parkell inc.

Safety Data Sheet

Issue Date: 23-Apr-2013 Revision Date: 13-Jan-2015 Version 1

1. IDENTIFICATION

Product Identifier

Product Name C&B Metabond Base

Other means of identification

SDS # S398

UN/ID No UN1247

Recommended use of the chemical and restrictions on use

Recommended Use Dental Adhesive System.

Details of the supplier of the safety data sheet

Supplier Address

Parkell, Inc. 300 Executive Drive Edgewood, NY 11717

Emergency Telephone Number

Company Phone Number (631) 249-1134

Emergency Telephone (24 hr) INFOTRAC 1-352-323-3500 (International)

1-800-535-5053 (North America)

2. HAZARDS IDENTIFICATION

Appearance Colorless, transparent liquid

Physical State Liquid

Classification

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2
Skin sensitization	Category 1
Specific target organ toxicity (single exposure)	Category 3
Flammable Liquids	Category 2

Hazards Not Otherwise Classified (HNOC)

May be harmful in contact with skin May be harmful if inhaled

Signal Word

Danger

Hazard Statements

Causes skin irritation
Causes serious eye irritation
May cause an allergic skin reaction
May cause respiratory irritation
Highly flammable liquid and vapor



Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling Wear protective gloves/protective clothing/eye protection/face protection Avoid breathing dust/fume/gas/mist/vapors/spray Contaminated work clothing should not be allowed out of the workplace Use only outdoors or in a well-ventilated area Keep away from heat/sparks/open flames/hot surfaces. — No smoking Keep container tightly closed Ground/bond container and receiving equipment

Use explosion-proof equipment

Use only non-sparking tools

Take precautionary measures against static discharge

Precautionary Statements - Response

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing Get medical attention

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

Wash contaminated clothing before reuse

If skin irritation or rash occurs: Get medical advice/attention

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Get medical advice / attention

IN CASE OF FIRE: Use CO2, dry chemical, or foam for extinction

Precautionary Statements - Storage

Store locked up

Store in a well-ventilated place. Keep cool

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Other Hazards

Harmful to aquatic life with long lasting effects

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
Methyl methacrylate	80-62-6	Proprietary

^{**}If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.**

4. FIRST-AID MEASURES

First Aid Measures

Eye Contact Rinse cautiously with water for several minutes. Remove contact lenses, if present and

easy to do. Continue rinsing. Get medical attention.

Skin Contact Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

Wash contaminated clothing before reuse. Wash contaminated clothing before reuse. If

skin irritation or rash occurs: Get medical advice/attention.

Inhalation Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not

breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical

attention.

Ingestion Do not induce vomiting without medical advice. Immediately call a poison center or

doctor/physician.

Most important symptoms and effects

Symptoms Causes serious eye irritation and skin irritation. May cause an allergic skin reaction.

Ingestion may cause headache, dizziness, nausea, tinnitus, dyspnea, etc. Inhalation can

cause irritation of the upper respiratory tract and mucous membranes; at high

concentrations, can cause symptoms similar to those which may be experienced upon

ingestion.

Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Foam. Water. Carbon dioxide (CO2).

Unsuitable Extinguishing Media Not determined.

Specific Hazards Arising from the Chemical

Highly flammable liquid and vapor. When exposed to flame, product emits toxic fumes and gases.

Hazardous Combustion Products Carbon monoxide.

Sensitivity to Static Discharge Take precautionary measures against static discharge.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions Use personal protection recommended in Section 8.

For Emergency Responders Remove all sources of ignition. Ventilate the area.

Environmental Precautions Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See

Section 12, Ecological Information. See Section 13: DISPOSAL CONSIDERATIONS.

Methods and material for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so.

Methods for Clean-Up

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 duct work. Burn the paper in a suitable location away from combustible materials. Large quantities can be

collected and burned in a suitable combustion chamber.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on Safe Handling Avoid contact with skin, eyes or clothing. Use personal protection recommended in Section

8. Avoid contact with skin, eyes or clothing. Wash face, hands, and any exposed skin thoroughly after handling. Avoid breathing dust/fume/gas/mist/vapors/spray. Contaminated work clothing should not be allowed out of the workplace. Use only outdoors or in a well-ventilated area. Keep away from heat/sparks/open flames/hot surfaces. — No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion proof equipment. Use only non-sparking tools. Take precautionary measures

against static discharges.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep container tightly closed and store in a cool, dry and well-ventilated place. Do not store

under pure nitrogen or sparge with nitrogen or oxygen-free gas. Store locked up.

