

**MATERIAL  
SAFETY  
DATA SHEET**

**PARKELL, INC.  
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FARMINGDALE, NY 11735  
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**24-HOUR  
EMERGENCY  
TELEPHONE  
1-800-535-5053**

**SECTION I - PRODUCT IDENTIFICATION**

**PRODUCT NAME:** C&B METABOND ENAMEL ETCHANT **STOCK NO:** S382  
DOT HAZARD LABEL: Corrosive **UN NUMBER:** UN1805  
PROPER SHIPPING NAME: Phosphoric Acid Solution **DATE PREPARED:** 06/25/04  
NFPA CODES: HEALTH - 2 FLAMMABILITY - 2 **REACTIVITY - 0**

**SECTION II - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION**

<u>HAZARDOUS COMPONENTS</u>	<u>CAS NUMBER</u>	<u>PEL</u>	<u>TLV</u>	<u>%</u>
Phosphoric acid	7664-38-2	1 mg/m3	1 mg/m3	
Polyvinyl alcohol	9002-89-5	NE	NE	
Water	7732-18-5	NE	NE	

**SECTION III - PHYSICAL & CHEMICAL CHARACTERISTICS**

**BOILING POINT:** 135° C **SPECIFIC GRAVITY (H<sub>2</sub>O = 1):** NE  
**VAPOR PRESSURE:** NE **PERCENT VOLATILES:** NE  
**VAPOR DENSITY (Air = 1):** NE **EVAPORATION RATE (Butyl Acetate = 1):** NE  
**APPEARANCE AND ODOR:** Orange-red, syrup-like liquid.

\* No adhesive (including C&B-Metabond) forms significant bonds to aluminum or zirconia based crowns.

#### **SECTION IV - FIRE AND EXPLOSION HAZARD DATA**

FLASH POINT Non-flammable FLAMMABLE LIMIT UPPER: NE LOWER: NE  
(TCC): (air, % by vol.)

EXTINGUISHER MEDIA: Alcohol foam, carbon dioxide or dry chemical.

SPECIAL FIRE FIGHTING PROCEDURES: During emergency conditions, overexposure to thermal decomposition products may cause health hazard. Self-contained breathing apparatus should be worn.

UNUSUAL FIRE & EXPLOSION HAZARDS: Phosphoric acid does not burn; however, it can react with metal to liberate hydrogen gas that can readily form flammable or explosive mixture with air. When exposed to flame, emits toxic fumes and gases.

#### **SECTION V - REACTIVITY DATA (PHYSICAL HAZARDS)**

STABILITY:  STABLE  UNSTABLE

CONDITIONS TO AVOID: Storage in metal containers, in direct sunlight, or near sources of heat.

INCOMPATIBILITY (Materials to avoid): Reacts vigorously with carbonates, alkalis and powdered metals to form phosphate salts and is corrosive (especially at temp. 85° C) to common metals. It liberates hydrogen gas when reacting with metals.

HAZARDOUS DECOMPOSITION PRODUCTS: NE

HAZARDOUS POLYMERIZATION:  MAY OCCUR  WILL NOT OCCUR

CONDITIONS TO AVOID:

#### **SECTION VI - HEALTH HAZARD DATA**

PRIMARY ROUTE(S) OF ENTRY:  EYES  SKIN  INHALATION  INGESTION

HEALTH HAZARDS (Acute & Chronic): Inhalation is not a hazard unless misted or heated at high temperature. Mist inhalation may cause coughing, sneezing, salivation and difficult breathing. Severe exposures may lead to chemical pneumonitis. As a strong mineral acid, it is corrosive and can cause irritation or severe burns on contact with any body tissue, although it may not cause immediate burning upon skin contact. Ingestion can result in severe G.I. damage. There are no reported cases of systemic effects. It does not cause phosphorus poisoning.

SIGNS & SYMPTOMS OF EXPOSURE: See above.

CARCINOGENECITY:  No NTP?  No IARC MONOGRAPHS?  No OSHA?

