

Material Safety Data Sheet

Date of Preparation: March 13, 2006

Section 1 - Product Information

Product Name: GLAZING & SPOT PUTTY

Product Code: 907, 907C, 937

Emergency Phone: Chemtrec 800-424-9300

Company: Bondo Corporation

3700 Atlanta Industrial Parkway NW

Atlanta, GA 30331

Revision Number: 1

Intended Use: Spot and Glazing Putty

Emergency Overview

Signs of Overexposure: Irritability, Irritation of nose, throat, and airways, Intestinal upset (nausea, vomiting, diarrhea), central nervous system effects (dizziness, drowsiness, weakness, fatigue, headache, unconsciousness), Shortness of breath, Irregular heart beat, Coma and death, Loss of consciousness, Respiratory paralysis, Coughing, temporary changes in mood and behavior, respiratory depression (slowing of the breathing rate), coma, Anesthesia,

Emergency First Aid: Flush eyes with plenty of water. Avoid rubbing eyes. If irritation develops, seek medical attention. Seek medical attention. If individual is drowsy or unconscious, do not give anything by mouth; place individual on the left side with head down. Contact physician for advise about whether to induce vomiting. Remove to fresh air. If breathing is difficult, have a trained individual administer oxygen. Get medical attention immediately Wash with soap and water. If symptoms persist, get medical attention.

Handling: Do not contact or breathe the material. Use only in a well ventilated area.

Material Physical Appearance: Red Paste

Fire Fighting: Use alcohol resistant foam, carbon dioxide, or dry chemical extinguishing agents. Water spray or fog may also be effective for extinguishing if swept across the base of the fire. Water can also be used to absorb heat and keep exposed material from being damaged by fire.

Your local fire department may require that you display the NFPA 704 diamond symbol on the front and/or rear entrance to your building.

NFPA 704: Health: 3, Fire: 4, Reactivity: 0 HMIS: Health: 3, Fire: 4, Reactivity: 0

Bondo Corporation has no oversight with respect to the guidance practices or policies or manufacturing processes of other companies handling or using this material. The information given in this MSDS is only related to the product as shipped in its original condition. The information contained in this safety data sheet does not constitute the user's own assessment of workplace risks as required by regulations.

Section 2 - Ingredients

Chemical Name	%	CAS#	OSHA Exposure Limits
Xylene	5.0 - 10.0	1330-20-7	100 ppm TWA; 435 mg/m3 TWA
Nitrocellulose	5.0 - 10.0	9004-70-0	No PEL established
Propylene Glycol Methyl Ether	1.0 - 5.0	108-65-6	No PEL established
Ethylene glycol mono-n-butyl ether	1.0 - 5.0	111-76-2	50 ppm TWA; 240 mg/m3 TWA prevent or reduce skin absorption
Acetone	1.0 - 5.0	67-64-1	1000 ppm TWA; 2400 mg/m3 TWA

% **CAS#** 1.0 - 5.0 100-41-4

OSHA Exposure Limits 100 ppm TWA; 435 mg/m3 TWA

Section 3 - Hazards Identification

Routes of Entry: Inhalation, Eye contact, Skin contact, Ingestion, Absorption, Skin contact, Eye contact, **Target Organs Potentially Affected by Exposure**: Eyes, Respiratory Tract, Skin, Nervous System, Digestive Tract, Liver, Kidneys, Blood,

Chemical Interactions That Change Toxicity: No chemical interaction known to affect toxicity., Medical Conditions Aggravated by Exposure: Respiratory disease including asthma and bronchitis, Eye disease, Skin disease including eczema and sensitization, Digestive tract disease, Liver disease, Kidney disease.

Immediate (Acute) Health Effects by Route of Exposure

Inhalation Irritation: Can cause severe respiratory irritation, dizziness, weakness, fatigue, nausea, headache and possible unconsciousness. Can cause mechanical irritation if dusts are generated. Harmful! Can cause severe irritation or burns and lung inflammation. Central nervous system effects such as dizziness, weakness, fatigue, nausea, headache, and unconsciousness are possible. Other possible symptoms include; wheezing and coughing due to pulmonary edema (fluid build-up in lungs). May cause headaches and dizziness. Causes respiratory tract irritation Irritation may be delayed for several hours. Irritating to the nose, throat, and respiratory tract.