Incompatible Materials Polymerization catalysts such as peroxides, persulfates, light, heat, nitric acid and other

strong oxidizers, ammonia and amines, and halogens and halogen compounds.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Methyl methacrylate	STEL: 100 ppm	TWA: 100 ppm	IDLH: 1000 ppm
80-62-6	TWA: 50 ppm	TWA: 410 mg/m ³	TWA: 100 ppm
		(vacated) TWA: 100 ppm	TWA: 410 mg/m ³
		(vacated) TWA: 410 mg/m ³	

Appropriate engineering controls

Engineering Controls Ensure adequate ventilation, especially in confined areas. Eyewash stations. Showers.

Individual protection measures, such as personal protective equipment

Eye/Face Protection Safety glasses or full face shield.

Skin and Body Protection Rubber or PVC gloves.

Respiratory Protection NIOSH-approved respiratory protection for organic gases if needed.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical State Liquid

AppearanceColorless, transparent liquidOdorNot determinedColorColorless, transparentOdor ThresholdNot determined

Property Values Remarks • Method

pH Not determined
Melting Point/Freezing Point
Boiling Point/Boiling Range Not determined
101 °C / 214 °F

Flash Point 10 °C / 214 °F 10 °C / 50 °F

Evaporation Rate Not applicable

Flammability (Solid, Gas) Liquid-not applicable

Upper Flammability Limits8.2%Lower Flammability Limit1.7%Vapor Pressure40 mm HGVapor Density3.45

Specific Gravity 0.944 Water Solubility Not determined Solubility in other solvents Not determined **Partition Coefficient** Not determined **Auto-ignition Temperature** Not determined **Decomposition Temperature** Not determined **Kinematic Viscosity** Not determined **Dynamic Viscosity** Not determined **Explosive Properties** Not determined

Tag Closed Cup

(Air=1)

(Water = 1)

10. STABILITY AND REACTIVITY

Reactivity

Not reactive under normal conditions.

Chemical Stability

Oxidizing Properties

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Hazardous Polymerization Hazardous polymerization may occur, especially when heated or catalyzed.

Conditions to Avoid

Keep separated from incompatible substances. Avoid heat and light. Keep out of reach of children.

Not determined

Incompatible Materials

Polymerization catalysts such as peroxides, persulfates, light, heat, nitric acid and other strong oxidizers, ammonia and amines, and halogens and halogen compounds.

Hazardous Decomposition Products

Thermal-oxidative degradation can produce toxic and corrosive materials, including carbon monoxide.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Eye Contact Causes serious eye irritation.

Skin ContactCauses skin irritation. May cause an allergic skin reaction. May be harmful in contact with

skin.

Inhalation May cause respiratory irritation. May be harmful if inhaled.

Ingestion Do not ingest.

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Methyl methacrylate	= 7872 mg/kg (Rat)	> 5 g/kg (Rabbit)	= 4632 ppm (Rat) 4 h = 400 ppm
80-62-6			(Rat) 1 h

Information on physical, chemical and toxicological effects

Symptoms Please see section 4 of this SDS for symptoms.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization May cause an allergic skin reaction.

Carcinogenicity Group 3 IARC components are "not classifiable as human carcinogens".

Chemical Name	ACGIH	IARC	NTP	OSHA
Methyl methacrylate		Group 3		
80-62-6		·		

Legend

IARC (International Agency for Research on Cancer)

Group 3 IARC components are "not classifiable as human carcinogens"

STOT - single exposure May cause respiratory irritation.

Numerical measures of toxicity

Not determined

12. ECOLOGICAL INFORMATION

Ecotoxicity

Harmful to aquatic life with long lasting effects.

Component Information

Chemical Name	Algae/aquatic plants	Fish	Toxicity to	Crustacea
			microorganisms	
Methyl methacrylate	170: 96 h	243 - 275: 96 h Pimephales		69: 48 h Daphnia magna
80-62-6	Pseudokirchneriella	promelas mg/L LC50 flow-		mg/L EC50
	subcapitata mg/L EC50	through 125.5 - 190.7: 96 h		
		Pimephales promelas mg/L		
		LC50 static 170 - 206: 96 h		
		Lepomis macrochirus mg/L		
		LC50 flow-through 153.9 -		
		341.8: 96 h Lepomis		
		macrochirus mg/L LC50		
		static 79: 96 h Oncorhynchus		
		mykiss mg/L LC50 flow-		
		through 79: 96 h		
		Oncorhynchus mykiss mg/L		
		LC50 static 326.4 - 426.9: 96		
		h Poecilia reticulata mg/L		
		LC50 static		

Persistence/Degradability

Not determined.

Bioaccumulation

Not determined.

Mobility

Chemical Name	Partition Coefficient
Methyl methacrylate	0.7
80-62-6	

Other Adverse Effects

Not determined

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods

Disposal of WastesDisposal should be in accordance with applicable regional, national and local laws and

regulations.

Contaminated Packaging Disposal should be in accordance with applicable regional, national and local laws and

regulations.

