

MSDS Name Manufacturer Name **Metal Bonding Adhesive**

Saint-Gobain Abrasives, Inc.

06420

Kit MSDS Revision Date

Stock No.

07/01/2013

Components			
	Metal Bonding Adhesive (Part 1)		
	Metal Bonding Adhesive (Part 2)		
Saint-Gobain Abrasives, Inc. Product Code: 06420			

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name: Metal Bonding Adhesive (Part 1)

Product Code: 06420A MSDS Manufacturer 06420A Number:

Synonyms: Metal Panel/Weld Bonding Adhesive (75 minutes)

Saint-Gobain Abrasives, Inc. Manufacturer Name: Address: 1 New Bond Street Worcester, MA 01615

General Phone Number: 508-795-5000 Chemtrec: 1 800 424-9300

Emergency Phone

Website: www.sgabrasives.com MSDS Creation Date: 10/28/2010

MSDS Revision Date: 07/01/2013





Chronic Health **Effects**

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS#	Ingredient Percent
Methacrylate phosphate ester	Proprietary	5 - 10 by weight
Methacrylic acid	79-41-4	5 - 10 by weight
Methacrylate Blend	Proprietary	5 - 10 by weight
Methyl Methacrylate Monomer	80-62-6	30 - 60 by weight

SECTION 3: HAZARDS IDENTIFICATION

Route of Exposure:

Inhalation:

Emergency Overview: WARNING! Flammable. Harmful. Skin Sensitizer. Irritant.

Eves. Skin. Inhalation. Ingestion.

Potential Health Effects:

Can cause moderate irritation, burning sensation, tearing, redness, and Eye:

swelling. Overexposure may cause lacrimation, conjunctivitis, corneal damage and permanent injury.

Can cause skin irritation; itching, redness, rashes, hives, burning, and Skin: swelling. Allergic reactions are possible.
May cause skin sensitization, an allergic reaction, which becomes evident

on reexposure to this material.

Respiratory tract irritant. High concentration may cause dizziness, headache, and anesthetic effects. May cause respiratory sensitization with asthma-like symptoms in susceptible individuals.

Ingestion:

Causes irritation, a burning sensation of the mouth, throat and

gastrointestinal tract and abdominal pain.

Prolonged skin contact may lead to burning associated with severe reddening, swelling, and possible tissue destruction. Chronic Health Effects:

Signs/Symptoms: Overexposure can cause headaches, dizziness, nausea, and vomiting.

Eyes. Skin. Respiratory system. Digestive system. Central nervous system. Liver. Kidney. Olfactory Function. Target Organs:

Individuals with pre-existing skin disorders, asthma, allergies or known sensitization may be more susceptible to the effects of this product. Aggravation of Pre-Existing Conditions:

SECTION 4: FIRST AID MEASURES

Eye Contact:

Immediately flush eyes with plenty of water for at least 15 to 20 minutes. Ensure adequate flushing of the eyes by separating the eyelids with fingers. Get immediate medical attention.

Immediately wash skin with plenty of soap and water for 15 to 20 Skin Contact:

minutes, while removing contaminated clothing and shoes. Get medical attention if irritation develops or persists.

If inhaled, remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Seek immediate medical attention. Inhalation:

If swallowed, do NOT induce vomiting. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious Ingestion:

person.

Other First Aid: Due to possible aspiration into the lungs, DO NOT induce vomiting if ingested. Provide a glass of water to dilute the material in the stomach.

If vomiting occurs naturally, have the person lean forward to reduce the risk of aspiration.

SECTION 5: FIRE FIGHTING MEASURES

Flammable Properties: Flammable. Fine mists explosive below flash point.

Flash Point: 60°F (15°C)

Flash Point Method: Setaflash Closed Cup Auto Ignition Temperature: Not determined.