Inhalation Toxicity: Highly toxic! Can cause systemic damage (see "Target Organs"). Respiratory failure is possible at high doses. Inhalation of high concentrations may result in central nervous system (CNS) effects such as dizziness, weakness, fatigue, nausea, headache, and lack of coordination.

Skin Contact: Can cause moderate skin irritation, defatting, and dermatitis. Not likely to cause permanent damage. Can cause moderate injury (reddening and swelling). May cause skin irritation.

Skin Absorption: Harmful if absorbed through the skin. May cause severe irritation and systemic damage. May be absorbed through the skin to cause hemolytic anemia and kidney damage evidenced by paleness and possibly red coloration of the urine. A single exposure is not likely to result in the product being absorbed through the skin in harmful amounts.

Eye contact: Can cause severe irritation. Eye contact may result in corneal injury. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva. Temporary vision impairment (cloudy or blurred vision) is possible. Can causes slight irritation. Severely irritating. Mildly irritating but will not injure eye tissue. Can cause irritation. Can cause mild irritation.

Ingestion Irritation: Irritating to mouth, throat, and stomach. Can cause abdominal discomfort, nausea, vomiting and diarrhea. Aspiration of material into the lungs can cause chemical pneumonitis which can be fatal. Harmful if swallowed.

Ingestion Toxicity: Toxic if swallowed. May cause target organ failure and/or death. Small amounts (a tablespoonful) swallowed during normal handling operations are not likely to cause injury; swallowing amounts larger than that may cause injury.

Long-Term (Chronic) Health Effects

Carcinogenicity: Contains a substance that can cause cancer in laboratory animals at high doses. Not a carcinogen according to NTP, IARC, or OSHA. There is no scientific evidence to indicate the substance or this product is a human carcinogen. Animal studies indicate that a component of this product might have the potential to cause cancer in humans. No direct evidence that the substance is a human carcinogen exists however. Not listed as a carcinogen by: IARC NTP OSHA

Reproductive and Developmental Toxicity: Contains a substance(s) that is a possible reproductive system hazard based on high dose tests with laboratory animals. Animal studies indicate that a component of this product might have the potential to cause reproductive harm in humans. No direct evidence that the substance is a reproductive hazard to humans exists however.

Mutagenicity: No data available to indicate product or any components present at greater than 0.1% is mutagenic or genotoxic.

Inhalation: Upon prolonged and/or repeated exposure, can cause severe respiratory irritation, dizziness, weakness, fatigue, nausea, headache and possible unconsciousness. Highly toxic! Can cause systemic damage upon prolonged and/or repeated exposure (see "Target Organs).

Skin Contact: Upon prolonged or repeated contact, can cause moderate skin irritation, defatting, and dermatitis. Not likely to cause permanent damage.

Skin Absorption: Upon prolonged or repeated exposure, harmful if absorbed through the skin. May cause severe irritation and systemic damage

Ingestion: Toxic if swallowed. May cause target organ failure and/or death.

Section 4 - First Aid Measures

Inhalation: Remove to fresh air. If breathing is difficult, get medical attention immediately. If you experience difficulty in breathing, leave the area to obtain fresh air. If continued difficulty is experienced, get medical attention immediately.

Eyes: Immediately flush eyes with plenty of water for at least 20 minutes retracting eyelids often. Tilt the head to prevent chemical from transferring to the uncontaminated eye. Get immediate medical attention and monitor the eye daily as advised by your physician. In case of eye contact, flush immediately with plenty of water for at least 15 minutes and get medical attention immediately; for skin, wash thoroughly with soap and water. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention immediately.

Skin Contact: Wash with soap and water. Remove contaminated clothing and launder. Get medical attention if irritation develops or persists. Thoroughly wash or discard clothing and shoes before reuse. In case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Get medical attention immediately. Wash clothing before reuse. Thoroughly clean contaminated shoes.

Ingestion: If swallowed, have a trained medical professional induce vomiting immediately. Never give anything by mouth to an unconscious person. Induce vomiting as a last measure. Induced vomiting may lead to aspiration of the material into the lungs potentially causing chemical pneumonitis that may be fatal. If swallowed, do not induce vomiting. Get medical attention immediately.

