

Material Safety Data Sheet

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PRODUCT NAME: 3MTM Flowable Finishing Putty PN 05823, 05824

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: 07/20/09 **Supercedes Date:** 07/20/09

Document Group: 25-7700-5

ID Number(s):

LB-K100-0693-7, 60-9800-3544-2

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:

25-7697-3, 24-7436-9

Revision Changes: Not Applicable

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TERIAL SAFETY DATA S	SHEET 3M TM Flow	able Finishing Pu	tty PN 05823, 058	07/20/09	



Material Safety Data Sheet

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SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: 3MTM Red Cream Hardener

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: 01/21/10 Supercedes Date: 11/10/09

Document Group: 24-7436-9

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 - 20
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

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 allergic skin

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reaction.

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:

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.

MATERIAL SAFETY DATA SHEET 3MTM Red Cream Hardener 01/21/10

Eve 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 temperatureNo Data AvailableFlash PointNot ApplicableFlammable Limits - LELNot ApplicableFlammable Limits - UELNot 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

Accidental Release Measures:

Evacuate unprotected and untrained personnel from hazard area. The spill should be cleaned up by qualified personnel. 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.

Place in a metal container approved for transportation by appropriate authorities. Dispose of collected material as soon as possible. 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. Contain spill. Collect as much of the spilled material as possible using non-sparking tools. Use wet sweeping compound or water to avoid dusting. Sweep up. Clean up residue.

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.

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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: Polyethylene/Ethylene Vinyl Alcohol. Use an additional glove (e.g. supported PVC or Nitrile) over the PE/EVAL glove, and change the over-glove frequently.

8.2.3 Respiratory Protection

Avoid breathing of vapors, mists or spray. Avoid breathing of dust created by cutting, sanding, grinding or machining. 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 and P95 particulate prefilters. 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

Ingredient	Authority	Type	<u>Limit</u>	Additional Information
BENZOYL PEROXIDE	ACGIH	TWA	5 mg/m3	Table A4
BENZOYL PEROXIDE	OSHA	TWA	5 mg/m3	Table Z-1
CALCIUM SULFATE	ACGIH	TWA, inhalable	10 mg/m3	
		fraction		
CALCIUM SULFATE	OSHA	TWA, respirable	5 mg/m3	Table Z-1
CALCIUM SULFATE	OSHA	TWA, as total dust	15 mg/m3	Table Z-1
IRON OXIDE (FE2O3)	ACGIH	TWA, respirable	5 mg/m3	Table A4

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IRON OXIDE (FE2O3)	OSHA	TWA, as fume	10 mg/m3	Table Z-1A
STEARATES	ACGIH	TWA, as total dust	10 mg/m3	Table A4
ZINC STEADATE	ACGIH	TWA	10 mg/m^3	

ZINC STEARATE ACGIH TWA 10 mg/m3
ZINC STEARATE ACGIH STEL 20 mg/m3

ZINC STEARATE OSHA TWA, respirable 5 mg/m3 Table Z-1

ZINC STEARATE OSHA TWA, Vacated, as 10 mg/m3

dust

ZINC STEARATE OSHA TWA, as total dust 15 mg/m3 Table Z-1

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

Specific Physical Form: Viscous

Odor, Color, Grade: Red paste with slight ester odor

General Physical Form: Solid

Autoignition temperatureNo Data AvailableFlash PointNot ApplicableFlammable Limits - LELNot ApplicableFlammable Limits - UELNot ApplicableBoiling pointNo Data AvailableDensityNo Data AvailableVapor DensityNot Applicable

Vapor Pressure Not Applicable

Specific Gravity 1.2 [@ 25 °C] [Ref Std: WATER=1]

pH No Data Available
Melting point No Data Available

Solubility in WaterNegligibleEvaporation rateNo Data AvailableHazardous Air Pollutants0 % weight

Volatile Organic Compounds 0 lb/gal [Test Method: calculated SCAQMD rule 443.1] [Details:

excluding exempt compounds]

Kow - Oct/Water partition coefNo Data Available

Percent volatile

20 % [Details: Water is the volatile component]

VOC Less H2O & Exempt Solvents

20 % [Details: Water is the volatile component]

0 g/l [Test Method: calculated SCAQMD rule 443.1]

Viscosity 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

MATERIAL SAFETY DATA SHEET 3MTM Red Cream Hardener 01/21/10

10.2 Materials to avoid

Accelerators

Hazardous Polymerization: Hazardous polymerization will not occur.