#### **EMERGENCY AND FIRST AID PROCEDURES:**

INHALATION: Remove victim to fresh air. If cough or other respiratory symptoms develop, consult medical personnel. If not breathing, give artificial respiration, preferably mouth-to-mouth. If breathing is difficult, give oxygen. Get medical attention immediately.

EYES: Immediately flush with copious amounts of water, including under eyelids, for at least 15 minutes. If irritation persists, get medical attention.

SKIN: Wash material off the skin with copious amounts of water. Get medical attention. Wash contaminated clothing and decontaminate footwear before reuse.

INGESTION: Promptly give several glasses of water or milk to drink to dilute. Then give milk of magnesia or aluminum hydroxide gel. Do not induce vomiting; if it occurs, give more fluid, especially milk. Get medical attention.

#### **SECTION VII - SPECIAL PRECAUTIONS AND SPILL OR LEAK PROCEDURES**

PRECAUTIONS TO BE TAKEN IN HANDLING & STORAGE: Store in closed containers. Store away from direct sunlight, source of heat, alkalis, sulfides, cyanides, and metal powder.

OTHER PRECAUTIONS: Avoid breathing mist. Prevent contact with eyes, skin or clothing. Do not ingest.

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: For small spills and residues cover with soda ash or soda ash - slaked lime mixture (1:1). Pick-up and place in polyolefin bottle for disposal. Flush spill area with water.

WASTE DISPOSAL METHODS (Consult federal, state, and local regulations): Dispose of in accordance with Federal, State, and Local regulations.

#### **SECTION VII - SPECIAL PROTECTION INFORMATION/CONTROL MEASURES**

RESPIRATORY PROTECTION: Respiratory protection not required for normal work procedures, but if misting occurs, use a high efficiency particulate respirator or self-con-

tained breathing apparatus, with full face piece needed above TLV.

**VENTILATION:** Provide general ventilation and local exhaust ventilation where misting can occur.

**PROTECTIVE GLOVES:** Use rubber gloves and apron.

**EYE PROTECTION:** Wear chemical safety goggles and/or face shield for mist or where splashing is possible. Do not wear contact lenses.

**OTHER PROTECTIVE CLOTHING OR EQUIPMENT:** Provide eyewash station. Have neutralizing materials readily available for emergency use. Wash contaminated clothing before reuse.

**WORK/HYGIENIC PRACTICES:** Wash hands before eating, drinking or smoking.

The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances.

### SECTION I - PRODUCT IDENTIFICATION

**PRODUCT NAME:** **C&B METABOND DENTIN ACTIVATOR** **STOCK NO:** **S381**  
**DOT HAZARD LABEL:** Corrosive **UN NUMBER:** UN2582  
**PROPER SHIPPING NAME:** Ferric chloride solution **DATE PREPARED:** 06/25/04  
**NFPA CODES:** HEALTH - 0 FLAMMABILITY - 2 REACTIVITY - 0

### SECTION II - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

<u>HAZARDOUS COMPONENTS</u>	<u>CAS NUMBER</u>	<u>PEL</u>	<u>TLV</u>	<u>%</u>
Citric acid	77-92-9	NE	NE	
Ferric chloride solution	7705-08-0	NE	NE	7%
Polyvinyl alcohol	9002-89-5	NE	NE	
Water	7732-18-5	NE	NE	73%

### SECTION III - PHYSICAL & CHEMICAL CHARACTERISTICS

**BOILING POINT:** 100° C **SPECIFIC GRAVITY (H<sub>2</sub>O = 1):** NE  
**VAPOR PRESSURE:** NE **PERCENT VOLATILES:** NE  
**VAPOR DENSITY (Air = 1):** NE **EVAPORATION RATE (Butyl Acetate = 1):** NE  
**APPEARANCE AND ODOR:** Green-yellow, thick liquid.

### SECTION IV - FIRE AND EXPLOSION HAZARD DATA

**FLASH POINT** Above 38° C **FLAMMABLE LIMIT** UPPER: NE LOWER: NE  
**(TCC):** (air, % by vol.)

**EXTINGUISHER MEDIA:** Alcohol foam, carbon dioxide or dry chemical.

**SPECIAL FIRE FIGHTING PROCEDURES:** During emergency conditions, overexposure to thermal decomposition products may cause health hazard. Self-contained breathing apparatus should be worn.

