



## Material Safety Data Sheet

Date of Preparation: May 31, 2006

### Section 1 - Product Information

**Product Name:** BONDO GLASS CLEANER

**Product Code:** 715

**Emergency Phone:** Chemtrec 800-424-9300

**Company:** Bondo Corporation  
3700 Atlanta Industrial Parkway NW  
Atlanta, GA 30331

**Revision Number:** 9

**Intended Use:** Autobody repair

### Emergency Overview

**Signs of Overexposure:** Irritation of nose, throat, and airways, central nervous system effects (dizziness, drowsiness, weakness, fatigue, headache, unconsciousness), Skin rashes, Intestinal upset (nausea, vomiting, diarrhea),

**Emergency First Aid:** Flush eyes with plenty of water. Avoid rubbing eyes. If irritation develops, seek medical attention. Do not induce vomiting and seek medical attention immediately.

Remove to fresh air. If breathing is difficult, have a trained individual administer oxygen. Get medical attention immediately Wash with soap and water. Get medical attention.

**Handling:** Avoid contacting and avoid breathing the material. Use only in a well ventilated area.

**Material Physical Appearance:** Colorless Aerosol Liquid

**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: 2, Fire: 4, Reactivity: 1

**HMIS:** Health: 2, Fire: 4, Reactivity: 1

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 - Hazardous Ingredients

Chemical Name	%	CAS#	OSHA Exposure Limits
Water	80.0 - 90.0	7732-18-5	No PEL established
Isopropanol	1.0 - 5.0	67-63-0	400 ppm TWA
Ethylene glycol mono-n-butyl ether	1.0 - 5.0	111-76-2	50 ppm TWA prevent or reduce skin absorption
Butane	1.0 - 5.0	106-97-8	No PEL established
Ammonium hydroxide	0.1 - 1.0	1336-21-6	50 ppm (Ammonia)

### Section 3 – Hazards Identification

**Routes of Entry:** Inhalation, Absorption, Ingestion, Skin contact, Eye contact,

**Target Organs Potentially Affected by Exposure:** Kidneys, Liver, Skin, Blood, Eyes, Respiratory Tract, Nervous System,

**Chemical Interactions That Change Toxicity:** None Known,

**Medical Conditions Aggravated by Exposure:** Kidney disease, Liver disease, Skin disease including eczema and sensitization, Eye disease, Respiratory disease including asthma and bronchitis,

#### Immediate (Acute) Health Effects by Route of Exposure

**Inhalation Irritation:** Can cause moderate respiratory irritation, dizziness, weakness, fatigue, nausea and headache. Can cause central nervous system depression. May cause headaches and dizziness. Irritation may be delayed for several hours. Can cause severe respiratory irritation.

**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:** Corrosive to skin tissue. Can cause chemical burns. Can cause moderate injury (reddening and swelling).

**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.

**Eye contact:** Corrosive to eye tissue. Can cause severe irritation, tearing, and burns that can quickly lead to permanent injury including blindness. Lachrymator.

**Ingestion Irritation:** Corrosive to tissue. Can cause severe and permanent damage to mouth, throat, stomach. Aspiration may lead to lung damage.

**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. 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.

**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 be corrosive to the respiratory tract causing severe irritation and tissue damage. Highly toxic! Can cause systemic damage upon prolonged and/or repeated exposure (see "Target Organs").

**Skin Contact:** Upon prolonged or repeated contact, corrosive to skin tissue. Can cause chemical burns.

**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. This corrosive material can cause immediate and permanent eye damage. 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.

**Skin Contact:** Wash with soap and water under a drench shower. Remove contaminated clothing, launder immediately, and discard contaminated leather goods. Get medical attention immediately. 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:** Corrosive. Do not induce vomiting! Drink one glass of water followed by milk if available. Seek medical attention immediately and give the medical care provider this MSDS. 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. Combustible Liquid. Can form explosive mixtures at temperatures at or above the flash point.

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.

During a fire irritating or toxic gases may be generated by thermal decomposition or combustion. Empty containers retain product residue (liquid and/or vapor). Vapor can ignite potentially causing an explosion.

**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, Toxic fumes., Toxic gases, Carbon monoxide, Ammonia, Nitrogen containing gases,

**Flash Point (SFCC):** -60 deg. C -76 deg. F

**Lower Flammable/Explosive Limit:** Not determined

## Section 6 - Accidental Release

**Personal Precautions and Equipment:** Exposure to the spilled material may be irritating or harmful. Follow personal protective equipment recommendations found in Section 8 of this MSDS. Additional precautions may be necessary based on special circumstances created by the spill including; the material spilled, the quantity of the spill, the area in which the spill occurred. Also consider the expertise of employees in the area responding to the spill.

**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.

## Section 7 – Handling and Storage

**Handling Technical Measures and Precautions:** Harmful or irritating material. Avoid contacting and avoid breathing the material. Use only in a well ventilated area. Avoid contact with material, avoid breathing dusts or fumes, use only in a well ventilated area. Do not get in eyes, on skin and clothing. Do not enter storage area unless adequately ventilated.