Hazardous Decomposition or By-Products

SubstanceConditionCarbon monoxideNot SpecifiedCarbon dioxideNot SpecifiedToxic Vapor, Gas, ParticulateNot 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 in the presence of a combustible material. 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):

LB-K100-0514-1, LB-K100-0530-2, LB-K100-0530-3, LB-K100-0530-4, LB-K100-0530-5, 41-3701-1487-2, 41-3701-1494-8

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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 - 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):

<u>Ingredient</u>	C.A.S. No	% by Wt
ZINC STEARATE (ZINC COMPOUNDS)	557-05-1	3 - 7
BENZOYL PEROXIDE	94-36-0	30 - 60

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

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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(r)) 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(r) ratings are to be used with a fully implemented HMIS(r) program. HMIS(r) is a registered mark of the National Paint and Coatings Association (NPCA).

Revision Changes:

Copyright was modified.

Section 9: Property description for optional properties was modified.

Section 16: HMIS hazard classification heading was added.

Section 16: HMIS hazard classification for health was added.

Section 16: HMIS hazard classification for flammability was added.

Section 16: HMIS hazard classification for reactivity was added.

Section 16: HMIS hazard classification for protection was added.

Section 16: HMIS explanation was added.

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SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: 3MTM Flowable Finishing Putty PN 05823, 05824

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: 03/25/09
Supercedes Date: Initial Issue

Document Group: 25-7697-3

Product Use:

Intended Use: Automotive

Specific Use: Finishing Putty for filling pinholes, sand scratches, low areas or other imperfections

SECTION 2: INGREDIENTS

<u>Ingredient</u>	<u>C.A.S. No.</u>	% by Wt
POLYESTER RESIN (PROPRIETARY)	Trade Secret	10 30
LIMESTONE	1317-65-3	10 - 30
STYRENE MONOMER	100-42-5	10 - 30
TALC	14807-96-6	7 - 13
TITANIUM DIOXIDE	13463-67-7	5 - 10
POLYESTER POLYMER	Trade Secret	5 10
MAGNESIUM CARBONATE	546-93-0	3 - 7
OXIDE GLASS CHEMICALS	65997-17-3	3 - 7
TRIMETHYLOLPROPANE TRIACRYLATE	15625-89-5	1 - 5
SYNTHETIC CRYSTALLINE-FREE SILICA GEL	112926-00-8	1 - 5
QUARTZ SILICA	14808-60-7	< 0.06

SECTION 3: HAZARDS IDENTIFICATION

3.1 EMERGENCY OVERVIEW

Odor, Color, Grade: Pungent odor Light Yellow Putty

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. 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:

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.

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:

Respiratory Effects: Signs/symptoms may include cough, shortness of breath, chest tightness, wheezing, increased heart rate, bluish colored skin (cyanosis), sputum production, changes in lung function tests, and/or respiratory failure.

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.

Prolonged or repeated exposure may cause:

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.

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.

Carcinogenicity:

Contains a chemical or chemicals which can cause cancer.