**UNUSUAL FIRE & EXPLOSION HAZARDS:** When exposed to flame, emits toxic fumes and gases.

### SECTION V - REACTIVITY DATA (PHYSICAL HAZARDS)

**STABILITY:**  STABLE  UNSTABLE  
**CONDITIONS TO AVOID:** None  
**INCOMPATIBILITY (Materials to avoid):** Bases and strong alkalis.  
**HAZARDOUS DECOMPOSITION PRODUCTS:** NE  
**HAZARDOUS POLYMERIZATION:**  MAY OCCUR  WILL NOT OCCUR  
**CONDITIONS TO AVOID:**

### SECTION VI - HEALTH HAZARD DATA

**PRIMARY ROUTE(S) OF ENTRY:**  EYES  SKIN  INHALATION  INGESTION

**HEALTH HAZARDS (Acute & Chronic):** Inhalation is not a hazard unless misted or heated at high temperature. Mist inhalation may cause coughing and sneezing. Excessive exposure may result in irritation of the eyes, skin and mucous membrane of the respiratory tract.

SIGNS & SYMPTOMS OF EXPOSURE: Irritation of eyes, skin and mucous membrane.

CARCINOGENECITY:  No NTP?  No IARC MONOGRAPHS?  No OSHA?

**EMERGENCY AND FIRST AID PROCEDURES:**

**INHALATION:** Remove victim to fresh air. If cough or other respiratory symptoms develop, consult medical personnel. If not breathing, give artificial respiration, preferably mouth-to-mouth. If breathing is difficult, give oxygen. Get medical attention immediately.

**EYES:** Immediately flush with copious amounts of water, including under eyelids, for at least 15 minutes. If irritation persists, get medical attention.

**SKIN:** Wash material off the skin with copious amounts of water. If irritation persists, get medical attention.

**INGESTION:** If substantial quantities are ingested, rinse mouth and give person 2 or 3 glasses of milk or water to drink. Get medical attention.

**SECTION VII - SPECIAL PRECAUTIONS AND SPILL OR LEAK PROCEDURES**

**PRECAUTIONS TO BE TAKEN IN HANDLING & STORAGE:** Store in closed containers. Store away from direct sunlight.

**OTHER PRECAUTIONS:** None

**STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:** For small spills and residues absorb with paper towels. Pick-up and place in polyolefine bottle for disposal. Flush spill area with water.

**WASTE DISPOSAL METHODS (Consult federal, state, and local regulations):** Dispose of in accordance with Federal, State, and Local regulations.

**SECTION VII - SPECIAL PROTECTION INFORMATION/CONTROL MEASURES**

**RESPIRATORY PROTECTION:** Respiratory protection not required for normal work procedures.

**VENTILATION:** None usually necessary.

**PROTECTIVE GLOVES:** None required.

**EYE PROTECTION:** Wear chemical safety goggles or glasses. Do not wear contact lenses.

**OTHER PROTECTIVE CLOTHING OR EQUIPMENT:** Provide eyewash station.

**WORK/HYGIENIC PRACTICES:** Wash hands before eating, drinking or smoking.

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**SECTION 1 – CHEMICAL PRODUCT**

**PRODUCT NAME: 4-META UNIVERSAL CATALYST-V      MSDS NO:      S371**

**SECTION 2 – COMPOSITION INFORMATION ON INGREDIENTS**

HAZARDOUS COMPONENTS	CAS NUMBER	PEL	TLV	%
tri-n-butylborane (TBB) / partially oxidized (TBB-O) Hydrocarbon	122-56-5 / 688-74-4			

**SECTION 3 – HAZARDS IDENTIFICATION**

**EMERGENCY OVERVIEW:** Highly flammable liquid (F). Reactive with water and air to generate heat and flammable gas.

**POTENTIAL HEALTH EFFECTS**

**EYES:** May cause irritation, chemical burns and possible corneal injury.

**SKIN:** May cause skin irritation.

**INHALATION:** Causes respiratory tract irritation. May cause dizziness, dullness, headache. Higher concentration can produce central nervous system depression, narcosis.

