

Material Safety Data Sheet

Copyright, 2009, 3M Company. All rights reserved. Copying and/or downloading of this information for the purpose of properly utilizing 3M products is allowed provided that: (1) the information is copied in full with no changes unless prior written agreement is obtained from 3M, and (2) neither the copy nor the original is resold or otherwise distributed with the intention of earning a profit thereon.

PRODUCT NAME: 3MTM Body Repair System Introductory Kit PN 05849

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:** 03/26/09

Document Group: 24-1829-1

ID Number(s):

60-4550-3408-6

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:

26-9510-4, 24-6052-5

Revision Changes:

Kit: Component document group number(s) was modified.

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

3M provides information in electronic form as a service to its customers. Due to the remote possibility that electronic transfer may have resulted in errors, omissions or alterations in this information, 3M makes no representations as to its completeness or accuracy.

MATERIAL SAFETY DATA SHEET 3M TM Body Repair System Introductory Kit PN 05849 07/20/09	
n addition, information obtained from a database may not be as current as the information in the MSDS available directly from	rom 3M.



Material Safety Data Sheet

Copyright, 2010, 3M Company. All rights reserved. Copying and/or downloading of this information for the purpose of properly utilizing 3M products is allowed provided that: (1) the information is copied in full with no changes unless prior written agreement is obtained from 3M, and (2) neither the copy nor the original is resold or otherwise distributed with the intention of earning a profit thereon.

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: 3M[™] Dynamic Mixing System Dent Repair Compound - Advanced Body Filler PN 05850

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: 04/14/10 **Supercedes Date:** 08/12/09

Document Group: 24-6052-5

Product Use:

Intended Use: Automotive

Specific Use: Automotive Body Filler

SECTION 2: INGREDIENTS

Ingredient	C.A.S. No.	<u>% by Wt</u>
POLYESTER POLYMER	Trade Secret	15 - 40
LIMESTONE	1317-65-3	10 - 30
STYRENE MONOMER	100-42-5	10 - 30
TALC	14807-96-6	7 - 13
MAGNESIUM CARBONATE	546-93-0	5 - 10
SODIUM SILICATE	1344-09-8	3 - 7
AMMONIUM SALTS	None	<= 2.0
SODIUM METABORATE	7775-19-1	0.5 - 1.5
PENTAERYTHRITOL TETRAACRYLATE	4986-89-4	0.1 - 1.0
2-HYDROXYETHYL METHACRYLATE	868-77-9	0.1 - 1.0
POLY(OXYPROPYLENE)DIAMINE	9046-10-0	0.1 - 1.0
PENTAERYTHRITOL TRIACRYLATE	3524-68-3	< 0.2

SECTION 3: HAZARDS IDENTIFICATION

3.1 EMERGENCY OVERVIEW

Odor, Color, Grade: Light gray paste with pungent solvent odor.

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. Contains a chemical or chemicals which can cause cancer. May cause target organ effects.

3.2 POTENTIAL HEALTH EFFECTS

Eve 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:

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:

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.

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.

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.

Carcinogenicity:

Contains a chemical or chemicals which can cause cancer.

<u>Ingredient</u> <u>C.A.S. No.</u> <u>Class Description</u> <u>Regulation</u>

STYRENE MONOMER 100-42-5 Grp. 2B: Possible human carc. 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 No Data Available

Flash Point 80 °F [Test Method: Closed Cup]

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

OSHA Flammability Classification: Class IC Flammable 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. 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

Accidental Release Measures:

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. Remember, adding an absorbent material does not remove a toxic, corrosivity or flammability hazard. 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.

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. 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. Ground containers securely when transferring contents. Wear low static or properly grounded shoes. Avoid breathing of vapors, mists or spray. Avoid skin contact. Avoid breathing of vapors created during cure cycle. Avoid static discharge. Avoid eye contact with vapors, mists, or spray. 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 in well-ventilated area. Keep container tightly closed. Store away from oxidizing agents. Store in a cool, dry place.

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 ventilated enclosure for heat curing. Provide appropriate local exhaust for molten or extruded material. Provide appropriate local exhaust for cutting, grinding, sanding or machining. Curing enclosures must be exhausted to outdoors or to a suitable emission control device. 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: 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 vapors created during cure cycle. 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. Do not ingest.

8.3 EXPOSURE GUIDELINES

Ingredient	Authority	Type	<u>Limit</u>	Additional Information
LIMESTONE	OSHA	TWA, respirable	5 mg/m3	
		fraction		
LIMESTONE	OSHA	TWA, as total dust	15 mg/m3	
MAGNESIUM CARBONATE	OSHA	TWA, respirable	5 mg/m3	
		fraction		
MAGNESIUM CARBONATE	OSHA	TWA, as total dust	15 mg/m3	
PENTAERYTHRITOL TRIACRYLATE	AIHA	TWA	1 mg/m3	Dermal Sensitizer
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	2 mg/m3	
		fraction		
TALC	CMRG	TWA, as respirable	0.5 mg/m3	
		dust		
TALC	OSHA	TWA concentration,	0.1 mg/m3	
		respirable		

TALC OSHA TWA concentration, 0.3 mg/m3

as total dust

TALC OSHA TWA 20 millions of

particles/cu. ft.