Ingredient	C.A.S. No.	Class Description	Regulation
ARSENIC COMPOUNDS	NONE	Group 1	International Agency for Research on Cancer
CADMIUM COMPOUNDS	NONE	Group 1	International Agency for Research on Cancer
CADMIUM COMPOUNDS	NONE	Known human carcinogen	National Toxicology Program Carcinogens
CADMIUM COMPOUNDS	NONE	Cancer hazard	OSHA Carcinogens
CHROMIUM (HEXAVALENT	NONE	Group 1	International Agency for Research on Cancer
COMPOUNDS)		-	
COBALT COMPOUNDS	NONE	Group 2B	International Agency for Research on Cancer
GLASSWOOL FIBERS (AIRBORNE	NONE	Group 2B	International Agency for Research on Cancer
PARTICLES OF RESPIRABLE SIZE)		-	
GLASSWOOL FIBERS (AIRBORNE	NONE	Anticipated human carcinogen	National Toxicology Program Carcinogens
PARTICLES OF RESPIRABLE SIZE)		-	
LEAD COMPOUNDS	NONE	Anticipated human carcinogen	National Toxicology Program Carcinogens
NICKEL ALLOYS	NONE	Group 2B	International Agency for Research on Cancer
QUARTZ SILICA	14808-60-7	Group 1	International Agency for Research on Cancer
QUARTZ SILICA	14808-60-7	Known human carcinogen	National Toxicology Program Carcinogens
SILICA, CRYSTALLINE (AIRBORNE	NONE	Group 1	International Agency for Research on Cancer
PARTICLES OF RESPIRABLE SIZE)		-	
SILICA, CRYSTALLINE (AIRBORNE	NONE	Known human carcinogen	National Toxicology Program Carcinogens
PARTICLES OF RESPIRABLE SIZE)		J	
STYRENE MONOMER	100-42-5	Group 2B	International Agency for Research on Cancer
TALC CONTAINING ASBESTIFORM	NONE	Group 1	International Agency for Research on Cancer
FIBERS		-	

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 No Data Available

Flash Point 31 °C [Test Method: Pensky-Martens Closed Cup]

Flammable Limits - LELNo Data Available **Flammable Limits - UEL**No Data Available

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). Water may be used to blanket the fire. Water may not effectively extinguish fire; however, it should be used to keep fire-exposed containers and surfaces cool and prevent explosive rupture.

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

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. 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. 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 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. 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

Keep away from heat, sparks, open flame, pilot lights and other sources of ignition. Avoid static discharge. Ground containers securely when transferring contents. Wear low static or properly grounded shoes. Do not breathe vapors. Do not breathe dust. Avoid

breathing of dust created by cutting, sanding, grinding or machining. Avoid eye contact with vapors, mists, or spray. Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water. Avoid contact with oxidizing agents.

7.2 STORAGE

Store away from acids. Store away from heat. Store out of direct sunlight. Keep container in well-ventilated area. Keep container tightly closed. Store away from oxidizing agents.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 ENGINEERING CONTROLS

Use with appropriate local exhaust ventilation. Use in an enclosed process area is recommended. Provide appropriate local exhaust for cutting, grinding, sanding or machining. 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. Avoid breathing of dust created by cutting, sanding, grinding or machining. Do not breathe vapors. Do not breathe dust.

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. Wash hands after handling and before eating.

8.3 EXPOSURE GUIDELINES

Authority	Type	<u>Limit</u>	Additional Information
ACGIH	TWA, as Al	5 mg/m3	
OSHA	TWA, as Al	5 mg/m3	Table Z-1A
ACGIH	TWA, as Sb	0.5 mg/m3	
OSHA	TWA, as Sb	0.5 mg/m3	Table Z-1A
ACGIH	TWA, as Cd,	0.002 mg/m3	Table A2
	respirable		
ACGIH	TWA, as Cd	0.01 mg/m3	Table A2
	dust/particle		
OSHA	TWA, as dust	0.2 mg/m3	Table Z-2
OSHA	CEIL, as dust	0.6 mg/m3	Table Z-2
ACGIH	TWA, as Cr	0.01 mg/m3	Table A1
ACGIH	TWA, as Co	0.02 mg/m3	Table A3
	ACGIH OSHA ACGIH OSHA ACGIH ACGIH OSHA ACGIH OSHA OSHA ACGIH	ACGIH OSHA ACGIH TWA, as Al ACGIH TWA, as Sb OSHA TWA, as Sb ACGIH TWA, as Cd, respirable ACGIH TWA, as Cd dust/particle OSHA TWA, as dust OSHA CEIL, as dust ACGIH TWA, as Cr	ACGIH TWA, as Al 5 mg/m3 OSHA TWA, as Al 5 mg/m3 ACGIH TWA, as Sb 0.5 mg/m3 OSHA TWA, as Sb 0.5 mg/m3 ACGIH TWA, as Cd, respirable 0.002 mg/m3 ACGIH TWA, as Cd dust/particle 0.01 mg/m3 OSHA TWA, as dust O.2 mg/m3 OSHA CEIL, as dust O.6 mg/m3 ACGIH TWA, as Cr 0.01 mg/m3