US EPA Waste Number

Chemical Name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Methyl methacrylate	U162	Included in waste stream:		U162
80-62-6		F039		

California Hazardous Waste Status

Chemical Name	California Hazardous Waste Status
Methyl methacrylate	Toxic
80-62-6	Ignitable

14. TRANSPORT INFORMATION

Note Please see current shipping paper for most up to date shipping information, including

exemptions and special circumstances.

<u>DOT</u>

UN1247

Proper Shipping Name Methyl methacrylate monomer, stabilized

Hazard Class 3
Packing Group III

IATA

UN/ID No UN1247

Proper Shipping Name Methyl methacrylate monomer, stabilized

Hazard Class 3
Packing Group III

IMDG

UN/ID No UN1247

Proper Shipping Name Methyl methacrylate monomer, stabilized

Hazard Class 3
Packing Group III

Marine Pollutant This material may meet the definition of a marine pollutant

15. REGULATORY INFORMATION

International Inventories

Chemical Name	TSCA	DSL	NDSL	EINECS	ELINCS	ENCS	IECSC	KECL	PICCS	AICS
Methyl methacrylate	Present	Χ		Present		Present	Х	Present	Χ	Х

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

US Federal Regulations

CERCLA

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Methyl methacrylate	1000 lb		RQ 1000 lb final RQ
80-62-6			RQ 454 kg final RQ

SARA 313

Chemical Name	CAS No	Weight-%	SARA 313 - Threshold Values %
Methyl methacrylate - 80-62-6	80-62-6	Proprietary	1.0

CWA (Clean Water Act)

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Methyl methacrylate	1000 lb			Χ

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Methyl methacrylate	X	X	X
80-62-6			

16. OTHER INFORMATION

NFPAHealth HazardsFlammabilityInstabilitySpecial Hazards232Not determinedHMISHealth HazardsFlammabilityPhysical HazardsPersonal ProtectionNot determinedNot determinedNot determinedNot determined

Issue Date:23-Apr-2013Revision Date:13-Jan-2015Revision Note:New format

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet



Safety Data Sheet

Issue Date: 23-Apr-2013 Revision Date: 13-Jan-2015 Version 1

1. IDENTIFICATION

Product Identifier

Product Name C&B Metabond Dentin Activator

Other means of identification

SDS # S394/S393

UN/ID No UN2582

Recommended use of the chemical and restrictions on use

Recommended Use Dental Adhesive System.

Details of the supplier of the safety data sheet

Supplier Address

Parkell, Inc. 300 Executive Drive Edgewood, NY 11717

Emergency Telephone Number

Company Phone Number (631) 249-1134

Emergency Telephone (24 hr) INFOTRAC 1-352-323-3500 (International)

1-800-535-5053 (North America)

2. HAZARDS IDENTIFICATION

Appearance Green-yellow, thick liquid Physical State Liquid

Classification

Skin corrosion/irritation	Category 1 Sub-category C
Serious eye damage/eye irritation	Category 1
Flammable Liquids	Category 3

Hazards Not Otherwise Classified (HNOC)

May be harmful if swallowed

Signal Word Danger

Hazard Statements

Causes severe skin burns and eye damage Flammable liquid and vapor



Revision Date: 13-Jan-2015

Precautionary Statements - Prevention

Do not breathe dust/fume/gas/mist/vapors/spray

Wash face, hands and any exposed skin thoroughly after handling

Wear protective gloves/protective clothing/eye protection/face protection

Keep away from heat/sparks/open flames/hot surfaces. — No smoking

Keep container tightly closed

Ground/bond container and receiving equipment

Use explosion-proof equipment

Use only non-sparking tools

Take precautionary measures against static discharge

Precautionary Statements - Response

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing Immediately call a poison center or doctor/physician

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

Wash contaminated clothing before reuse

If skin irritation persists: Get medical advice/attention

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Immediately call a poison center or doctor/physician IF SWALLOWED: Call a poison center or doctor/physician

Rinse mouth

Do not induce vomiting

IN CASE OF FIRE: Use CO2, dry chemical, or foam for extinction

Precautionary Statements - Storage

Store locked up

Store in a well-ventilated place. Keep cool

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
Citric Acid	77-92-9	Proprietary
Iron(III) Chloride, Ferric Chloride	7705-08-0	Proprietary

^{**}If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.**

4. FIRST-AID MEASURES

First Aid Measures

Eye Contact Rinse cautiously with water for several minutes. Remove contact lenses, if present and

easy to do. Continue rinsing. Immediately call a poison center or doctor/physician.

Skin Contact Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

Wash contaminated clothing before reuse. If irritation persists, seek medical attention.

Inhalation Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not

breathing, give artificial respiration. If breathing is difficult, give oxygen. Immediately call a

poison center or doctor/physician.