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: Light gray paste with pungent solvent odor.

General Physical Form: Liquid

Autoignition temperature No Data Available

Flash Point 80 °F [Test Method: Closed Cup]

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

Boiling point 293 °F
Density 1.12 g/ml

Vapor Density3.60 [Ref Std: AIR=1]Vapor DensityNo Data AvailableVapor Pressure4.5 mmHg

Vapor Pressure No Data Available

Specific Gravity 1.12 [Ref Std: WATER=1]

pHNot ApplicableMelting pointNo Data AvailableSolubility In WaterNo Data AvailableSolubility in WaterNegligibleEvaporation rateNo Data Available

Volatile Organic Compounds 211.09 g/l [Test Method: calculated SCAQMD rule 443.1] [Details:

Excluding exempt compounds]

Kow - Oct/Water partition coefNo Data AvailablePercent volatile18.55 % weightPercent volatile22.84 % volume

VOC Less H2O & Exempt Solvents 211.09 g/l [*Test Method:* calculated SCAQMD rule 443.1]

Viscosity 96000 centipoise - 172000 centipoise

SECTION 10: STABILITY AND REACTIVITY

Stability: Stable. Stable under normal conditions. Maybe become unstable at elevated temperatures and/or pressure.

Materials and Conditions to Avoid:

10.1 Conditions to avoid

Heat

Sparks and/or flames

10.2 Materials to avoid

Strong oxidizing agents

Strong acids

Alkali and alkaline earth metals

Hazardous Polymerization: Hazardous polymerization will not occur.

Hazardous Decomposition or By-Products

Substance

Hydrocarbons Carbon monoxide Carbon dioxide

Condition

During Combustion 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):

LB-K100-0436-6, 41-3701-2189-3

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):

IngredientC.A.S. No% by WtSTYRENE MONOMER100-42-510 - 30

STATE REGULATIONS

Contact 3M for more information.

CHEMICAL INVENTORIES

The components of this product are in compliance with the chemical notification requirements of TSCA.

The components of this product are listed on the Canadian Domestic Substances List.

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: 0 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.

HMIS Hazard Classification

Health: 2 Flammability: 3 Reactivity: 0 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 8: Eye/face protection information was modified.

Section 8: Skin protection - recommended gloves information was modified.

Section 8: Respiratory protection - recommended respirators information was modified.

Section 3: Immediate other hazard(s) was modified.

Section 5: Flash point information was modified.

Section 9: Property description for optional properties was modified.

Section 9: Flash point information was modified.

Section 2: Ingredient table was modified.

Section 8: Exposure guidelines ingredient information was modified.

Section 3: Carcinogenicity table was modified.

Section 5: OSHA flammability heading was added.

Section 5: OSHA flammability data was added.

Section 10.1 Conditions to avoid heading was added.

Section 10.2 Materials to avoid heading was added.

Section 6: Personal precautions information was added.

Section 6: Environmental procedures information was added.

Section 6: Methods for cleaning up information was added.

Section 10: Materials to avoid physical property was added.

Section 10: Conditions to avoid physical property was added.

Section 6: Release measures information was deleted.

Section 10: Materials and conditions to avoid physical property was deleted.

Section 8: Exposure guidelines legend was deleted.

Section 8: Exposure guideline note was deleted.

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

3M provides information in electronic form as a service to its customers. Due to the remote possibility that electronic transfer may have resulted in errors, omissions or alterations in this information, 3M makes no representations as to its completeness or accuracy. In addition, information obtained from a database may not be as current as the information in the MSDS available directly from 3M.

ERIAL SAFETY DATA SHEET	3M TM Dynamic Mixing Sys	tem Dent Repair Comp	ound - Advanced Body	y Filler PN 05850
3M MSDSs are available at w	ww.3M.com			



Material Safety Data Sheet

Copyright, 2012, 3M Company All rights reserved. Copying and/or downloading of this information for the purpose of properly utilizing 3M products is allowed provided that: (1) the information is copied in full with no changes unless prior written agreement is obtained from 3M, and (2) neither the copy nor the original is resold or otherwise distributed with the intention of earning a profit thereon.

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: 3MTM Blue 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: 03/09/12 **Supercedes Date:** 02/28/12

Document Group: 26-9510-4

Product Use:

Intended Use: Automotive

Specific Use: Hardener for Body Fillers

SECTION 2: INGREDIENTS

<u>Ingredient</u>	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	5 - 10
OXIRANE, POLYMER WITH METHYLOXIRANE, MONOBUTYL ETHER	9038-95-3	3 - 7
CALCIUM SULFATE	7778-18-9	3 - 7
FERRIC AMMONIUM FERROCYANIDE	25869-00-5	< 1
FERRIC FERROCYANIDE	14038-43-8	< 1

SECTION 3: HAZARDS IDENTIFICATION

3.1 EMERGENCY OVERVIEW

Specific Physical Form: Paste

Odor, Color, Grade: Blue 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

Page 1 of 7

MATERIAL SAFETY DATA SHEET 3MTM Blue Cream Hardener

explode. May cause severe eye irritation. May cause allergic skin reaction.