Lower Flammable/Explosive 1.6% Limit:

Upper Flammable/Explosive

Limit: Fire Fighting Instructions:

Evacuate area of unprotected personnel. Use cold water spray to cool fire exposed containers to minimize risk of rupture. Do not enter confined fire space without full protective gear. If possible, contain fire run-off

8.8%

Extinguishing Media: Use foam, water fog, carbon dioxide (CO2) or dry chemical when fighting

fires involving this material.

As in any fire, wear Self-Contained Breathing Apparatus (SCBA), MSHA/NIOSH (approved or equivalent) and full protective gear. Protective Equipment:

Sealed containers at elevated temperatures may rupture explosively and Unusual Fire Hazards:

spread fire due to polymerization.

Universal Fire And Explosion

Flammable liquid or vapor. Keep containers tightly closed. Isolate from heat, electrical equipment, sparks, open flame and other sources of ignition. Closed containers may rupture when exposed to extreme heat. Use water spray to keep fire-exposed containers cool. During a fire, irritating and/or toxic gases and particulate may be generated by thermal

decomposition or combustion.

NFPA Ratings:

NFPA Flammability: 3 NFPA Health: 2 NFPA Reactivity: 1

SECTION 6: ACCIDENTAL RELEASE MEASURES

Spill Cleanup Measures:

Absorb spill with inert material (e,g., dry sand or earth), then place in a chemical waste container. Provide ventilation. Collect spill with a nonsparking tool. Place into a suitable container for disposal. Clean up spills immediately observing precautions in the protective equipment section. After removal, flush spill area with soap and water to remove trace

Flammable, eliminate ignition sources. Vapors can form an ignitable mixture with air. Vapors can flow along surfaces to distant ignition sources and flash back. Ventilate area. Use proper personal protective equipment

as listed in section 8.

Personnel Precautions: Avoid breathing vapors. Notify appropriate authorities if necessary. Avoid contact. Evacuate area and keep unnecessary and unprotected personnel

from entering the spill area.

Environmental Precautions: Avoid runoff into storm sewers, ditches, and waterways.

Other Precautions: Pump or shovel to storage/salvage vessels. Add inhibitor to prevent

polymerization

SECTION 7: HANDLING and STORAGE

Handling: Use with adequate ventilation. Avoid breathing vapor, aerosol or mist. Material will accumulate static charges which may cause an electrical spark

(ignition source). Use proper grounding procedures. Do not reuse

containers without proper cleaning or reconditioning

Store in a cool, dry, well ventilated area away from sources of heat, combustible materials, direct sunlight, and incompatible substances. Keep container tightly closed when not in use. Storage:

Provide appropriate ventilation/respiratory protection against Special Handling Procedures:

decomposition products (see Section 10) during welding/flame cutting operations and to protect against dust during sanding/grinding of cured product. Hazardous liquid or vapor residue may remain in emptied container. Do not reuse, heat, burn, pressurize, cut, weld, braze, solder, drill, grind, expose to sparks, flame, or ignition sources of empty containers without proper commercial cleaning or reconditioning.

Hygiene Practices: Wash thoroughly after handling.

SECTION 8: EXPOSURE CONTROLS, PERSONAL PROTECTION - EXPOSURE GUIDELINES

Engineering Controls: Use appropriate engineering control such as process enclosures, local

exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Good general ventilation should be sufficient to control airborne levels. Where such systems are not effective wear suitable personal protective equipment, which performs satisfactorily and meets OSHA or other recognized standards. Consult with local procedures for selection, training, inspection and maintenance of the personal protective equipment.

Eve/Face Protection:

Wear appropriate protective glasses or splash goggles as described by 29

CFR 1910.133, OSHA eye and face protection regulation, or the European standard EN 166.

Skin Protection Description:

Use neoprene, nitrile, or rubber gloves and other protective apparel to prevent skin contact. Consult manufacturer's data for permeability data.