Ingestion Do not induce vomiting. If substantial quantities are ingested, give person 2 or 3 glasses of

milk or water to drink. Get medical attention.

Most important symptoms and effects

Symptoms Causes severe skin burns and eye damage. Inhalation is not a hazard unless misted or

heated at high temperature. Mist inhalation may cause coughing or sneezing. May be

Revision Date: 13-Jan-2015

irritating to the mouth, throat and stomach.

Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Alcohol resistant foam. Carbon dioxide (CO2). Dry chemical.

Unsuitable Extinguishing Media Not determined.

Specific Hazards Arising from the Chemical

Flammable liquid and vapor. When exposed to flame, product emits toxic fumes and gases.

Sensitivity to Static Discharge Take precautionary measures against static discharge.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions Use personal protection recommended in Section 8.

Environmental Precautions Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See

Section 12, Ecological Information. See Section 13: DISPOSAL CONSIDERATIONS.

Methods and material for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so.

Methods for Clean-Up For small spills and residues, absorb with paper towels. Pick up and place in polyolefin

bottle for disposal. Flush spill area with water.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on Safe Handling Avoid contact with skin, eyes or clothing. Use personal protection recommended in Section

8. Avoid contact with skin, eyes or clothing. Wash face, hands, and any exposed skin thoroughly after handling. Do not breathe dust/fume/gas/mist/vapors/spray. Keep away from heat/sparks/open flames/hot surfaces. — No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion proof equipment. Use only

non-sparking tools. Take precautionary measures against static discharges.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep container tightly closed and store in a cool, dry and well-ventilated place. Store away

from direct sunlight. Store locked up.

Incompatible Materials Bases. Strong alkalis.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Citric Acid 77-92-9	-	15 mg / m3 (Total)	-
Iron(III) Chloride, Ferric Chloride 7705-08-0	TWA: 1 mg/m³ Fe	(vacated) TWA: 1 mg/m³ Fe	TWA: 1 mg/m³ Fe

Appropriate engineering controls

Engineering Controls Ensure adequate ventilation, especially in confined areas. Eyewash stations. Showers.

Individual protection measures, such as personal protective equipment

Eye/Face Protection Wear chemical safety goggles or glasses. Do not wear contact lenses.

Skin and Body Protection Wear protective gloves and protective clothing.

Respiratory ProtectionNo protection is ordinarily required under normal conditions of use and with adequate

ventilation.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical State Liquid

AppearanceGreen-yellow, thick liquidOdorNot determinedColorGreen-yellowOdor ThresholdNot determined

Property Values Remarks • Method

Not determined

Not determined

pH Not determined

Melting Point/Freezing Point Not determined

Melting Point/Freezing PointNot determinedBoiling Point/Boiling Range100 °C / 212 °FFlash Point>38 °C / >100 °F

Evaporation Rate Not established
Flammability (Solid, Gas) Liquid-Not applicable

Upper Flammability Limits Not established **Lower Flammability Limit** Not established **Vapor Pressure** Not established **Vapor Density** Not established **Specific Gravity** Not established **Water Solubility** Not determined Solubility in other solvents Not determined **Partition Coefficient** Not determined **Auto-ignition Temperature** Not determined **Decomposition Temperature** Not determined **Kinematic Viscosity** Not determined **Dynamic Viscosity** Not determined

Explosive Properties

Oxidizing Properties

Tag Closed Cup

Revision Date: 13-Jan-2015

Page 4/8 A00793rev*0515

10. STABILITY AND REACTIVITY

Revision Date: 13-Jan-2015

Reactivity

Not reactive under normal conditions.

Chemical Stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Hazardous Polymerization Hazardous polymerization does not occur.

Conditions to Avoid

Keep separated from incompatible substances. Keep out of reach of children.

Incompatible Materials

Bases. Strong alkalis.

Hazardous Decomposition Products

None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Eye ContactCauses severe eye damage.Skin ContactCauses severe skin burns.InhalationAvoid breathing vapors or mists.IngestionMay be harmful if swallowed.

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Polyvinyl alcohol	> 20 g/kg (Rat)	-	-
9002-89-5			
Citric Acid	= 3000 mg/kg (Rat)	-	=
77-92-9			
Iron(III) Chloride, Ferric Chloride	= 316 mg/kg (Rat)	-	-
7705-08-0	- ' '		

Information on physical, chemical and toxicological effects

Symptoms Please see section 4 of this SDS for symptoms.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Carcinogenicity Group 3 IARC components are "not classifiable as human carcinogens".