COPPER COMPOUNDS	CORDED COMPOUNDS	A CCITI	TWA C. 1	1 /2	
COPPER COMPOUNDS	COPPER COMPOUNDS	ACGIH	,	1 mg/m3	
IMMESTONE					
IMMESTONE					Table Z-1A
LIMESTONE					
MAGRISIUM CARBONATE	LIMESTONE	OSHA	TWA, respirable	5 mg/m3	Table Z-1
MAGNESIUM CARBONATE	LIMESTONE	OSHA	TWA, as total dust	15 mg/m3	Table Z-1
MAGNESIUM CARBONATE	MAGNESIUM CARBONATE	OSHA	TWA, respirable	5 mg/m3	Table Z-1
MANGANESE COMPOUNDS ACGIH TWA, as Mn 0.2 mg/m3 MERCURY NON-ALKYL, VAPOR ACGIH TWA, as Hg 0.05 mg/m3 Skin Notation*; Table Z-1A MERCURY, ARYL & INORGANIC OSHA CELL, as Hg 0.05 mg/m3 Skin Notation*; Table Z-1A MERCURY, ARYL & INORGANIC OSHA CELL, as Hg 0.1 mg/m3 Skin Notation*; Table Z-1A MERCURY, INORGANIC COMPOUNDS ACGIH TWA, as Hg 0.025 mg/m3 Skin Notation*; Table Z-1A MOLYBDENUM, INSOLUBLE ACGIH TWA, as Mg 0.025 mg/m3 Skin Notation*; Table A4 TWA, as Mg 0.025 mg/m3 Table Z-1A MOLYBDENUM, INSOLUBLE ACGIH TWA, as Mg 0.025 mg/m3 Table Z-1A TWA, as Mg TWA, as	MAGNESIUM CARBONATE			•	
MANGANESE, INORGANIC COMPOUNDS ACGIH TWA, as Mg 0.05 mg/m3 Skin Notation* Skin Notation* Skin Notation* Table Z-1A TWA, as Hg 0.05 mg/m3 Skin Notation* Table Z-1A TWA, as Hg 0.05 mg/m3 Skin Notation* Table Z-1A TWA, as Hg 0.1 mg/m3 Skin Notation* Table Z-1A TWA, as Hg 0.1 mg/m3 Skin Notation* Table Z-1A TWA, as Hg 0.1 mg/m3 Skin Notation* Table Z-1A TWA, as Hg 0.025 mg/m3 Skin Notation* Table Z-1A TWA, as Hg 0.025 mg/m3 Skin Notation* Table Z-1A TWA, as Mg 0.025 mg/m3 Skin Notation* Table Z-1A TWA, as Mg 0.025 mg/m3 Skin Notation* Table Z-1A TWA, as Mg 0.025 mg/m3 Table Z-2 TWA, as Mg 0.025 mg/m3 Table Z-2 TWA, as Mg 0.025 mg/m3 Table Z-2 TWA, as Mg 0.025 mg/m3 Table Z-1A TWA, as Mg					
MERCURY NON-ALKYL, VAPOR ACGIH TWA, as Hg 0.05 mg/m3 Skin Notation*; Table Z-IA MERCURY, ARYL & INORGANIC OSHA CEIL, as Hg 0.1 mg/m3 Skin Notation*; Table Z-IA COMPOUNDS ACGIH TWA, as Hg 0.025 mg/m3 Skin Notation*; Table Z-IA MOLYBDENUM, INSOLUBLE ACGIH TWA, as Hg 0.025 mg/m3 Skin Notation*; Table A4 COMPOUNDS MOLYBDENUM, INSOLUBLE ACGIH TWA, as Mo, inhalable fraction 10 mg/m3 Table Z-IA COMPOUNDS MOLYBDENUM, INSOLUBLE OSHA TWA, as Mo 10 mg/m3 Table Z-IA COMPOUNDS MOLYBDENUM, INSOLUBLE OSHA TWA, as Mo 10 mg/m3 Table Z-IA COMPOUNDS MICHALES JM TWA, as dust 10 mg/m3 Table Z-IA OUARTZ SILICA OSHA TWA, respirable 0.025 mg/m3 Table Z-IA SELENUM COMPOUNDS ACGIH TWA, as Se 0.2 mg/m3 Table Z-I SILICATES (LESS THAN 1% OSHA TWA, as total dust 1 fiber/cc Standard Appendix CRYSTALINE SILICA) TALC <t< td=""><td></td><td></td><td></td><td></td><td>14010 2 111</td></t<>					14010 2 111