**INGESTION:** Harmful if swallowed.

**CHRONIC EFFECTS:** Not known.

**SIGNS & SYMPTOMS:**

CARCINOGENECITY:  NA NTP?  No IARC MONOGRAPHS?  No ACGIH?

#### **SECTION 4 – FIRST-AID MEASURES**

**INHALATION:** Remove victim to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

**EYES:** Immediately flush with flowing water for at least 15 minutes. Get medical attention.

**SKIN:** Flush with soap and plenty of water. Get medical attention if irritation develops or persists.

**INGESTION:** Promptly drink several glasses of water or milk to dilute. Get medical attention.

**NOTE TO PHYSICIANS:**

#### **SECTION 5 – FIRE-FIGHTING MEASURES**

**FLASH POINT (TCC):** Unknown **FLAMMABLE LIMIT (air, % by vol.) acetone** UPPER: 13 % LOWER: 2 %

**FLAMMABILITY CLASSIFICATION (CFR 1910.1200):** Flammable Liquid UN No. 1993

**EXTINGUISHING MEDIA:** Foam, dry chemical, carbon dioxide or dry sand, water spray.

**FIRE FIGHTING INSTRUCTIONS:** During emergency conditions, over-exposure to decomposition products may cause health hazard. Self-contained breathing apparatus should be worn.

**UNUSUAL FIRE & EXPLOSION HAZARDS:** Highly flammable liquid, reactive with water and air to generate heat and flammable gases.

**HAZARDOUS COMBUSTION PRODUCTS:** Flammable gas and toxic gas may be released by reaction with water or air.

#### **SECTION 6 – ACCIDENTAL RELEASE MEASURES**

**Personal Precaution:**

For skin protection wear impervious protective gloves and clothing. For eye protection use safety goggles or a full-face shield. If the exposure limit is exceeded use an organic vapor respirator.

**Environmental Precautions:** May be hazardous to the environment. Methods For Cleaning-Up: In case material is released or spilled, remove all ignition sources, and ventilate the area of leak or spill. Collect spilled liquid in sealable containers as far as possible. Absorb remaining liquid in sand or inert absorbent and remove to safe place. Contents may develop pressure by decomposition.

#### **SECTION 7 – HANDLING AND STORAGE**

**HANDLING:** Observe normal warehouse handling procedures. Protect against physical damages.

**STORAGE:** Store in a dry and dark well-ventilated place at cool (5–30°C) and stable temperature. Store away from ignition sources, flammable solids with large surface area (such as cotton, gauze).

#### **SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION**

**ENGINEERING CONTROLS:** Use local exhaust to keep exposures to a minimum.

**EYE/FACE PROTECTION:** Use safety glasses. Eye wash station near work area.

**SKIN PROTECTION:** Use impervious protective gloves to prevent skin contact.

**RESPIRATORY PROTECTION:** None required during normal use of this product.

**EXPOSURE GUIDELINES:** Not established.

#### **SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES**

**APPEARANCE AND ODOR:** Colorless transparent liquid. Like n-butanol.

**BOILING POINT:** 56°C (acetone) **SPECIFIC GRAVITY (H<sub>2</sub>O = 1):** approx. 0.8

**VAPOR PRESSURE:** Not known **PERCENT VOLATILES:**

**VAPOR DENSITY (Air = 1):** Not known **EVAPORATION RATE (Butyl Acetate = 1):**

**SOLUBILITY IN WATER:** Decomposes, partly soluble **PH:** Not applicable

#### **SECTION 10 – STABILITY AND REACTIVITY**

**STABILITY:** Reactive with air or water. **HAZARDOUS POLYMERIZATION:** Will not occur.

**CONDITIONS TO AVOID:** Heat beyond 30°C. Refrigeration. Fluctuating temperature. Direct sunlight. Ignition sources.

**INCOMPATIBILITY (Materials to avoid):** Strong oxidizers or halogenated hydrocarbons. Flammable solids with large surface area (such as gauze, cotton).

