use in a confined area or areas with little or no air movement. 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. To minimize the risk of injury to face and eyes, always wear eye and face protection when working at sanding or grinding operations or when near such operations.
The following eye protection(s) are recommended: Full Face Shield
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.

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: Nitrile Rubber
Polyvinyl Alcohol (PVA)

### 8.2.3 Respiratory Protection

Avoid breathing of vapors, mists or spray. Avoid breathing of dust created by cutting, sanding, grinding or machining.
An exposure assessment may be needed to decide if a respirator is required. If a respirator is needed, use respirators as part of a full respiratory protection program. Based on the results of the exposure assessment, select from the following respirator type(s) to reduce inhalation exposure:
Half facepiece or full facepiece air-purifying respirator suitable for organic vapors and particulates
For questions about suitability for a specific application, consult with your respirator manufacturer.

### 8.2.4 Prevention of Swallowing

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

### 8.3 EXPOSURE GUIDELINES

| Ingredient | Authority | Type | $\underline{\text { Limit }}$ |
| :---: | :---: | :---: | :---: |
| LIMESTONE | OSHA | TWA, respirable fraction | $5 \mathrm{mg} / \mathrm{m} 3$ |
| LIMESTONE | OSHA | TWA, as total dust | $15 \mathrm{mg} / \mathrm{m} 3$ |
| MAGNESIUM CARBONATE | OSHA | TWA, respirable fraction | $5 \mathrm{mg} / \mathrm{m} 3$ |
| MAGNESIUM CARBONATE | OSHA | TWA, as total dust | $15 \mathrm{mg} / \mathrm{m} 3$ |
| OXIDE GLASS CHEMICALS | Manufacturer determined | TWA, as dust | $10 \mathrm{mg} / \mathrm{m} 3$ |
| QUARTZ SILICA | ACGIH | TWA, respirable fraction | $0.025 \mathrm{mg} / \mathrm{m} 3$ |
| QUARTZ SILICA | OSHA | TWA concentration, respirable | $0.1 \mathrm{mg} / \mathrm{m} 3$ |
| QUARTZ SILICA | OSHA | TWA concentration, as total dust | $0.3 \mathrm{mg} / \mathrm{m} 3$ |
| SILICA, AMORPHOUS | OSHA | TWA concentration | $0.8 \mathrm{mg} / \mathrm{m} 3$ |
| SILICA, AMORPHOUS | OSHA | TWA | 20 millions of particles/cu. ft. |
| STYRENE MONOMER | ACGIH | TWA | 20 ppm |
| STYRENE MONOMER | ACGIH | STEL | 40 ppm |
| STYRENE MONOMER | OSHA | TWA | 100 ppm |
| STYRENE MONOMER | OSHA | CEIL | 200 ppm |
| TALC | ACGIH | TWA, respirable fraction | $2 \mathrm{mg} / \mathrm{m} 3$ |
| TALC | CMRG | TWA, as respirable dust | $0.5 \mathrm{mg} / \mathrm{m} 3$ |
| TALC | OSHA | TWA concentration, respirable | $0.1 \mathrm{mg} / \mathrm{m} 3$ |
| TALC | OSHA | TWA concentration, as total dust | $0.3 \mathrm{mg} / \mathrm{m} 3$ |
| TALC | OSHA | TWA | 20 millions of particles/cu. ft. |
| TITANIUM DIOXIDE | ACGIH | TWA | $10 \mathrm{mg} / \mathrm{m} 3$ |
| TITANIUM DIOXIDE | CMRG | TWA, as respirable dust | $5 \mathrm{mg} / \mathrm{m} 3$ |
| TITANIUM DIOXIDE | OSHA | TWA, as total dust | $15 \mathrm{mg} / \mathrm{m} 3$ |

Additional Information

## 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

Specific Physical Form:
Odor, Color, Grade:
General Physical Form:
Autoignition temperature
Flash Point
Flammable Limits(LEL)
Flammable Limits(UEL)
Boiling Point
Density
Vapor Density
Vapor Pressure
Specific Gravity
pH
Melting point
Solubility in Water
Evaporation rate
Hazardous Air Pollutants
Volatile Organic Compounds
Volatile Organic Compounds
Kow - Oct/Water partition coef
Percent volatile
VOC Less H2O \& Exempt Solvents
Viscosity

Paste
Pungent Styrene Odor Grey Paste
Liquid
No Data Available
$88^{\circ} \mathrm{F}$ [Test Method: Closed Cup]
0.9 \% [Details: based on styrene]
$6.8 \%$ [Details: based on styrene]
$293{ }^{\circ} \mathrm{F}$
$1.14 \mathrm{~g} / \mathrm{ml}$
3.6

No Data Available
1.14

No Data Available
No Data Available
Negligible
No Data Available
0.355 lb HAPS/lb solids
17.6 \% weight [Test Method: calculated per CARB title 2]
$200 \mathrm{~g} / 1$ [Test Method: calculated SCAQMD rule 443.1]
No Data Available
17.9 \% weight
$201 \mathrm{~g} / 1$ [Test Method: calculated SCAQMD rule 443.1]
192000-208000 centipoise

## SECTION 10: STABILITY AND REACTIVITY

Stability: Stable. Stable under normal conditions. May become unstable at elevated temperatures and/or pressure.
Materials and Conditions to Avoid:

### 10.1 Conditions to avoid

Sparks and/or flames
Heat

### 10.2 Materials to avoid

Strong acids
Strong oxidizing agents
Alkali and alkaline earth metals
Strong bases
Hazardous Polymerization: Hazardous polymerization will not occur.

## Hazardous Decomposition or By-Products

| Substance | Condition |
| :--- | :--- |
|  | Not Specified |
| Carbon monoxide | Not Specified |
| Carbon dioxide | Not Specified |

## 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

For Transport Information, please visit http://3M.com/Transportinfo or call 1-800-364-3577 or 651-737-6501.

## 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):

Ingredient
STYRENE MONOMER
C.A.S. No 100-42-5

## STATE REGULATIONS

Contact 3M for more information.

## CALIFORNIA PROPOSITION 65

| $\frac{\text { Ingredient }}{\text { SILICA, CRYSTALLINE (AIRBORNE }}$ | C.A.S. No. |  | Classification |
| :--- | :--- | :--- | :--- |
| PARTICLES OF RESPIRABLE SIZE) |  |  |  |
| PARCinogen <br> TITANIUM DIOXIDE | $13463-67-7$ | $* *$ 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.

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: 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 1: Initial issue message was modified.
Section 2: Ingredient table was modified.
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