Notes to Doctor: No additional first aid information available

Section 5 – Fire Fighting Measures

Flammability Summary: Extremely Flammable

Extinguishing Media: Use alcohol resistant foam, carbon dioxide, or dry chemical extinguishing agents. Water spray or fog may also be effective for extinguishing if swept across the base of the fire. Water can also be used to absorb heat and keep exposed material from being damaged by fire.

Fire and/or Explosion Hazards: Vapors may be ignited by heat, sparks, flames or other sources of ignition at or above the low flash point giving rise to a Class B fire. Vapors are heavier than air and may travel to a source of ignition and flash back Extremely Flammable. Material will readily ignite at room temperatures.

Empty containers that retain product residue (liquid, solid/sludge, or vapor) can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose container to heat, flame, sparks, static electricity, or other sources of ignition. Any of these actions can potentially cause an explosion that may lead to injury or death.

Container may explode in heat of fire.

Flammable Liquid. Can release vapors that form explosive mixtures at temperatures at or above the flash point.

Combustible Liquid. Can form explosive mixtures at temperatures at or above the flash point. During a fire irritating or toxic gases may be generated by thermal decomposition or combustion.

Fire Fighting Methods and Protection: Do not enter fire area without proper protection including self-contained toxic breathing apparatus and full protective equipment. Fight fire from a safe distance and a

protected location due to the potential of hazardous vapors and decomposition products. Flammable component(s) of this material may be lighter than water and burn while floating on the surface. Use water spray/fog for cooling.

Fight fire from a safe distance and a protected location due to the potential of hazardous vapors and decomposition products.

Hazardous Combustion Products: Carbon dioxide, Carbon monoxide, Hydrocarbons, Carbon dioxide, Carbon monoxide, Hydrogen cyanide, Nitrogen containing gases, Toxic fumes., Toxic gases,

Flash Point (SFCC): -44 deg. C -47 deg. F Lower Flammable/Explosive Limit: 1.1

Section 6 - Accidental Release

Personal Precautions and Equipment: Exposure to the spilled material may be severely irritating or toxic. Follow personal protective equipment recommendations found in Section 8 of this MSDS. Evaporation of volatile substances can lead to the displacement of air creating an environment that can cause asphyxiation.

Methods for Clean-up: Prevent the spread of any spill to minimize harm to human health and the environment if safe to do so. Wear complete and proper personal protective equipment following the recommendation of Section 8 at a minimum. Dike with suitable absorbent material like granulated clay. Gather and store in a sealed container pending a waste disposal evaluation.

Shut off ignition sources; including electrical equipment and flames. Do not allow smoking in the area.

Section 7 - Handling and Storage

Handling Technical Measures and Precautions: Toxic or severely irritating material. Avoid contacting and avoid breathing the material. Use only in a well ventilated area. Follow all protective equipment recommendations provided in Section VIII. Use spark-proof tools and explosion-proof equipment. As with all chemicals, good industrial hygiene practices should be followed when handling this material. Avoid contact with material, avoid breathing dusts or fumes, use only in a well ventilated area. Wash thoroughly after handling.

Do not get in eyes, on skin and clothing.

"Empty" containers retain product residue (liquid and/or vapor) and can be dangerous. Remove contaminated clothing and wash before reuse.

Ground and bond containers when transferring material Keep in air-tight containers- material is hygroscopic. Do not enter storage area unless adequately ventilated.

Do not use pressure to empty container. Follow all MSDS/label precautions even after container is emptied because it may retain product residues.

Special care must be taken to avoid inhalation exposure when using this product at high temperatures (above 300 degrees F) or if product is sanded, ground or cut. Use non-sparking tools when opening or closing containers.

Storage Technical Measures and Conditions: Store in a cool dry ventilated location. Isolate from incompatible materials and conditions. Keep container(s) closed. Keep away from sources of ignition. Store in a tightly closed container. Store in a cool place in original container and protect from sunlight Keep away from heat, sparks, and flame.

Store in a cool dry place Do not store near combustible materials.

Limit quantity of material stored. Keep container closed when not in use.