Chemical Name	ACGIH	IARC	NTP	OSHA
Polyvinyl alcohol 9002-89-5		Group 3		

Legend

IARC (International Agency for Research on Cancer)

Group 3 IARC components are "not classifiable as human carcinogens"

Numerical measures of toxicity

Not determined

12. ECOLOGICAL INFORMATION

Revision Date: 13-Jan-2015

Ecotoxicity

The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Component Information

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Citric Acid 77-92-9		1516: 96 h Lepomis macrochirus mg/L LC50 static		120: 72 h Daphnia magna mg/L EC50
Iron(III) Chloride, Ferric Chloride 7705-08-0		75.6: 96 h Gambusia affinis mg/L LC50 static 20.26: 96 h Lepomis macrochirus mg/L LC50 semi-static 20.95 - 22.56: 96 h Pimephales promelas mg/L LC50 semi-static		27.9: 48 h Daphnia magna mg/L EC50 9.6: 48 h Daphnia magna mg/L EC50 Static

Persistence/Degradability

Not determined.

Bioaccumulation

Not determined.

Mobility

Chemical Name	Partition Coefficient
Citric Acid 77-92-9	-1.72
Iron(III) Chloride, Ferric Chloride 7705-08-0	-4

Other Adverse Effects

Not determined

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods

Disposal of WastesDisposal should be in accordance with applicable regional, national and local laws and

regulations.

Contaminated Packaging Disposal should be in accordance with applicable regional, national and local laws and

regulations.

California Hazardous Waste Status

Chemical Name	California Hazardous Waste Status
Iron(III) Chloride, Ferric Chloride	Toxic
7705-08-0	Corrosive

14. TRANSPORT INFORMATION

Revision Date: 13-Jan-2015

Note Please see current shipping paper for most up to date shipping information, including

exemptions and special circumstances.

<u>DOT</u>

UN/ID No UN2582

Proper Shipping Name Ferric chloride solution

Hazard Class 8
Packing Group III

IATA

UN/ID No UN2582

Proper Shipping Name Ferric chloride solution

Hazard Class 8
Packing Group III

IMDG

UN/ID No UN2582

Proper Shipping Name Ferric chloride solution

Hazard Class 8
Packing Group III

15. REGULATORY INFORMATION

International Inventories

Chemical Name	TSCA	DSL	NDSL	EINECS	ELINCS	ENCS	IECSC	KECL	PICCS	AICS
Citric Acid	Present	Х		Present		Present	Χ	Present	Х	Х
Iron(III) Chloride, Ferric Chloride	Present	Х		Present		Present	Х	Present	Х	Х

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

US Federal Regulations

CERCLA

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Iron(III) Chloride, Ferric Chloride	1000 lb		RQ 1000 lb final RQ
7705-08-0			RQ 454 kg final RQ

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

CWA (Clean Water Act)

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Iron(III) Chloride, Ferric Chloride	1000 lb			X

Revision Date: 13-Jan-2015

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Iron(III) Chloride, Ferric Chloride	X	X	X
7705-08-0			

16. OTHER INFORMATION

NFPA **Flammability** Instability **Special Hazards Health Hazards** Not determined HMIS **Health Hazards Flammability Physical Hazards Personal Protection** Not determined Not determined Not determined Not determined

Issue Date: 23-Apr-2013 **Revision Date:** 13-Jan-2015 **Revision Note:** New format

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet



Safety Data Sheet

Issue Date: 23-Apr-2013 Revision Date: 13-Jan-2015 Version 1

1. IDENTIFICATION

Product Identifier

Product Name C&B Metabond Powders

Other means of identification

SDS # S396, VAR.

Recommended use of the chemical and restrictions on use
Recommended Use Dental Adhesive System.

Details of the supplier of the safety data sheet

Supplier Address

Parkell, Inc. 300 Executive Drive Edgewood, NY 11717

Emergency Telephone Number

Company Phone Number (631) 249-1134

Emergency Telephone (24 hr) INFOTRAC 1-352-323-3500 (International)

1-800-535-5053 (North America)

2. HAZARDS IDENTIFICATION

Appearance Tan powder Physical State Solid

Classification

This chemical does not meet the hazardous criteria set forth by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200). However, this Safety Data Sheet (SDS) contains valuable information critical to the safe handling and proper use of this product. This SDS should be retained and available for employees and other users of this product.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
Metal Oxide	1314-23-4	Proprietary

^{**}If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.**

4. FIRST-AID MEASURES

First Aid Measures

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get

medical attention if irritation occurs.

Skin Contact Wash off immediately with plenty of water.

Inhalation Remove to fresh air. Get medical attention for any breathing difficulty.

Ingestion Clean mouth with water and drink afterwards plenty of water.

S396, VAR. - C&B Metabond Powders Revision Date: 13-Jan-2015

Most important symptoms and effects

Symptoms Direct contact with eyes may cause temporary irritation.

Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Water spray (fog). Foam. Dry chemical. Carbon dioxide (CO2).