MERCURY NON-ALKYL, VAPOR					Skin Motation*
MERCURY, ARYL & INORGANIC OSHA CEIL, as Hg O.1 mg/m3 Skin Notation*; Table Z-1A COMPOUNDS MERCURY, INORGANIC COMPOUNDS ACGIH TWA, as Hg TWA, as Hg O.025 mg/m3 Skin Notation*; Table A4 MOLYBDENUM, INSOLUBLE ACGIH TWA, as Mo, inhalable fraction MOLYBDENUM, INSOLUBLE OSHA TWA, as Mo, inhalable fraction MOLYBDENUM, INSOLUBLE OSHA TWA, as Mo 10 mg/m3 Table Z-1A COMPOUNDS OSHA TWA, as Mo 10 mg/m3 Table Z-1A COMPOUNDS OSHA TWA, as Mo O.025 mg/m3 Table Z-1A COMPOUNDS OSHA TWA, as Se O.2 mg/m3 Table Z-1A OSHA TWA, as Se OSHA TWA,					
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MERCURY, INORGANIC COMPOUNDS ACGIH TWA, respirable 3 mg/m3 Skin Notation*; Table A4		OSHA	CEIL, as Hg	0.1 mg/m3	Skin Notation*; Table Z-1A
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COMPOUNDS ACGIH TWA, as Mo, inhalable fraction 10 mg/m3 Table Z-1A COMPOUNDS TWA, as Mo 10 mg/m3 Table Z-1A COMPOUNDS TWA, as dust 10 mg/m3 Table Z-1A OWDOUNDS ACGIH TWA, as dust 10 mg/m3 Table Z-1A OUARTZ SILICA ACGIH TWA, respirable 0.025 mg/m3 Table A2 QUARTZ SILICA OSHA TWA, as Se 0.2 mg/m3 Table A2 SELENIUM COMPOUNDS ACGIH TWA, as Se 0.2 mg/m3 Table Z-1A SELENIUM COMPOUNDS OSHA TWA, as Se 0.2 mg/m3 Table Z-1A SILICATES (LESS THAN 1% OSHA TWA, as Se 0.2 mg/m3 Table Z-1 CONTAINING ASBESTOS SILICAN TALC OSHA STEL, as total dust 1 fiber/cc Standard Appendix CONTAINING ASBESTOS STYEREN MONOMER ACGIH TWA 20 ppm Skin Notation*; Table A4 STYRENE MONOMER ACGIH TWA 20 ppm Skin Notation*; Table A4 STYRENE MONOMER OSHA TWA <t< td=""><td>MERCURY, INORGANIC COMPOUNDS</td><td>ACGIH</td><td>TWA, as Hg</td><td></td><td>Skin Notation*; Table A4</td></t<>	MERCURY, INORGANIC COMPOUNDS	ACGIH	TWA, as Hg		Skin Notation*; Table A4
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COMPOUNDS inhalable fraction Image: Compound of the process of the pr	COMPOUNDS		_		
COMPOUNDS inhalable fraction Image: Compound of the process of the pr	MOLYBDENUM, INSOLUBLE	ACGIH	TWA. as Mo.	10 mg/m3	