Section 8 – Exposure Controls/Personal Protection

Engineering Measures: Local exhaust ventilation, process enclosures, or other engineering controls are imperative when handling or using this product to avoid overexposure. Good general room ventilation should be sufficient to control airborne contaminates to safe levels. Engineering controls must be designed to meet the OSHA chemical specific standard in 29 CFR 1910. Explosion proof exhaust ventilation should be used. Use process enclosures, local exhaust ventilation, or other engineering controls to control

airborne levels below recommended exposure limits Facilities storing or using this material should be equipped with an eyewash and safety shower. Ventilation is required to maintain operator exposure below published exposure limits.

Respiratory Protection: Use NIOSH approved respirator for particulate when handling dried material. Respirators should be selected by and used under the direction of a trained health and safety professional following requirements found in OSHA's respirator standard (29 CFR 1910.134) and ANSI's standard for respiratory protection (Z88.2-1992). A written respiratory protection program, including provisions for medical certification, training, fit testing, exposure assessments, maintenance, inspection, cleaning, and convenient, sanitary storage must be implemented. Follow a respiratory protection program that meets 29 CFR 1910.134 and ANSI Z88.2 requirements whenever work place conditions warrant the use of a respirator. Wear a NIOSH approved respirator if any exposure is possible. Wear a NIOSH approved respirator if levels above the exposure limits are possible. Local exhaust preferable. General exhaust acceptable if the exposure to materials in Section 2 is maintained below applicable exposure limits. Refer to OSHA Standards 1910.94

Eye Protection: Wear chemical splash goggles when handling this product. Additionally, wear a face shield when the possibility of splashing of liquid exists. Have an eye wash station available. Wear goggles and a Face shield

Skin Protection: Avoid skin contact by wearing chemically resistant gloves, an apron and other protective equipment depending upon conditions of use. Inspect gloves for chemical break-through and replace at regular intervals. Clean protective equipment regularly. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work. Where contact is likely, wear chemical resistant gloves, a chemical suit, rubber boots, and chemical safety goggles plus a face shield **Gloves:** Required for prolonged or repeated contact. Use solvent resistant gloves. Barrier creams are not substitutes for full physical protection. Refer to safety equipment supplier for effective glove recommendations.

Control Parameters:

Chemical Name Xylene	ACGIH TLV-TWA 100 ppm TWA; 434 mg/m3 TWA	ACGIH STEL 150 ppm STEL; 651 mg/m3 STEL	IDLH Not determined
Nitrocellulose	Not established	Not established	Not determined
Propylene Glycol Methyl Ether	Not established	Not established	Not determined
Ethylene glycol mono-n- butyl ether	25 ppm TWA; 121 mg/m3 TWA	OSHA VPEL 25.000 PPM - TWA (SKIN) ACGIH TLV 25.000 PPM - TWA (SKIN)	Not determined
Acetone	500 ppm TWA; 1188 mg/m3 TWA	750 ppm STEL; 1782 mg/m3 STÈL	2500 ppm (LEL)
Ethylbenzene	100 ppm TWA; 434 mg/m3 TWA	125 ppm STEL; 543 mg/m3 STEL	Not determined
Isopropanol	(400) ppm TWA; (983) mg/m3 TWA	(500) ppm STEL; (1230) mg/m3 STEL	Not determined

Section 9 – Physical and Chemical Properties

Physical State: Paste

Color: Red

Odor: Strong solvent Strong solvent

pH: Not determined

Solubility in Water: Negligible; 0-1% Volatiles, % by weight: 31.69 Volatiles, % by volume: 57.17

Volatile Organic Compounds excluding exempt solvents and water:

3.93 Lb/gallon 472.09 g/l

Volatile Organic Compounds including exempt solvents and water:

3.65 LB/gallon 438.2 g/l **Vapor Pressure:** Not determined

Boiling Point: 34.0000000 deg. C; 93 deg. F

Specific Gravity: 2.75

Weight per Gallon: 13.0473

Section 10 - Stability and Reactivity

Stability: Stable under normal conditions. Stable Stable. However, may decompose if heated Hazardous polymerization will not occur

Conditions to Avoid: Sparks, open flame, other ignition sources, and elevated temperatures.