Use spark-proof tools and explosion-proof equipment. Do not use pressure to empty container. Follow all MSDS/label precautions even after container is emptied because it may retain product residues.

"Empty" containers retain product residue (liquid and/or vapor) and can be dangerous. 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. As with all chemicals, good industrial hygiene practices should be followed when handling this material. Wash thoroughly after handling.

Remove contaminated clothing and wash before reuse.

**Storage Technical Measures and Conditions:** Store in a cool dry ventilated location. Isolate from incompatible materials and conditions. Keep container(s) closed. Store in a tightly closed container. Keep away from heat, sparks, and flame.

Do not store near combustible materials.

Limit quantity of material stored. Keep away from sources of ignition. Keep away from food and drinking water. Store in a cool place in original container and protect from sunlight

## Section 8 – Exposure Controls/Personal Protection

**Engineering Measures:** Local exhaust ventilation, process enclosures, or other engineering controls are necessary when handling or using this product to avoid overexposure. Engineering controls must be designed to meet the OSHA chemical specific standard in 29 CFR 1910. Explosion proof exhaust ventilation should be used. Engineering controls must be designed to control vapor concentrations to below levels published in 29 CFR 1910.1000. Facilities storing or using this material should be equipped with an eyewash and safety shower.

**Respiratory Protection:** Respiratory protection must be used when handling this product. Use respirators only if ventilation cannot be used to eliminate symptoms or reduce the exposure to below acceptable levels. A supplied air type respirator may be required. Wear a NIOSH approved respirator if any exposure is possible. 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. 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 A supplied air type respiratory will be required.

**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:**

<b>Chemical Name</b>	<b>ACGIH TLV-TWA</b>	<b>ACGIH STEL</b>	<b>IDLH</b>
Water	Not established	Not established	Not determined
Isopropanol	200 ppm TWA;	400 ppm STEL	2000 ppm
Ethylene glycol mono-n-butyl ether	20 ppm TWA	Not established	700 ppm
Butane	1,000 ppm /Aliphatic hydrocarbon gases, Alkane [C1-C4]	Not established	Not determined
Ammonium hydroxide	Not established	Not established	300 ppm (Ammonia)

**Section 9 – Physical and Chemical Properties**

**Physical State:** Aerosol Liquid

**Color:** Colorless

**Odor:** None Solvent

**pH:** Not determined

**Solubility in Water:** Not determined

**Volatiles, % by weight:** 99.00

**Volatiles, % by volume:** 98.94

**Volatile Organic Compounds excluding exempt solvents and water:**

5.61 Lb/gallon 672.71 g/l

**Volatile Organic Compounds including exempt solvents and water:**

0.91 LB/gallon 109.24 g/l

**Vapor Density:** 4.1000000

**Vapor Pressure:** Not determined

**Boiling Point:** Not determined deg. C; Not determined deg. F

**Specific Gravity:** 0.785

**Weight per Gallon:** 8.0038

**Section 10 – Stability and Reactivity**

**Stability:** Stable under normal conditions. Hazardous polymerization will not occur

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

**Contamination**

**Materials to Avoid/Chemical Incompatibility:** Oxidizing materials, Strong alkalis, Strong oxidizing agents, Metals,

**Hazardous Decomposition Products:** Carbon dioxide, Carbon monoxide, Toxic fumes., Toxic gases, Carbon monoxide, Ammonia, Nitrogen containing gases,

**Section 11 - Toxicological Information**

**Sensitization (effects of repeated exposure):** No data

## Component Toxicology Data (NIOSH)

Chemical Name	CAS Number	LD50/LC50
Water	7732-18-5	No Data Available
Isopropanol	67-63-0	Inhalation LC50 Rat : 16000 ppm/8H Oral LD50 Rat : 5045 mg/kg Oral LD50 Mouse: 3600 mg/kg
Ethylene glycol mono-n-butyl ether	111-76-2	Inhalation LC50 Rat : 450 ppm/4H; Inhalation LC50 Mouse : 700 ppm/7H; Oral LD50 Mouse: 1167 mg/kg; Skin LD50 Rabbit: 220mg/kg
Butane	106-97-8	Inhalation LC 50 Rat: 658 g/cu m/4 hr Inhalation LC 50 Mouse: 680 g/cu m/4 hr
Ammonium hydroxide	1336-21-6	Oral LD50 Rat : 350 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: Aerosols, 2, UN 1950, 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:** A

**SARA Title III:**

**Section 302 Extremely Hazardous Substances:** None

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

**Section 313 Toxic Chemicals:** Ethylene glycol monobutyl ether

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:** This product DOES NOT contain a chemical regulated under California Proposition 65.

#### **Section 16 - Preparation Information**

Prepared by Bondo Corporation

Information phone number: (404) 696-2730

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.

While Bondo Corporation believes that the data contained herein are accurate and derived from qualified sources, the data are not to be taken as a warranty or representation for which Bondo Corporation assumes legal responsibility. They are offered solely for your consideration, investigation and verification. Any use of these data and information must be determined by the user to be in accordance with applicable federal, state or provincial and local laws and regulations.