**HAZARDOUS DECOMPOSITION PRODUCTS:** Carbon monoxide, butanol, boron oxide, borane.

#### **SECTION 11 – TOXICOLOGICAL INFORMATION**

**Health Hazards:** (immediate, delayed, acute, chronic) (TBB-O): Not known. Easily decomposed to n-butanol and boric acid. (acetone): Inhalation of high concentration may cause central nervous system

effects characterized by headache, dizziness and unconsciousness.  
Toxicity: LD50: Oral 1,125 mg/Kg (Rat/borane), 2,150 mg/Kg(Mouse/borate)  
4,360 mg/Kg (Rat/n-butanol), 2,660 mg/Kg (Rat/boric acid)  
Mutagenicity: Negative (Schmalz G. et al., J. Dent. Res., vol 80, 1234, 2001)

### **SECTION 12 – ECOLOGICAL INFORMATION**

General: This substance may be hazardous to the environment.  
Mobility: When released, this substance is expected to decompose quickly by contact with air or water.  
Degradability, Accumulation, Ecotoxicity, Other adverse effects: Not known.

### **SECTION 13 – DISPOSABLE CONSIDERATIONS**

Danger in disposal: Highly reactive with water and air. This substance should be handled as hazardous waste.  
Disposal method: Consult federal, state, and local regulations): Do not empty into sewer. This substance should be sent to an approved incinerator.

### **SECTION 14 – TRANSPORT INFORMATION (not meant to be all-inclusive)**

PROPER SHIPPING NAME: Flammable liquid, n.o.s.  
DOT HAZARD LABEL: UN1993 - Flammable liquid, n.o.s. UN/NA NUMBER: UN 1993  
PRECAUTIONS FOR TRANSPORT: Highly flammable liquid  
IMDG Class 3.2, PG II  
ICAO/IATA Class 3, PG II

### **SECTION 15 – REGULATORY INFORMATION (not meant to be all-inclusive)**

#### **SECTION 16 – OTHER INFORMATION**

NFPA CODES: HEALTH - FLAMMABILITY - REACTIVITY -  
WORK/HYGIENIC PRACTICES: Wash hands before eating, drinking or smoking.  
DATE PREPARED: 06/25/04 PREPARED BY: R. Burke

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### **SECTION I - PRODUCT IDENTIFICATION**

**PRODUCT NAME:** C&B METABOND BASE **STOCK NO:** S398  
**DOT HAZARD LABEL:** Flammable Liquid **UN NUMBER:** UN1247  
**PROPER SHIPPING NAME:** Methyl Methacrylate Monomer, Inhibited **DATE PREPARED:** 06/25/04  
**NFPA CODES:** HEALTH - 2 FLAMMABILITY - 3 REACTIVITY - 2

### **II - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION**

<u>HAZARDOUS COMPONENTS</u>	<u>CAS NUMBER</u>	<u>PEL</u>	<u>TLV</u>	<u>%</u>
Methyl Methacrylate	80-62-6	100 ppm	100 ppm	

### **SECTION III - PHYSICAL & CHEMICAL CHARACTERISTICS**

**BOILING POINT:** 101°C **SPECIFIC GRAVITY (H2O = 1):** 0.944  
**VAPOR PRESSURE:** 40 mm HG **PERCENT VOLATILES:** NA  
**VAPOR DENSITY (Air = 1):** 3.45 **EVAPORATION RATE (Butyl Acetate = 1):** NA  
**APPEARANCE AND ODOR:** Colorless transparent liquid.

### **SECTION IV - FIRE AND EXPLOSION HAZARD DATA**

**FLASH POINT (TCC):** 10 °C **FLAMMABLE LIMIT (air, % by vol.) UPPER:** 1.7 % **LOWER:** 8.2 %  
**EXTINGUISHER MEDIA:** Foam, dry chemical, carbon dioxide.  
**SPECIAL FIRE FIGHTING PROCEDURES:** During emergency conditions, overexposure to thermal decomposition products may cause health hazard. Self contained breathing apparatus should be worn.  
**UNUSUAL FIRE & EXPLOSION HAZARDS:** When exposed to flame, emits toxic fumes and gases.