Contamination Elevated temperatures Contact with air.

Materials to Avoid/Chemical Incompatibility: Strong oxidizing agents, Strong acids, Amines, Strong alkalies, Oxidizing materials,

Hazardous Decomposition Products: Hydrocarbons, Carbon dioxide, Carbon monoxide, Carbon dioxide, Carbon monoxide, Hydrocarbons, Carbon dioxide, Carbon monoxide, Hydrogen cyanide, Nitrogen containing gases, Toxic fumes., Toxic gases,

Section 11 - Toxicological Information

Sensitization (effects of repeated exposure): No data

Component Toxicology Data (NIOSH)

Chemical Name	CAS Number	LD50/LC50
Xylene	1330-20-7	Inhalation LC50 Rat: 5000 ppm/4H; Oral LD50
		Rat : 4300 mg/kg
Nitrocellulose	9004-70-0	Oral LD50 Rat : >5 gm/kg; Oral LD50 Mouse :
		>5 gm/kg
Propylene Glycol Methyl Ether	108-65-6	Oral LD50 Rat: 8532 mg/kg; Dermal LD50
		Rabbit : >5 gm/kg
Ethylene glycol mono-n-butyl ether	111-76-2	Inhalation LC50 Rat: 450 ppm/4H; Inhalation
		LC50 Mouse : 700 ppm/7H
Acetone	67-64-1	Inhalation LC50 Rat: 50100 mg/m3/8H;
		Inhalation LC50 Mouse: 44 gm/m3/4H
Ethylbenzene	100-41-4	Oral LD50 Rat: 3500 mg/kg; Dermal LD50
		Rabbit : 17800 uL/kg
Isopropanol	67-63-0	Inhalation LC50 Rat: 16000 ppm/8H; Oral
		LD50 Rat : 5045 mg/kg

Section 12 - Ecological Information

Overview:

Avoid runoff into ground, storm drains or sewers that lead into waterways. Water runoff may cause environmental damage. There are extensive ecological data available on the various components of these products. An adequate representation of all these data is beyond the scope of this document. Please contact the information phone number found in Section 16.

Section 13 – Disposal Information

Waste Description for Spent Product: Spent or discarded material is a hazardous waste.

Disposal Methods: Dispose of in accordance with federal, state or provincial and local pollution requirements. Clean preferably with a detergent, avoid the use of solvents. This information applies only to the material as manufactured; processing, use or contamination may make this information inappropriate, inaccurate or incomplete. The generator of the waste has the responsibility for proper waste classification, transportation and disposal.

Waste Disposal Codes: D001

Section 14 – Transportation Information

DOT Shipping Information: DOT: Consumer Commodity, ORM-D

IMDG: Coating Solution, 3, UN 1139, II, LTD QTY

Section 15 - Regulatory Information

Note: Materials listed in this section may be present as trace level contaminants to raw materials. Check Section 2 - Hazardous Ingredients to determine if a significant amount is present

OSHA: This product is considered hazardous under the Federal OSHA Hazard Communication Standard.

WHMIS: B2 D1B, D2B,

SARA Title III:

Section 302 Extremely Hazardous Substances: None

Section 311 / 312 Hazard Categories: Immediate health, delayed health, fire hazard.

Section 313 Toxic Chemicals: Xylene and ethylbenzene, Ethylene glycol monobutyl ether

, DIBUTYL PHTHALATE, Ethylene glycol, Toluene, Formaldehyde,

You may be required to submit this MSDS to state and local emergency response agencies (SERC & LEPC) and to your local fire department. Also, you may be affected by other sections of this law, depending on the chemicals and amounts that you inventory at your location. To learn more about your responsibilities, call the EPA Hotline (800) 535-0202

TSCA status: All components in this product are on the TSCA Inventory.

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

Proposition 65: WARNING: This product contains a chemical known to the state of California to cause cancer and birth defects, or other reproductive harm.

Section 16 - Preparation Information

Prepared by Bondo Corporation

Information phone number: (404) 696-2730

<u>Do not handle until the manufacturer's safety precautions have been read and understood. Regulations require that all employees be trained on Material Safety Data Sheets for all products with which they come in contact.</u>

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