Respiratory Protection: A NIOSH approved air-purifying respirator with an organic vapor cartridge

or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate

Facilities storing or utilizing this material should be equipped with an eyewash and a deluge shower safety station. Other Protective:

EXPOSURE GUIDELINES

Methacrylic acid:

Guideline ACGIH: 20 ppm

TLV-TWA: 20 ppm

Methyl Methacrylate Monomer:

Guideline ACGIH: 50 ppm

Sensitizer: Sen TLV-STEL: 100 ppm TLV-TWA: 50 ppm

Guideline OSHA: 100 ppm

PEL-TWA: 100 ppm

Only established PEL and TLV values for the ingredients are listed. Notes:

SECTION 9: PHYSICAL and CHEMICAL PROPERTIES

Physical State Appearance: Paste. Color: Off-white. Odor:

Boiling Point: 140 - 322°F (60 - 161°C) Melting Point: Not determined. Density: 8.92 lb/gal Solubility: Insoluble in water.

Vapor Density: > 1 (air = 1)Vapor Pressure: Not determined.

Percent Volatile: By Weight: 0.00% By Volume: 0.00%

Evaporation Rate: Slower than n-butyl acetate.

pH: Not determined. Flash Point: 60°F (15°C) Flash Point Method: Setaflash Closed Cup Auto Ignition Temperature: Not determined. VOC Content: 0 lb/gal, 0 g/L

SECTION 10: STABILITY and REACTIVITY

Chemical Stability: Product is stable under normal storage conditions.

Hazardous Polymerization: Hazardous polymerization will not occur under normal conditions. Storage above 100 degrees F and below 32 degrees F. Exposure to Conditions to Avoid:

sunlight, ultraviolet light irradiation. Avoid dropping or puncture of

Incompatible Materials:

Inorganic acids, organic acids, caustics, oxidizing agents, amines,

Special Decomposition Products:

Carbon monoxide, carbon dioxide, oxides of nitrogen.

SECTION 11: TOXICOLOGICAL INFORMATION

Methacrylic acid:

OZ2975000 RTECS Number:

Unreported - Rat LD50: 1600 mg/kg [Details of toxic effects not reported other than lethal dose value]
Oral - Mouse LD50: 1250 mg/kg [Details of toxic effects not reported other than lethal dose value] Skin

Intraperitoneal. - Mouse LD50: 48 mg/kg [Details of toxic effects not reported other than lethal dose value]
Unreported - Mouse LD50: 1250 mg/kg [Details of toxic effects not reported other than lethal dose value]
Oral - Rabbit LD50: 1200 mg/kg [Details of toxic effects not reported

other than lethal dose value]
Administration onto the skin - Rabbit LD50: 500 mg/kg [Details of toxic

effects not reported other than lethal dose value

Administration onto the skin - Guinea pig LD50: 1 gm/kg [Details of toxic effects not reported other than lethal dose value]

Oral - Rat LD50: 1060 mg/kg [Details of toxic effects not reported other than lethal dose value]

Inaestion:

Oral - Mouse LD50: 1250 mg/kg [Details of toxic effects not reported other than lethal dose value]
Oral - Rat LD50: 1060 mg/kg [Details of toxic effects not reported other

than lethal dose value]

Methyl Methacrylate Monomer

RTECS Number:

OZ5075000 Eye:

Eye - Rabbit Standard Draize test.: 150 mg Skin: Intraperitoneal. - Guinea pig LD50: 1890 mg/kg [Behavioral -

Intraperitoneal. - Guinea pig LDSU: 1890 mg/kg [Benavioral - Somnolence (general depressed activity)]
Subcutaneous - Guinea pig LDSO: 5954 mg/kg [Behavioral - Somnolence (general depressed activity)]
Oral - Rat LDSO: 7872 mg/kg [Behavioral - Muscle weakness Behavioral - Coma Lungs, Thorax, or Respiration - Respiratory depression]
Intraperitoneal. - Rat LDSO: 1328 mg/kg [Details of toxic effects not reported other than lethal dose value]

Subcutaneous - Rat LD50: 7088 mg/kg [Behavioral - Somnolence (general depressed activity)]