Unsuitable Extinguishing Media Not determined.

Specific Hazards Arising from the Chemical

Combustion products may be toxic.

Hazardous Combustion Products Carbon monoxide.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions Use personal protection recommended in Section 8.

Environmental Precautions Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See

Section 12, Ecological Information. See Section 13: DISPOSAL CONSIDERATIONS.

Methods and material for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so.

Methods for Clean-Up Sweep up and shovel into suitable containers for disposal.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on Safe Handling Handle in accordance with good industrial hygiene and safety practice. Use personal

protection recommended in Section 8. Avoid contact with skin, eyes or clothing.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep container tightly closed and store in a cool, dry and well-ventilated place. Store away

from other materials which may cause cross-contamination.

Incompatible MaterialsNone known based on information supplied.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Revision Date: 13-Jan-2015

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Zirconium Oxide	STEL: 10 mg/m ³ Zr	TWA: 5 mg/m ³ Zr	IDLH: 25 mg/m ³ Zr
1314-23-4	TWA: 5 mg/m ³ Zr	(vacated) TWA: 5 mg/m ³ Zr	TWA: 5 mg/m³ except Zirconium
	_	(vacated) STEL: 10 mg/m ³ Zr	tetrachloride Zr
		, ,	STEL: 10 mg/m³ Zr

Appropriate engineering controls

Engineering Controls Ensure adequate ventilation, especially in confined areas. Eyewash stations. Showers.

Individual protection measures, such as personal protective equipment

Eye/Face Protection Use safety glasses.

Skin and Body Protection Use rubber or PVC gloves.

Respiratory Protection No protection is ordinarily required under normal conditions of use and with adequate

ventilation.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical State Solid

AppearanceTan powderOdorNot determinedColorTanOdor ThresholdNot determined

<u>Property</u> <u>Values</u> <u>Remarks</u> • <u>Method</u>

pHNot determinedMelting Point/Freezing PointNot determinedBoiling Point/Boiling RangeNot applicable

Flash Point None

Evaporation Rate
Flammability (Solid, Gas)
Upper Flammability Limits
Lower Flammability Limit
Vapor Pressure
Vapor Density

Not applicable
Not applicable
Not applicable
Not applicable
Not applicable

Specific Gravity 1.96 (Water = 1)

Water Solubility Nil Solubility in other solvents Not determined **Partition Coefficient** Not determined **Auto-ignition Temperature** Not determined **Decomposition Temperature** Not determined **Kinematic Viscosity** Not determined **Dynamic Viscosity** Not determined **Explosive Properties** Not determined **Oxidizing Properties** Not determined

10. STABILITY AND REACTIVITY

Revision Date: 13-Jan-2015

Reactivity

Not reactive under normal conditions.

Chemical Stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Hazardous Polymerization

Hazardous polymerization does not occur.

Conditions to Avoid

Keep out of reach of children.

Incompatible Materials

None known based on information supplied.

Hazardous Decomposition Products

None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Eye Contact Avoid contact with eyes.

Skin Contact Avoid contact with skin.

Inhalation Avoid inhalation of dust.

Ingestion Do not ingest.

Component Information

Not available

Information on physical, chemical and toxicological effects

Symptoms Please see section 4 of this SDS for symptoms.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Carcinogenicity Group 3 IARC components are "not classifiable as human carcinogens".

Chemical Name	ACGIH	IARC	NTP	OSHA
Polymethylmethacrylate (PMMA)		Group 3		

Legend

IARC (International Agency for Research on Cancer)

Group 3 IARC components are "not classifiable as human carcinogens"

Numerical measures of toxicity

Not determined

12. ECOLOGICAL INFORMATION

Revision Date: 13-Jan-2015

Ecotoxicity

The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Component Information

Not available

Persistence/Degradability

Not determined.

Bioaccumulation

Not determined.

Mobility

Not determined

Other Adverse Effects

Not determined

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods

Disposal of Wastes Disposal should be in accordance with applicable regional, national and local laws and

regulations.

Contaminated Packaging Disposal should be in accordance with applicable regional, national and local laws and

regulations.

14. TRANSPORT INFORMATION

Note Please see current shipping paper for most up to date shipping information, including

exemptions and special circumstances.

DOT Not regulated

<u>IATA</u> Not regulated

IMDG Not regulated

15. REGULATORY INFORMATION

International Inventories

Chemical Name	TSCA	DSL	NDSL	EINECS	ELINCS	ENCS	IECSC	KECL	PICCS	AICS
Zirconium Oxide	Present	Х		Present		Present	Х	Present	Χ	Х

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

S396, VAR. - C&B Metabond Powders Revision Date: 13-Jan-2015

US Federal Regulations

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355).