## **SECTION V - REACTIVITY DATA (PHYSICAL HAZARDS)**

STABILITY:  STABLE  UNSTABLE  
CONDITIONS TO AVOID: Heat and light.  
INCOMPATIBILITY (Materials to avoid): Polymerization catalysts (peroxides, persulfates, light, heat, nitric acid and other strong oxidizers, ammonia and amines, halogens and halogen compounds.  
HAZARDOUS DECOMPOSITION PRODUCTS: Thermal-oxidative degradation can produce toxic and corrosive materials, including carbon monoxide.  
HAZARDOUS POLYMERIZATION:  MAY OCCUR  WILL NOT OCCUR  
CONDITIONS TO AVOID: Hazardous polymerization may occur, especially when heated or catalyzed.

## **SECTION VI - HEALTH HAZARD DATA**

PRIMARY ROUTE(S) OF ENTRY:  EYES  SKIN  INHALATION  INGESTION  
HEALTH HAZARDS (Acute & Chronic): Ingestion may cause headache, dizziness, nausea, tinnitus, dyspnea, etc. May cause corrosion after contact is made with human eye. Primary irritant on human skin, repeated prolonged contact can cause irreversible damage to human skin. Inhalation can cause irritation of the upper respiratory tract and mucous membranes, and, at high concentrations can cause symptoms similar to those which may be experienced upon ingestion.  
SIGNS & SYMPTOMS OF EXPOSURE: see above.  
CARCINOGENICITY:  No NTP?  No IARC MONOGRAPHS?  No OSHA?

### **EMERGENCY AND FIRST AID PROCEDURES:**

INHALATION: Remove victim to fresh air. If cough or other respiratory symptoms develop, consult medical personnel. If not breathing, give artificial respiration, preferably mouth-to-mouth. If breathing is difficult, give oxygen. Consult medical personnel.  
EYES: Immediately flush with copious amounts of water for at least 15 minutes. Get medical attention.  
SKIN: Wash skin with copious amounts of soap and water. If irritation exists, get medical attention. Wash contaminated clothing and decontaminate footwear before reuse.  
INGESTION: Induce vomiting. Get medical attention immediately.

## **SECTION VII - SPECIAL PRECAUTIONS AND SPILL OR LEAK PROCEDURES**

PRECAUTIONS TO BE TAKEN IN HANDLING & STORAGE: Do not store under pure nitrogen or sparge with nitrogen or oxygen-free gas.  
OTHER PRECAUTIONS: NE  
STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: People not wearing protective equipment and clothing should be restricted from areas of spill or leaks until cleanup has been completed. If this material is spilled or leaked, remove all ignition sources and ventilate area of spill or leak. Absorb small quantities on paper towels. Evaporate in safe place such as a fume hood. Allow sufficient time for evaporating vapors to completely clear the hood ductwork. Burn the paper in a suitable location away from combustible materials. Large quantities can be collected and burned in a suitable combustion chamber.  
WASTE DISPOSAL METHODS (Consult federal, state, and local regulations): Incinerate liquid and diking material after addition of excess inhibitor, in accordance with Federal, State, and Local regulations.

## **SECTION VII - SPECIAL PROTECTION INFORMATION/CONTROL MEASURES**

RESPIRATORY PROTECTION: NIOSH-approved respiratory protection for organic gases if needed.  
VENTILATION: Use local exhaust to keep exposures to a minimum.  
PROTECTIVE GLOVES: Rubber or PVC Gloves  
EYE PROTECTION: Safety glasses or full face shield.  
OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Safety shower and eyewash station.  
WORK/HYGIENIC PRACTICES: Wash hands and face before eating, drinking and/or smoking.

