

SAFETY DATA SHEETS

This SDS packet was issued with item:

075508726

The safety data sheets (SDS) in this packet apply to the individual products listed below. Please refer to invoice for specific item number(s).

273003988

The safety data sheets (SDS) in this packet apply to one or more components included in the items listed below. Items listed below may require one or more SDS. Please refer to invoice for specific item number(s).

075508718

SECTION I - PRODUCT IDENTIFICATION

PRODUCT NAME: C&B METABOND DENTIN ACTIVATOR STOCK NO: S381/8373
DOT HAZARD LABEL: Corrosive UN NUMBER: UN2582
DOT/OPER SHIPPING NAME: Ferric chloride solution DATE PREPARED: 02/18/98
Hazard Codes: HEALTH - 0 FLAMMABILITY - 2 REACTIVITY - 0

SECTION II - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

HAZARDOUS COMPONENTS	CAS NUMBER	PEL	TLV	%
trichloroacetic 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 (H₂O = 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 (air, % by vol.) UPPER: NE LOWER: NE
(CC)

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.
MUTAGENICITY NTP? IARC MONOGRAPHS? 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.

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

NO: 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 polyethylene 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.

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: UNIVERSAL 4-META CATALYST **STOCK NO:** S378AB/CB
DOT HAZARD LABEL: Flammable Liquid **UN NUMBER:** UN1993
PROPER SHIPPING NAME: Flammable Liquid, N.O.S. **DATE PREPARED:** 02/18/98
DOT HAZARD CODES: HEALTH - 3 FLAMMABILITY - 2 REACTIVITY - 1

SECTION II - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

<u>HAZARDOUS COMPONENTS</u>	<u>CAS NUMBER</u>	<u>FEL</u>	<u>TLV</u>	<u>%</u>
Tri-n-butylborane, partially oxidized	688-74-4	NE	NE	

SECTION III - PHYSICAL & CHEMICAL CHARACTERISTICS

BOILING POINT: 57° C (solvent) **SPECIFIC GRAVITY (H₂O = 1):** .75 (TBB)
VAPOR PRESSURE: NA **PERCENT VOLATILES:** 100%
VAPOR DENSITY (Air = 1): 7.95 **EVAPORATION RATE (Butyl Acetate = 1):** NA
APPEARANCE AND ODOR: Colorless liquid, odor like n-butanol.

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (TCC): -17° C **FLAMMABLE LIMIT (air, % by vol.)** **UPPER:** 13% **LOWER:** 2%
EXTINGUISHER MEDIA: Foam, dry chemical, carbon dioxide.

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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:

INCOMPATIBILITY (Materials to avoid): Strong oxidizers or halogenated hydrocarbons (detonation or violent reaction). Generates heat when exposed in the air and may cause spontaneous combustion of cotton, gauze or other flammable materials. Saturate such material containing catalyst with water before discarding.

HAZARDOUS DECOMPOSITION PRODUCTS: Toxic gases and vapors (such as carbon dioxide and carbon monoxide) may be released in a fire.

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): Thermal burns of skin or eyes.

SIGNS & SYMPTOMS OF EXPOSURE: NA

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. Consult medical personnel in all cases.

EYES: Immediately flush with copious amounts of water for at least 15 minutes. Have eyes examined and treated by medical personnel.

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

INGESTION: NA

SECTION VII - SPECIAL PRECAUTIONS AND SPILL OR LEAK PROCEDURES

PRECAUTIONS TO BE TAKEN IN HANDLING & STORAGE: Store in cool, dry and dark place away from combustibles or oxidizing agents.

OTHER PRECAUTIONS: NA

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Absorb small quantities with slightly damp cloth towels (do not use paper towels). Then saturate cloth towels with water, wring out water, and allow to dry out in the open.

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: NIOSH-approved respiratory protection for organic gases is needed.

VENTILATION: Use local exhaust to keep exposure to a minimum.

PROTECTIVE GLOVES: Prevent skin contact by using rubber or PVC gloves.

EYE PROTECTION: Use safety glasses or full face shield.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Safety shower or eye wash station near work area.

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

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MATERIAL SAFETY DATA SHEET	PARKELL, INC. 300 EXECUTIVE DRIVE EDGEWOOD, NY 11717	24-HOUR EMERGENCY TELEPHONE 1-800-535-5053
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SECTION I - PRODUCT IDENTIFICATION

PRODUCT NAME: AMALGAMBOND BASE STOCK NO: S372
 DOT HAZARD LABEL: Flammable Liquid UN NUMBER: UN1247
 PROPER SHIPPING NAME: Methyl Methacrylate Monomer, Inhibited DATE PREPARED: 02/21/13
 NFPA CODES: HEALTH - 2 FLAMMABILITY - 3 REACTIVITY - 2

SECTION II - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

HAZARDOUS COMPONENTS	CAS NUMBER	PEL	TLV	%
Methyl Methacrylate	80-62-6	100 ppm	100 ppm	
Polymerizable Methacrylates		NA	NA	

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, dypnea, etc. May cause corrosion after contact is made with human eye. Primary irritation 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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MATERIAL SAFETY DATA SHEET	PARKELL, INC. 300 EXECUTIVE DRIVE EDGEWOOD, NY 11717	24-HOUR EMERGENCY TELEPHONE 1-800-535-5053
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SECTION I - PRODUCT IDENTIFICATION

PRODUCT NAME: AMALGAMBOND DENTIN ACTIVATOR STOCK NO: S394
 DOT HAZARD LABEL: Corrosive UN NUMBER: UN2582
 PROPER SHIPPING NAME: Ferric chloride solution DATE PREPARED: 02/21/13
 NFPA CODES: HEALTH - 0 FLAMMABILITY - 2 REACTIVITY - 0

SECTION II - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

HAZARDOUS COMPONENTS	CAS NUMBER	PEL	TLV	%
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 (H₂O = 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 (air, % by vol.) UPPER: NE LOWER: NE (TCC).
 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.
 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. 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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