3.2 POTENTIAL HEALTH EFFECTS

Eve 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.

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

410 °C [Test Method: Estimated] **Autoignition temperature Flash Point** 111 °C [Test Method: Estimated] Flammable Limits(LEL) Not Applicable Flammable Limits(UEL) Not Applicable

5.2 EXTINGUISHING MEDIA

Ordinary combustible material. Use fire extinguishers with class A extinguishing agents (e.g., water, foam). 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 be used to blanket the fire. 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.

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

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. Collect as much of the spilled material as possible using non-sparking tools. 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.

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. No smoking while handling this material. Avoid skin contact. 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. For industrial or professional use only. Do not breathe vapors. Avoid eye contact with dust or airborne particles. 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 heat. Store out of direct sunlight. Keep container in well-ventilated area. Do not heat under confinement to avoid risk of explosion Store in a cool, dry place.

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 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. 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: 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

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 dust created by cutting, sanding, grinding or machining. Do not breathe vapors.

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

. Select and use respiratory protection to prevent an inhalation exposure based on the results of an exposure assessment. Consult with your respirator manufacturer for selection of appropriate types of respirators.

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

<u>Ingredient</u>	Authority	Type	<u>Limit</u>	Additional Information
BENZOYL PEROXIDE	ACGIH	TWA	5 mg/m3	
BENZOYL PEROXIDE	OSHA	TWA	5 mg/m3	
CALCIUM SULFATE	ACGIH	TWA, inhalable	10 mg/m3	
		fraction		
CALCIUM SULFATE	OSHA	TWA, respirable	5 mg/m3	
		fraction		
CALCIUM SULFATE	OSHA	TWA, as total dust	15 mg/m3	
ZINC STEARATE	OSHA	TWA, respirable	5 mg/m3	
		fraction		
ZINC STEARATE	OSHA	TWA, as total dust	15 mg/m3	

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)

Page 4 of 7

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Specific Physical Form: Paste

Odor, Color, Grade:

Blue paste with slight ester odor

General Physical Form: Solid

Autoignition temperature410 °C [Test Method: Estimated] **Flash Point**111 °C [Test Method: Estimated]

Flammable Limits(LEL)

Flammable Limits(UEL)

Roiling Point

Not Applicable
Not Applicable
Not Applicable
1.2 g/ml

Vapor Density No Data Available

Vapor Pressure No Data Available

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

pHMelting pointNo Data AvailableNo Data Available

Solubility in WaterNegligibleEvaporation rateNo Data Available

Hazardous Air Pollutants 2.0 % weight [Test Method: Calculated]

Volatile Organic Compounds0 % weight [Test Method: calculated per CARB title 2]Volatile Organic Compounds0 g/l [Test Method: calculated SCAQMD rule 443.1]

Kow - Oct/Water partition coefNo Data Available

VOC Less H2O & Exempt Solvents 0 g/l [Test Method: calculated SCAQMD rule 443.1]

Viscosity 70000 centipoise - 150000 centipoise

SECTION 10: STABILITY AND REACTIVITY

Stability: Stable.

Materials and Conditions to Avoid:

10.1 Conditions to avoid

None known

10.2 Materials to avoid

Accelerators

Hazardous Polymerization: Hazardous polymerization will not occur.

Hazardous Decomposition or By-Products

SubstanceConditionCarbon monoxideDuring CombustionCarbon dioxideDuring CombustionToxic Vapor, Gas, ParticulateDuring Combustion

SECTION 11: TOXICOLOGICAL INFORMATION

Th.

MATERIAL SAFETY DATA SHEET 3MTM Blue Cream Hardener 03/09/12

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-K100-0788-3, LB-K100-0801-2, 41-0003-6567-0, 41-0003-6575-3, 41-0003-6576-1, 41-0003-6577-9, 41-0003-6578-7, 41-0003-6610-8, 41-0003-6613-2, 41-0003-6614-0, 60-4550-4563-7, 60-4550-4689-0, 70-0080-0038-5, 70-0080-0373-6, 70-0080-0377-7, 70-0080-0380-1, 70-0080-0382-7, 70-0080-0386-8, 70-0080-0389-2, 70-0080-0609-3

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 - 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>	C.A.S. No	% by Wt
ZINC STEARATE (ZINC COMPOUNDS)	557-05-1	5 - 10
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.

Page 6 of 7

MATERIAL SAFETY DATA SHEET 3MTM Blue Cream Hardener 03/09/12

The components of this product are listed on the Canadian Domestic Substances List.

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: 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.

Revision Changes:

Section 9: Vapor density text was deleted.

Section 9: Vapor pressure text was deleted.

Section 9: Solubility in water value was deleted.

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

3M provides information in electronic form as a service to its customers. Due to the remote possibility that electronic transfer may have resulted in errors, omissions or alterations in this information, 3M makes no representations as to its completeness or accuracy. In addition, information obtained from a database may not be as current as the information in the MSDS available directly from 3M

3M USA MSDSs are available at www.3M.com