MOLYBDENUM, INSOLUBLE COMPOUNDS OSHA TWA, as dust 10 mg/m3 Table Z-1A COMPOUNDS OXIDE GLASS CHEMICALS 3M TWA, as dust 10 mg/m3 Table A2 QUARTZ SILICA OSHA TWA, respirable 0.025 mg/m3 Table A2 QUARTZ SILICA OSHA TWA, as Se 0.2 mg/m3 Table Z-1A SELENIUM COMPOUNDS OSHA TWA, as Se 0.2 mg/m3 Table Z-1A SILICATES (LESS THAN 1% OSHA TWA, as total dust 0.1 fiber/cc Standard Appendix CRYSTALLINE SILICA) TALC CONTAINING ASBESTOS STEL, as total dust 1 fiber/cc Standard Appendix CRYSTALLINE SILICA) TALC CONTAINING ASBESTOS STYRENE MONOMER ACGIH TWA 20 ppm Skin Notation*: Table A4 STYRENE MONOMER ACGIH TWA 20 ppm Skin Notation*: Table A4 STYRENE MONOMER OSHA TWA 100 ppm Table Z-2 STYRENE MONOMER OSHA TWA 200 ppm Table Z-2 SYNTHETIC CRYSTALLINE-FREE SILICA OSHA TWA, respirable 2 mg/m3				8	
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OXIDE GLASS CHEMICALS 3M		OSHA	I WA, as Mo	10 mg/m3	Table Z-TA
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CRYSTALLINE SILICA) TALC CONTAINING ASBESTOS SILICATES (LESS THAN 19% OSHA STEL, as total dust of the process	SELENIUM COMPOUNDS	OSHA	TWA, as Se	0.2 mg/m3	Table Z-1
CRYSTALLINE SILICA) TALC	SILICATES (LESS THAN 1%	OSHA	TWA, as total dust		Standard Appendix
CONTAINING ASBESTOS SILICATES (LESS THAN 1% OSHA STEL, as total dust 1 fiber/cc Standard Appendix CRYSTALLINE SILICA) TAIC CONTAINING ASBESTOS STYRENE MONOMER ACGIH TWA 20 ppm Skin Notation*; Table A4 STYRENE MONOMER ACGIH STEL 40 ppm Skin Notation*; Table A4 STYRENE MONOMER OSHA TWA, Vacated 50 ppm Table Z-2 STYRENE MONOMER OSHA TWA 100 ppm Table Z-2 STYRENE MONOMER OSHA STEL, Vacated 100 ppm Table Z-2 STYRENE MONOMER OSHA TWA 80 mg/m3 Table Z-3 STYRENE MONOMER OSHA TWA 80 mg/m3 Table Z-2 SYNTHETIC CRYSTALLINE-FREE SILICA OSHA TWA 80 mg/m3 Table Z-3 GEL TALC ACGIH TWA, respirable 0.5 mg/m3 Table Z-1 TALC OSHA TWA, as respirable 0.5 mg/m3 Table Z-1 TALC OSHA TWA, as Sn 2 mg/m3 Table Z-1 TALC OSHA TWA, as Sn 2 mg/m3 Table Z-1 TIN, INORGANIC COMPOUNDS, EXCEPT OSHA TWA, as Sn 2 mg/m3 Table Z-1 TIN, INORGANIC COMPOUNDS, EXCEPT OSHA TWA, as Sn 2 mg/m3 Table Z-1 TIN, INORGANIC COMPOUNDS, EXCEPT OSHA TWA, as Sn 2 mg/m3 Table A4 TITANIUM DIOXIDE ACGIH TWA 10 mg/m3 Table A4 TITANIUM DIOXIDE ACGIH TWA 10 mg/m3 Table A4 TITANIUM DIOXIDE OSHA TWA, as respirable dust TITANIUM DIOXIDE OSHA TWA, as respirable 3 mg/m3 dust TITANIUM DIOXIDE OSHA TWA, as total dust 15 mg/m3 Table Z-1 TRIMETHYLOLPROPANE TRIACRYLATE AIHA TWA 1 mg/m3 Table Z-1 TRIMETHYLOLPROPANE TRIACRYLATE AIHA TWA 1 mg/m3 TungSTEN, INSOLUBLE COMPOUNDS ACGIH TWA, as W 5 mg/m3 Table Z-1A TUNGSTEN, INSOLUBLE COMPOUNDS ACGIH TWA, as W 5 mg/m3 Table Z-1A			,		11
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^{*} Substance(s) refer to the potential contribution to the overall exposure by the cutaneous route including mucous membrane and eye,

