



Material Safety Data Sheet

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SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: 3M™ Bondo (R),ULTIMATE EASY SANDING L/W BODY FILLER 232D, 234D

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: 08/12/09 **Supercedes Date:** 02/02/09

Document Group: 25-0243-3

Product Use:

Intended Use: Automotive

SECTION 2: INGREDIENTS

Ingredient	C.A.S. No.	% by Wt
1,3-ISOBENZOFURANDIONE, POLYMER WITH 2,5-FURANDIONE AND	26123-45-5	15 - 40
2,2'-OXYBIS[ETHANOL]		
TALC	14807-96-6	10 - 30
STYRENE MONOMER	100-42-5	10 - 30
LIMESTONE	1317-65-3	10 - 30
MAGNESIUM CARBONATE	546-93-0	5 - 10
SODIUM SILICATE	1344-09-8	3 - 7
SYNTHETIC CRYSTALLINE-FREE SILICA GEL	112926-00-8	1 - 5
QUARTZ SILICA	14808-60-7	<= 0.3766

SECTION 3: HAZARDS IDENTIFICATION

3.1 EMERGENCY OVERVIEW

Odor, Color, Grade: Strong Solvent - Pungent Odor Gray Paste

General Physical Form: Liquid

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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 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.

May be absorbed through skin and cause target organ effects.

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.

Prolonged or repeated exposure may cause:

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 **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 STYRENE MONOMER 100-42-5 Group 2B 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 88 °F [Test Method: 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: Water may not effectively extinguish fire; however, it should be used to keep fire-exposed containers and surfaces cool and prevent explosive rupture. Wear full protective equipment (Bunker Gear) and a self-contained breathing apparatus (SCBA).

Unusual Fire and Explosion Hazards: Flammable liquid and vapor. 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 designed for use on solvents, such as alcohols and acetone, that can dissolve in water. An AR - AFFF type foam is recommended. Working from around the edges of the spill inward, cover with bentonite, vermiculite, or commercially available inorganic absorbent material. Mix in sufficient absorbent until it appears dry. Remember, adding an absorbent material does not remove a toxic, corrosivity or flammability hazard. Collect as much of the spilled material as possible using non-sparking tools. Clean up residue with 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. Ground containers securely when transferring contents. Wear low static or properly grounded shoes. Avoid breathing of vapors, mists or spray. 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.

7.2 STORAGE

Store away from acids. Store away from heat. Store out of direct sunlight. Keep container tightly closed. Store away from oxidizing agents.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 ENGINEERING CONTROLS

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: Safety Glasses with side shields.

8.2.2 Skin Protection

Avoid skin contact. Avoid prolonged or repeated 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 P100 particulate filters. 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

<u>Ingredient</u>	Authority	Type	<u>Limit</u>	Additional Information
LIMESTONE	ACGIH	TWA	10 mg/m3	
LIMESTONE	OSHA	TWA, respirable	5 mg/m3	Table Z-1
LIMESTONE	OSHA	TWA, as total dust	15 mg/m3	Table Z-1
QUARTZ SILICA	ACGIH	TWA, respirable	0.025 mg/m3	Table A2
QUARTZ SILICA	OSHA	TWA, respirable	0.1 mg/m3	Table Z-1A
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	
STYRENE MONOMER	OSHA	TWA	100 ppm	Table Z-2
STYRENE MONOMER	OSHA	STEL, Vacated	100 ppm	
STYRENE MONOMER	OSHA	CEIL	200 ppm	Table Z-2
SYNTHETIC CRYSTALLINE-FREE SILICA	OSHA	TWA	80 mg/m3	Table Z-3
GEL				
TALC	ACGIH	TWA, respirable	2 mg/m3	Table A4
TALC	CMRG	TWA, as respirable dust	0.5 mg/m3	
TALC	OSHA	TWA, respirable	2 mg/m3	Table Z-1A

^{*} Substance(s) refer to the potential contribution to the overall exposure by the cutaneous route including mucous membrane and eye, either by airborne or, more particularly, by direct contact with the substance. Vehicles can alter skin absorption.

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: Strong Solvent - Pungent Odor Gray Paste Liquid

General Physical Form:

Autoignition temperature No Data Available

Flash Point 88 °F [Test Method: Closed Cup]

No Data Available Flammable Limits - LEL

Flammable Limits - UEL No Data Available

293 °F **Boiling point Density** 1.14 g/ml

MATERIAL SAFETY DATA SHEET 3M™ Bondo (R),ULTIMATE EASY SANDING L/W BODY FILLER 232D, 234D

Vapor Density 3.6 g/cm³

Vapor DensityNo Data AvailableVapor PressureNo Data AvailableVapor PressureNo Data AvailableSpecific Gravity2.75 g/cm3

pHNo Data AvailableMelting pointNo Data AvailableSolubility In WaterNo Data AvailableSolubility in WaterNo Data Available

Volatile Organic Compounds 187.88 g/l [Test Method: calculated SCAQMD rule 443.1] [Details:

excluding exempt compounds]

VOC Less H2O & Exempt Solvents 188.94 g/l [Test Method: calculated SCAQMD rule 443.1]

SECTION 10: STABILITY AND REACTIVITY

Stability: Stable.

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

Hazardous Polymerization: Hazardous polymerization will not occur.

Hazardous Decomposition or By-Products

Substance Condition

Carbon monoxide During Combustion
Carbon dioxide 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: Dispose of completely cured (or polymerized) wastes in a sanitary landfill. Incinerate uncured product in a permitted hazardous waste incinerator.

08/12/09

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

LB-K100-0566-1, LB-K100-0569-0

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):

 Ingredient
 C.A.S. No
 % by Wt

 STYRENE MONOMER
 100-42-5
 10 - 30

STATE REGULATIONS

Contact 3M for more information.

CALIFORNIA PROPOSITION 65

 Ingredient
 C.A.S. No.
 Classification

 SILICA, CRYSTALLINE (AIRBORNE
 NONE
 **Carcinogen

 PARTICLES OF RESPIRABLE SIZE)

CHEMICAL INVENTORIES

Contact 3M for more information.

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

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: 1 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.

Revision Changes:

Section 1: Product name was modified.

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

Page Heading: Product name was modified. Section 2: Ingredient table was modified.

Section 8: Skin protection comment was added.

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