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**SECTION 1 – CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

**PRODUCT NAME: C&B METABOND POWDERS MSDS NO: S396 VAR.**

**SECTION 2 – COMPOSITION INFORMATION ON INGREDIENTS**

<u>HAZARDOUS COMPONENTS</u>	<u>CAS NUMBER</u>	<u>PEL</u>	<u>TLV</u>	<u>%</u>
Polymethylmethacrylate (PMMA)	9011-74-7			
Metal Oxide	1314-23-4			

**SECTION 3 – HAZARDS IDENTIFICATION**

EMERGENCY OVERVIEW:

**POTENTIAL HEALTH EFFECTS**

EYES: Can cause irritation due to physical contact.

SKIN: Practically negligible.

INHALATION: Mist inhalation can cause coughing.

INGESTION: Practically negligible.

CHRONIC EFFECTS:

SIGNS & SYMPTOMS:

CARCINOGENECITY:  No NTP?  No IARC MONOGRAPHS?  No OSHA?

**SECTION 4 – FIRST-AID MEASURES**

INHALATION: Although no adverse effects anticipated by breathing during proper handling, if breathing difficult give oxygen and get medical attention.

EYES: Immediately flush with flowing water for 15 minutes. If redness, itching or a burning sensation develops, get medical attention.

SKIN: Wash material off with water.

INGESTION: Normally no treatment required.

NOTE TO PHYSICIANS:

**SECTION 5 – FIRE-FIGHTING MEASURES**

FLASH POINT (TCC): None FLAMMABLE LIMIT (air, % by vol.) UPPER: NA LOWER: NA

FLAMMABILITY CLASSIFICATION (CFR 1910.1200):

EXTINGUISHING MEDIA: Water fog, foam, dry chemical or carbon dioxide.

FIRE FIGHTING INSTRUCTIONS: During emergency conditions, to prevent overexposure to thermal decomposition products, self-contained breathing apparatus should be worn.

UNUSUAL FIRE & EXPLOSION HAZARDS:

HAZARDOUS COMBUSTION PRODUCTS: Toxic gases such as carbon monoxide may be released in a fire.

**SECTION 6 – ACCIDENTAL RELEASE MEASURES**

In case material is released or spilled, sweep into container for disposal.

**SECTION 7 – HANDLING AND STORAGE**

HANDLING: Observe normal warehouse handling procedures.

STORAGE: Store in a cool, dry and dark place. Store away from other materials which may cause cross-contamination.

**SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION**

ENGINEERING CONTROLS: Eye wash station near work area.

EYE/FACE PROTECTION: Use safety glasses

SKIN PROTECTION: Use rubber or PVC gloves to prevent skin contact.

RESPIRATORY PROTECTION: None normally needed.

EXPOSURE GUIDELINES:

**SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES**

APPEARANCE AND ODOR: Tan powder.

BOILING POINT: NA SPECIFIC GRAVITY (H2O = 1): 1.96

VAPOR PRESSURE: NA PERCENT VOLATILES: NA

VAPOR DENSITY (Air = 1): NA EVAPORATION RATE (Butyl Acetate = 1): NA

SOLUBILITY IN WATER: Nil PH:

**SECTION 10 – STABILITY AND REACTIVITY**

STABILITY: Stable under normal conditions. HAZARDOUS POLYMERIZATION: Will not occur.  
CONDITIONS TO AVOID:  
INCOMPATIBILITY (Materials to avoid): None  
HAZARDOUS DECOMPOSITION PRODUCTS:

**SECTION 11 – TOXICOLOGICAL INFORMATION**

**SECTION 12 – ECOLOGICAL INFORMATION**

**SECTION 13 – DISPOSABLE CONSIDERATIONS**

Waste must be disposed of in accordance with federal, state, and local environmental control regulations.

**SECTION 14 – TRANSPORT INFORMATION (not meant to be all-inclusive)**

PROPER SHIPPING NAME: Non-hazardous  
DOT HAZARD LABEL: UN/NA NUMBER:

**SECTION 15 – REGULATORY INFORMATION (not meant to be all-inclusive)**

**SECTION 16 – OTHER INFORMATION**

NFPA CODES: HEALTH - FLAMMABILITY - REACTIVITY -

WORK/HYGIENIC PRACTICES: Wash hands before eating, drinking or smoking.

DATE PREPARED: 06/25/04 PREPARED BY: R. Burke

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