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Zirconium Oxide		X	
1314-23-4			

16. OTHER INFORMATION

NFPA **Health Hazards Flammability** Instability Special Hazards Not determined Not determined Not determined Not determined **Personal Protection Health Hazards Physical Hazards Flammability** Not determined Not determined Not determined Not determined

Issue Date:23-Apr-2013Revision Date:13-Jan-2015Revision Note:New format

<u>Disclaimer</u>

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet



Safety Data Sheet

Issue Date: 23-Apr-2013 Revision Date: 13-Jan-2015 Version 1

1. IDENTIFICATION

Product Identifier

Product Name C&B Metabond Enamel Etchant

Other means of identification

SDS # S395

UN/ID No UN1805

Recommended use of the chemical and restrictions on use

Recommended Use Dental Adhesive System.

Details of the supplier of the safety data sheet

Supplier Address

Parkell, Inc. 300 Executive Drive Edgewood, NY 11717

Emergency Telephone Number

Company Phone Number (631) 249-1134

Emergency Telephone (24 hr) INFOTRAC 1-352-323-3500 (International)

1-800-535-5053 (North America)

2. HAZARDS IDENTIFICATION

Appearance Orange-red, syrup-like

liquid

Physical State Liquid

Classification

Skin corrosion/irritation	Category 1 Sub-category C
Serious eye damage/eye irritation	Category 1

Hazards Not Otherwise Classified (HNOC)

May be harmful if swallowed May be harmful in contact with skin

Signal Word Danger

Hazard Statements

Causes severe skin burns and eye damage



Revision Date: 13-Jan-2015

Precautionary Statements - Prevention

Do not breathe dust/fume/gas/mist/vapors/spray

Wash face, hands and any exposed skin thoroughly after handling

Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Response

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing Immediately call a poison center or doctor/physician

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

Wash contaminated clothing before reuse

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Immediately call a poison center or doctor/physician IF SWALLOWED: Call a poison center or doctor/physician

Rinse mouth

Do not induce vomiting

Precautionary Statements - Storage

Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
Phosphoric Acid	7664-38-2	30-80

^{**}If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.**

4. FIRST-AID MEASURES

First Aid Measures

Eye Contact Rinse cautiously with water for several minutes. Remove contact lenses, if present and

easy to do. Continue rinsing. Immediately call a poison center or doctor/physician.

Skin Contact Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

Wash contaminated clothing before reuse.

Inhalation Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not

breathing, give artificial respiration. If breathing is difficult, give oxygen. Immediately call a

poison center or doctor/physician.

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.

Most important symptoms and effects

Symptoms Causes severe skin burns and eye damage. Ingestion can result in severe gastrointestinal

> damage. Inhalation is not a hazard unless misted or heated at high temperature. Mist inhalation may cause coughing, sneezing, salivation, and difficulty breathing. Severe

exposures may lead to chemical pneumonitis.

Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Alcohol resistant foam. Carbon dioxide (CO2). Dry chemical.

Unsuitable Extinguishing Media Not determined.

Specific Hazards Arising from the Chemical

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

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions Use personal protection recommended in Section 8.

Environmental Precautions Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See

Section 12, Ecological Information. See Section 13: DISPOSAL CONSIDERATIONS.

Revision Date: 13-Jan-2015

Methods and material for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so.

Methods for Clean-Up 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.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on Safe Handling Avoid contact with skin, eyes or clothing. Use personal protection recommended in Section

8. Avoid contact with skin, eyes or clothing. Wash face, hands, and any exposed skin

thoroughly after handling. Do not breathe dust/fume/gas/mist/vapors/spray.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep container tightly closed and store in a cool, dry and well-ventilated place. Store away

from direct sunlight, sources of heat, alkalis, sulfides, cyanides, and metal powders. Store

locked up.

Packaging Materials Do not store in metal containers.

Incompatible Materials Reacts vigorously with carbonates, alkalis, and powdered metals to form phosphate salts

and is corrosive (especially at temp. 85°C) to common metals. Liberates hydrogen gas

when reacting with metals.

Revision Date: 13-Jan-2015

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Phosphoric Acid	STEL: 3 mg/m ³	TWA: 1 mg/m ³	IDLH: 1000 mg/m ³
7664-38-2	TWA: 1 mg/m ³	(vacated) TWA: 1 mg/m ³	TWA: 1 mg/m ³
	_	(vacated) STEL: 3 mg/m ³	STEL: 3 mg/m ³

Appropriate engineering controls

Engineering Controls Ensure adequate ventilation, especially in confined areas. Eyewash stations. Showers.

Individual protection measures, such as personal protective equipment

Eye/Face Protection Wear chemical safety goggles and/or face shield for mist or where splashing is possible. Do

not wear contact lenses.

Skin and Body Protection Use rubber gloves and apron.