MATERIAL SAFETY DATA SHEET 3MTM Flowable Finishing Putty PN 05823, 05824 03/25/09

either by airborne or, more particularly, by direct contact with the substance. Vehicles can alter skin absorption.

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: Pungent odor Light Yellow Putty

General Physical Form: Liquid

Autoignition temperature No Data Available

Flash Point 31 °C [Test Method: Pensky-Martens Closed Cup]

Flammable Limits - LEL
No Data Available
No Data Available
No Data Available

Boiling point 145 °C **Density** 1.1 g/ml

Vapor DensityNo Data AvailableVapor DensityNo Data Available

Vapor Pressure 4.5 mmHg

Specific Gravity 1.1 g/cm³

pH No Data Available
Melting point No Data Available

Solubility in Water Nil

Volatile Organic Compounds 240.34 g/l [Test Method: calculated SCAQMD rule 443.1] [Details:

Excluding exempt compounds]

VOC Less H2O & Exempt Solvents 240.51 g/l [Test Method: calculated SCAQMD rule 443.1]

SECTION 10: STABILITY AND REACTIVITY

Stability: Stable.

Materials and Conditions to Avoid: Sparks and/or flames; Heat; Strong acids; Strong oxidizing agents

Hazardous Polymerization: Hazardous polymerization will not occur.

Hazardous Decomposition or By-Products

SubstanceConditionCarbon monoxideNot SpecifiedCarbon dioxideNot 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.

Dispose of empty product containers in a sanitary landfill.

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

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

SECTION 14:TRANSPORT INFORMATION

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>Ingredient</u>	<u>C.A.S. No</u>	% by Wt
STYRENE MONOMER	100-42-5	10 - 30

STATE REGULATIONS

Contact 3M for more information.

CALIFORNIA PROPOSITION 65

<u>Ingredient</u>	<u>C.A.S. No.</u>	Classification
CADMIUM COMPOUNDS	NONE	*Male reproductive toxin
CADMIUM COMPOUNDS	NONE	**Carcinogen
CADMIUM COMPOUNDS	NONE	*Developmental Toxin
CHROMIUM (HEXAVALENT	NONE	**Carcinogen
COMPOUNDS)		
GLASSWOOL FIBERS (AIRBORNE	NONE	**Carcinogen
PARTICLES OF RESPIRABLE SIZE)		
LEAD COMPOUNDS	NONE	*Female reproductive toxin
LEAD COMPOUNDS	NONE	*Male reproductive toxin
LEAD COMPOUNDS	NONE	**Carcinogen
LEAD COMPOUNDS	NONE	*Developmental Toxin
MERCURY COMPOUNDS	NONE	*Developmental Toxin
NICKEL COMPOUNDS	NONE	**Carcinogen
SILICA, CRYSTALLINE (AIRBORNE	NONE	**Carcinogen
PARTICLES OF RESPIRABLE SIZE)		
TALC CONTAINING ASBESTIFORM	NONE	**Carcinogen
FIBERS		

^{*} WARNING: contains a chemical or chemicals which can cause birth defects or other reproductive harm.

CHEMICAL INVENTORIES

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: 2 Reactivity: 0 Special Hazards: None

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^{**} WARNING: contains a chemical which can cause cancer.

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.

No revision information is available.

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