Oral - Mouse LD50: 3625 mg/kg [Details of toxic effects not reported other than lethal dose value]

Intraperitoneal. - Mouse LD50: 945 mg/kg [Behavioral - Somnolence (general depressed activity)]
Subcutaneous - Mouse LD50: 5954 mg/kg [Behavioral - Somnolence

(general depressed activity)]

Oral - Rabbit LD50: 8700 mg/kg [Details of toxic effects not reported

other than lethal dose value]
Administration onto the skin - Rabbit LD50: >5 gm/kg [Skin and

Administration onto the skin - Rabbit LD30. 25 gin/kg [skin and Appendages - Dermatitis, other (After systemic exposure)]
Oral - Guinea pig LD50: 5954 mg/kg [Behavioral - Somnolence (general depressed activity) Behavioral - Ataxia Gastrointestinal - Changes in structure or function of salivary glands]
Administration onto the skin - Rabbit Open irritation test: 10 gm

Inhalation - Rat LC50: 78000 mg/m3/4H [Details of toxic effects not reported other than lethal dose value]
Inhalation - Mouse LC50: 18500 mg/m3/2H [Details of toxic effects not reported other than lethal dose value]

Ingestion:

Oral - Rat LD50: 7872 mg/kg [Behavioral - Muscle weakness Behavioral - Coma Lungs, Thorax, or Respiration - Respiratory depression]
Oral - Mouse LD50: 3625 mg/kg [Details of toxic effects not reported other than lethal dose value]

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity: No ecotoxicity data was found for the product. Environmental Fate: No environmental information found for this product.

SECTION 13: DISPOSAL CONSIDERATIONS

Methacrylate Blend:

Inhalation:

Waste Disposal: Disposal should be done in accordance with Federal (40CFR Part 261),

state and local environmental control regulations. If waste is determined to be hazardous, use licensed hazardous waste transporter and disposal

facility.

Waste Disposal: Consult with the US EPA Guidelines listed in 40 CFR Part 261.3 for the classifications of hazardous waste prior to disposal. Furthermore, consult

with your state and local waste requirements or guidelines, if applicable, to ensure compliance. Arrange disposal in accordance to the EPA and/or

state and local guidelines.

RCRA Number: D001

DANGER! Rags, steel wool and waste soaked with this product may Important Disposal Information:

spontaneously catch fire if improperly discarded or stored. To avoid a spontaneous combustion fire, immediately after use, place rags, steel wool or waste in a sealed, water-filled, metal container.

SECTION 14: TRANSPORT INFORMATION

DOT Shipping Name: Adhesives DOT UN Number: 1133 DOT Hazard Class: 3 DOT Packing Group: ΙI

DOT Exemption: ORM-D Small quantity exemption

SECTION 15: REGULATORY INFORMATION

Methacrylic acid:

TSCA Inventory Status: Listed

Massachusetts: Listed: Massachusetts Oil and Hazardous List

Pennsylvania: Canada DSL: Listed 607-088-00-5 EC Number:

Methyl Methacrylate Monomer:

TSCA Inventory Status: Listed

SARA: EPCRA - 40 CFR Part 372 - (SARA Title III) Section 313 Listed Chemical.

Listed: NJ Hazardous List; Substance Number: 1277 New Jersey: Massachusetts: Listed: Massachusetts Oil and Hazardous List

Pennsylvania: Listed Canada DSL: Listed 607-035-00-6 EC Number:

WHMIS Hazard Class(es): B2; D2B Canada WHMIS:

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by the Controlled Products Regulations.

SECTION 16: ADDITIONAL INFORMATION

HMIS Fire Hazard: HMIS Health Hazard: 2 HMIS Reactivity: 1 HMIS Personal Protection:

MSDS Creation Date: 10/28/2010 MSDS Revision Date: 07/01/2013 MSDS Author: Actio Corporation

Copyrightı̈i $\stackrel{.}{\iota}$ $^{1/2}$ 1996-2011 Actio Software Corporation. All Rights Reserved.

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name: Metal Bonding Adhesive (Part 2)

Product Code: 06420B MSDS Manufacturer 06420B Number:

Metal Panel/Weld Bonding Adhesive (75 minutes) Synonyms:

Manufacturer Name: Saint-Gobain Abrasives, Inc. 1 New Bond Street Address: Worcester, MA 01615

General Phone Number: 508-795-5000 Emergency Phone Number: 508-795-5000

Website: www.Nortonabrasives.com

MSDS Creation Date: 10/28/2010 MSDS Revision Date: 07/01/2013



HMIS		
2		
1		
1		
1		

Chronic Health Effects

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS#	Ingredient Percent
Dibutyl phthalate	84-74-2	5 - 10 by weight
Benzoyl peroxide	94-36-0	5 - 10 by weight
Epoxy resin	Proprietary	30 - 60 by weight

SECTION 3: HAZARDS IDENTIFICATION

Emergency Overview: WARNING! Potential Sensitizer Irritant. Route of Exposure: Eyes. Skin. Inhalation. Ingestion.

Potential Health Effects: Eve:

Inhalation:

Can cause moderate irritation, burning sensation, tearing, redness, and swelling. Overexposure may cause lacrimation, conjunctivitis, comea

damage and permanent injury.

Can cause skin irritation; itching, redness, rashes, hives, burning, and swelling. Allergic reactions are possible. Skin:

May cause skin sensitization, an allergic reaction, which becomes evident on reexposure to this material.

Respiratory tract irritant. High concentration may cause dizziness

headache, and anesthetic effects. May cause respiratory sensitization with asthma-like symptoms in susceptible individuals.

Inaestion:

Causes irritation, a burning sensation of the mouth, throat and gastrointestinal tract and abdominal pain.

Chronic Health Effects: Prolonged skin contact may lead to burning associated with severe reddening, swelling, and possible tissue destruction.

Overexposure can cause headaches, dizziness, nausea, and vomiting.

Signs/Symptoms: Target Organs: Eyes. Skin. Respiratory system. Digestive system.

Aggravation of Pre-Existing Conditions: Individuals with pre-existing skin disorders, asthma, allergies or known sensitization may be more susceptible to the effects of this product.

SECTION 4: FIRST AID MEASURES

Immediately flush eyes with plenty of water for at least 15 to 20 minutes. Ensure adequate flushing of the eyes by separating the eyelids with fingers. Get immediate medical attention. Eye Contact:

Immediately wash skin with plenty of soap and water for 15 to 20 Skin Contact:

minutes, while removing contaminated clothing and shoes. Get medical attention if irritation develops or persists.

If inhaled, remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Seek immediate medical attention. Inhalation:

If swallowed, do NOT induce vomiting. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious

person.

SECTION 5: FIRE FIGHTING MEASURES

Flash Point: 201°F (93.3°C) Flash Point Method: Setaflash Closed Cup Auto Ignition Temperature: Not determined. Lower Flammable/Explosive Not determined. Limit:

Ingestion:

Upper Flammable/Explosive

Not determined.

Fire Fighting Instructions:

Evacuate area of unprotected personnel. Use cold water spray to cool fire exposed containers to minimize risk of rupture. Do not enter confined fire space without full protective gear. If possible, contain fire run-off

Extinguishing Media: Use foam, water fog, carbon dioxide (CO2) or dry chemical when fighting

fires involving this material.

Protective Equipment:

As in any fire, wear Self-Contained Breathing Apparatus (SCBA), MSHA/NIOSH (approved or equivalent) and full protective gear. During a fire, irritating and/or toxic gases and particulate may be

generated by thermal decomposition or combustion.

Universal Fire And Explosion

Unusual Fire Hazards:

Personnel Precautions:

Sealed containers at elevated temperatures may rupture explosively and spread fire due to polymerization.

Hazards:

NFPA Ratings: NFPA Flammability: 1 NFPA Health: NFPA Reactivity: 1

SECTION 6: ACCIDENTAL RELEASE MEASURES

Spill Cleanup Measures: Absorb spill with inert material (e,g., dry sand or earth), then place in a

chemical waste container. Provide ventilation. Clean up spills immediately observing precautions in the protective equipment section. After removal,

flush spill area with soap and water to remove trace residue. Avoid personal contact and breathing vapors or mists. Ventilate area. Use proper personal protective equipment as listed in section 8.

Avoid breathing vapors. Notify appropriate authorities, if necessary. Avoid contact. Evacuate area and keep unnecessary and unprotected personnel

from entering the spill area.

Environmental Precautions: Avoid runoff into storm sewers, ditches, and waterways.

Other Precautions: Pump or shovel to storage/salvage vessels.

SECTION 7: HANDLING and STORAGE

Handling: Use with adequate ventilation. Avoid breathing vapor, aerosol or mist. Storage:

Store in a cool, dry, well ventilated area away from sources of heat and

Use appropriate engineering control such as process enclosures, local

incompatible materials. Keep container tightly closed when not in use. Do not store in temperatures above 100 $^{\rm oF}\!.$

Hygiene Practices: Wash thoroughly after handling.

SECTION 8: EXPOSURE CONTROLS, PERSONAL PROTECTION - EXPOSURE GUIDELINES

exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Good general ventilation should be sufficient to control airborne levels. Where such systems are not effective wear suitable personal protective equipment, which performs satisfactorily and meets OSHA or other recognized standards. Consult with local procedures for selection, training, inspection and maintenance

of the personal protective equipment.

Wear appropriate protective glasses or splash goggles as described by 29 CFR 1910.133, OSHA eye and face protection regulation, or the European $\,$ Eye/Face Protection:

standard EN 166.

Use neoprene, nitrile, or rubber gloves and other protective apparel to prevent skin contact. Consult manufacturer's data for permeability data. Skin Protection Description:

A NIOSH approved air-purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where Respiratory Protection: airborne concentrations are expected to exceed exposure limits.

Metal Bonding Adhesive Product Code: 06420

Revision:: 07/01/2013

Engineering Controls:

Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate

protection.

Facilities storing or utilizing this material should be equipped with an eyewash and a deluge shower safety station. Other Protective:

EXPOSURE GUIDELINES

Dibutyl phthalate: Guideline ACGIH: ACGIH TLV-TWA 5 mg/m3 Guideline OSHA: OSHA PEL-TWA 5 mg/m3

Benzoyl peroxide:

Guideline ACGIH: ACGIH TLV-TWA 5 mg/m3 Guideline OSHA: OSHA PEL-TWA 5 mg/m3

Notes : Only established PEL and TLV values for the ingredients are listed.

SECTION 9: PHYSICAL and CHEMICAL PROPERTIES

Physical State Appearance: Paste. Black. Color: Odor: Mild

Boiling Point: 642°F (339°C) Not determined. Melting Point: 15.07 lb/gal Density: Solubility: Insoluble in water. Vapor Density: >1 (air = 1) Vapor Pressure: Not determined.

Percent Volatile: By Weight: 0.00% By Volume: 0.00%

Evaporation Rate: Not applicable. Not determined. pH: Flash Point: 201°F (93.3°C) Flash Point Method: Setaflash Closed Cup Auto Ignition Temperature: Not determined. VOC Content: 0 lb/gal, 0 g/L Notes: Not determined.

SECTION 10: STABILITY and REACTIVITY

Chemical Stability: Product is stable under normal storage conditions.

Hazardous Polymerization: Will not occur under normal conditions.

Conditions to Avoid: High temperatures.

Incompatible Materials: Strong acids, bases and strong oxidizers. Special Decomposition Carbon monoxide, carbon dioxide. Products:

SECTION 11: TOXICOLOGICAL INFORMATION

Dibutyl phthalate:

Skin - Rabbit LD50: >20 mL/kg - [Details of toxic effects not reported other than lethal dose value](RTECS)
Skin - Rat LDLo: 6 gm/kg - [Details of toxic effects not reported other than lethal dose value](RTECS) Skin:

Inhalation:

Inhalation - Rat LC50: 4250 mg/m3 - [Details of toxic effects not reported other than lethal dose value] (RTECS)
Inhalation - Mouse LC50: 25 gm/m3/2H - [Details of toxic effects not reported other than lethal dose value] (RTECS)

 $\dot{\rm C}$ Oral - Rat LD50: 7499 mg/kg - [Details of toxic effects not reported other Ingestion: Oral - Not Enects not reported off than lethal dose value] (RTECS) Oral - Mouse LD50: 3474 mg/kg - [Details of toxic effects not reported other than lethal dose value] (RTECS)

Benzoyl peroxide:

Eye - Rabbit Standard Draize test. : 500 mg/24H - [mild](RTECS) Eve: Skin - Human Standard Draize test. : 5%/8W-I - [severe](RTECS) Skin - Mammal species unspecified LD50: >1 gm/kg - [Details of toxic effects not reported other than lethal dose value](RTECS) Skin:

Oral - Rat LD50: 6400 mg/kg - [Details of toxic effects not reported other than lethal dose value] (RTECS)
Oral - Mouse LD50: 1200 mg/kg - [Details of toxic effects not reported other than lethal dose value] (RTECS) Ingestion:

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity: No ecotoxicity data was found for the product. No environmental information found for this product. Environmental Fate:

Metal Bonding Adhesive Product Code: 06420 Revision:: 07/01/2013

Page 7 of 8

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal: Consult with the US EPA Guidelines listed in 40 CFR Part 261.3 for the

classifications of hazardous waste prior to disposal. Furthermore, consult with your state and local waste requirements or guidelines, if applicable, to ensure compliance. Arrange disposal in accordance to the EPA and/or

state and local guidelines.

SECTION 14: TRANSPORT INFORMATION

DOT Shipping Name: Non regulated. DOT UN Number: Non regulated.

DOT Exemption: Not regulated in non bulk packages per CFR 49 173.150 (f) (2)

SECTION 15: REGULATORY INFORMATION

Dibutyl phthalate:

TSCA Inventory Status:

SARA: EPCRA - 40 CFR Part 372 - (SARA Title III) Section 313 Listed Chemical.

Listed in the State of Massachusetts Hazardous Substance List. State Regulations:

Listed in the New Jersey State Right to Know List.

Listed in the Pennsylvania State Hazardous Substances List.

New Jersey: Listed: NJ Hazardous List; Substance Number: 0773

Massachusetts: Listed: Massachusetts Oil and Hazardous List

Pennsylvania: Listed

Benzoyl peroxide:

TSCA Inventory Status:

SARA: EPCRA - 40 CFR Part 372 - (SARA Title III) Section 313 Listed Chemical.

Listed in the State of Massachusetts Hazardous Substance List. State Regulations:

Listed in the New Jersey State Right to Know List. Listed in the Pennsylvania State Hazardous Substances List.

New Jersey: Listed: NJ Hazardous List; Substance Number: 0215

Massachusetts: Listed: Massachusetts Oil and Hazardous List Pennsylvania:

Listed

EC Number: 617-008-00-0

Canada WHMIS: WHMIS Hazard Class(es): D2B

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by the Controlled Products Regulations.

SECTION 16: ADDITIONAL INFORMATION

HMIS Fire Hazard: HMIS Health Hazard: 2 HMIS Reactivity: 1 HMIS Personal Protection:

MSDS Creation Date: 10/28/2010 MSDS Revision Date: 07/01/2013 MSDS Author: Actio Corporation

Copyrightı̈i $\stackrel{.}{\iota}$ $^{1/2}$ 1996-2011 Actio Software Corporation. All Rights Reserved.