Respiratory Protection Respiratory protection is not required for normal work procedures, but if misting occurs, use

a high efficiency particulate respirator or self-contained breathing apparatus with full face

piece needed above TLV.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical State Liquid

AppearanceOrange-red, syrup-like liquidOdorNot determinedColorOrange-redOdor ThresholdNot determined

Property Values Remarks • Method

Not determined Hq Melting Point/Freezing Point Not determined **Boiling Point/Boiling Range** 135 °C / 275 °F Flash Point Non-flammable **Evaporation Rate** Not established Flammability (Solid, Gas) Liquid-Not applicable **Upper Flammability Limits** Not established **Lower Flammability Limit** Not established **Vapor Pressure** Not established **Vapor Density** Not established **Specific Gravity** Not established Water Solubility Not determined Solubility in other solvents Not determined **Partition Coefficient** Not determined **Auto-ignition Temperature** Not determined **Decomposition Temperature** Not determined **Kinematic Viscosity** Not determined **Dynamic Viscosity** Not determined **Explosive Properties** Not determined **Oxidizing Properties** Not determined

10. STABILITY AND REACTIVITY

Revision Date: 13-Jan-2015

Reactivity

Not reactive under normal conditions.

Chemical Stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Hazardous Polymerization Hazardous polymerization does not occur.

Conditions to Avoid

Keep separated from incompatible substances. Avoid storage in metal containers, direct sunlight, and sources of heat. Keep out of reach of children.

Incompatible Materials

Reacts vigorously with carbonates, alkalis, and powdered metals to form phosphate salts and is corrosive (especially at temperature 85°C) to common metals. Liberates hydrogen gas when reacting with metals.

Hazardous Decomposition Products

None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Eye Contact Causes severe eye damage.

Skin Contact Causes severe skin burns. May be harmful in contact with skin.

Inhalation Avoid breathing vapors or mists.

Ingestion May be harmful if swallowed.

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Phosphoric Acid 7664-38-2	= 1530 mg/kg (Rat)	= 2730 mg/kg (Rabbit)	> 850 mg/m³ (Rat) 1 h
Polyvinyl alcohol 9002-89-5	> 20 g/kg (Rat)	-	-

Information on physical, chemical and toxicological effects

Symptoms Please see section 4 of this SDS for symptoms.

Revision Date: 13-Jan-2015

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Carcinogenicity

Group 3 IARC components are "not classifiable as human carcinogens".

Chemical Name	ACGIH	IARC	NTP	OSHA
Polyvinyl alcohol 9002-89-5		Group 3		

Legend

IARC (International Agency for Research on Cancer)

Group 3 IARC components are "not classifiable as human carcinogens"

Numerical measures of toxicity

Not determined

12. ECOLOGICAL INFORMATION

Ecotoxicity

The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Component Information

Not available

Persistence/Degradability

Not determined.

Bioaccumulation

Not determined.

Mobility

Not determined

Other Adverse Effects

Not determined

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods

Disposal of Wastes Disposal should be in accordance with applicable regional, national and local laws and

regulations.

Contaminated Packaging Disposal should be in accordance with applicable regional, national and local laws and

regulations.

California Hazardous Waste Status

Chemical Name	California Hazardous Waste Status		
Phosphoric Acid	Corrosive		
7664-38-2			

14. TRANSPORT INFORMATION

Revision Date: 13-Jan-2015

Note Please see current shipping paper for most up to date shipping information, including

exemptions and special circumstances.

<u>DOT</u>

UN/ID No UN1805

Proper Shipping Name Phosphoric acid solution

Hazard Class 8
Packing Group III

IATA

UN/ID No UN1805

Proper Shipping Name Phosphoric acid solution

Hazard Class 8
Packing Group III

IMDG

UN/ID No UN1805

Proper Shipping Name Phosphoric acid solution

Hazard Class 8
Packing Group III

15. REGULATORY INFORMATION

International Inventories

Chemical Name	TSCA	DSL	NDSL	EINECS	ELINCS	ENCS	IECSC	KECL	PICCS	AICS
Phosphoric Acid	Present	Χ		Present		Present	Χ	Present	Χ	Χ

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

US Federal Regulations

CERCLA

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Phosphoric Acid	5000 lb		RQ 5000 lb final RQ
7664-38-2			RQ 2270 kg final RQ

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

CWA (Clean Water Act)

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Phosphoric Acid	5000 lb			Χ

Revision Date: 13-Jan-2015

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Phosphoric Acid	X	X	X
7664-38-2			

16. OTHER INFORMATION

NFPA Instability **Special Hazards Health Hazards** Flammability Not determined HMIS **Health Hazards Flammability Physical Hazards Personal Protection** Not determined Not determined Not determined Not determined

Issue Date: 23-Apr-2013 **Revision Date:** 13-Jan-2015 **Revision Note:** New format

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet