

# Safety Data Sheet

Issue Date: 21-Feb-2013	Revision Date: 13-Jan-2015			Version 1			
1. IDENTIFICATION							
<u>Product Identifier</u> Product Name	Amalgambond Adhesive Agent						
Other means of identification   SDS # \$374							
Recommended use of the chemical and restrictions on useRecommended UseDental Adhesive System.							
Details of the supplier of the safet Supplier Address Parkell, Inc. 300 Executive Drive Edgewood, NY 11717	Parkell, Inc. 300 Executive Drive						
Emergency Telephone Number Company Phone Number Emergency Telephone (24 hr)	(631) 249-1134 INFOTRAC 1-352-323-3500 (International) 1-800-535-5053 (North America)						
	2. HAZARDS IDENTIFICATION						
Appearance Clear, water-white liq	Appearance Clear, water-white liquid Physical State Liquid Odor Mild and pleasant						
Classification							
Skin corrosion/irritation Serious eye damage/eye irritation Skin sensitization		Category 2 Category 2 Category 1					
Hazards Not Otherwise Classified May be harmful in contact with skin	(HNOC)						
<u>Signal Word</u> Warning							
<u>Hazard Statements</u> Causes skin irritation Causes serious eye irritation May cause an allergic skin reaction							

## 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

### **Precautionary Statements - Response**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing If eye irritation persists: Get medical advice/attention IF ON SKIN: Wash with plenty of soap and water Take off contaminated clothing and wash it before reuse

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

#### **Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

# **3. COMPOSITION/INFORMATION ON INGREDIENTS**

Chemical Name	CAS No	Weight-%
2-Hydroxyethyl methacrylate	868-77-9	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. If eye irritation persists: Get medical advice/attention.
Skin Contact	Wash with plenty of soap and water. Take off contaminated clothing and wash it before reuse. If skin irritation or rash occurs: Get medical advice/attention.
Inhalation	Remove to fresh air. Get medical attention if discomfort persists.
Ingestion	Do not induce vomiting without medical advice. Get immediate medical attention.
Inhalation	reuse. If skin irritation or rash occurs: Get medical advice/attention. Remove to fresh air. Get medical attention if discomfort persists.

## Most important symptoms and effects

SymptomsCauses serious eye irritation. Causes skin irritation. May cause an allergic skin reaction.<br/>Prolonged exposure can lead to headaches, nausea, dizziness, and unconsciousness.

## Indication of any immediate medical attention and special treatment needed

**Notes to Physician** Treat symptomatically.

# **5. FIRE-FIGHTING MEASURES**

### Suitable Extinguishing Media

Foam. Carbon dioxide (CO2). Dry chemical.

#### Unsuitable Extinguishing Media Not determined.

#### Specific Hazards Arising from the Chemical

Vapors may travel to source of ignition and flash back. Heat can cause polymerization with rapid release of energy which may rupture the container explosively. Spontaneous polymerization may occur upon prolonged storage.

## Hazardous Combustion Products Carbon oxides.

#### 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. Use water spray to cool exposed containers. Fight fire from safe distance/protected location.

# 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures				
Personal Precautions	Use personal protection recommended in Section 8.			
For Emergency Responders	Evacuate unprotected personnel from area. Remove all sources of ignition.			
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	Contain and collect with an inert absorbent and place into an appropriate container for disposal. Do not release into sewers or waterways.			

# 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. 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. Ground/bond container and receiving equipment. Use explosion proof equipment.

#### Conditions for safe storage, including any incompatibilities

Storage Conditions	Keep container tightly closed and store in a cool, dry and well-ventilated place. Check inhibitor levels every three months.
Incompatible Materials	Reducing agents. Oxidizing agents. UV light.

# 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

## Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
4-Methoxyphenol 150-76-5	TWA: 5 mg/m <sup>3</sup>	(vacated) TWA: 5 mg/m <sup>3</sup>	TWA: 5 mg/m <sup>3</sup>

## 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 goggles or glasses.
Skin and Body Protection	Impervious, neoprene gloves.
Respiratory Protection	If necessary, use a self-contained breathing apparatus.
General Hygiene Considerations	s Handle in accordance with good industrial hygiene and safety practice.

# 9. PHYSICAL AND CHEMICAL PROPERTIES

#### Information on basic physical and chemical properties Pł

Physical State	Liquid		
Appearance	Clear, water-white liquid	Odor	Mild and pleasant
Color	Water-white	Odor Threshold	Not determined
Proporty	Values	Bomarka • Mothod	
Property_ pH	<u>Values</u> Not determined	Remarks • Method	-
•			
Melting Point/Freezing Point	Not determined		
Boiling Point/Boiling Range	Not established	<b>T</b> 01 10	
Flash Point	>300 °C / >572 °F	Tag Closed Cup	
Evaporation Rate	>1	(butyl acetate = 1)	
Flammability (Solid, Gas)	Liquid-not applicable		
Upper Flammability Limits	Not applicable		
Lower Flammability Limit	Not applicable		
Vapor Pressure	0.1 mm HG		
Vapor Density	>1	(Air=1)	
Specific Gravity	1.074	(Water = 1)	
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**

# Reactivity

Not reactive under normal conditions.

#### **Chemical Stability** UNSTABLE.

## **Possibility of Hazardous Reactions**

None under normal processing.

## **Hazardous Polymerization**

Exposure to temperatures above 40°C (104°F), oxidizing agents, reducing agents, peroxides, or amines may cause hazardous polymerization to occur.

# **Conditions to Avoid**

Keep separated from incompatible substances. Avoid heat, sources of ignition, aging, and contamination. Keep out of reach of children.

# **Incompatible Materials**

Reducing agents. Oxidizing agents. UV light.

# Hazardous Decomposition Products

Carbon oxides.

# **11. TOXICOLOGICAL INFORMATION**

## Information on likely routes of exposure

Product Information	
Eye Contact	Causes serious eye irritation.
Skin Contact	Causes skin irritation. May cause an allergic skin reaction. May be harmful in contact with skin.
Inhalation	Avoid breathing vapors or mists.
Ingestion	Do not ingest.

## Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
2-Hydroxyethyl methacrylate 868-77-9	= 5050 mg/kg (Rat)	> 3000 mg/kg (Rabbit)	-
4-Methoxyphenol 150-76-5	= 1600 mg/kg (Rat)	-	-

## 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	Based on the information provided, this product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.

## 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

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
2-Hydroxyethyl methacrylate 868-77-9		213 - 242: 96 h Pimephales promelas mg/L LC50 flow-through 227: 96 h Pimephales promelas mg/L LC50		
4-Methoxyphenol 150-76-5		84.3: 96 h Pimephales promelas mg/L LC50 flow-through 28.5: 96 h Oncorhynchus mykiss mg/L LC50 flow-through	EC50 = 3.66 mg/L 5 min EC50 = 4.30 mg/L 15 min EC50 = 4.61 mg/L 30 min	

# Persistence/Degradability

Not determined.

### **Bioaccumulation**

Not determined.

## **Mobility**

Chemical Name	Partition Coefficient
2-Hydroxyethyl methacrylate 868-77-9	0.47
4-Methoxyphenol 150-76-5	1.34

# **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
<u>Note</u>	Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.
DOT	Not regulated
IATA	Not regulated
IMDG	Not regulated

# **15. REGULATORY INFORMATION**

## International Inventories

Chemical Name	TSCA	DSL	NDSL	EINECS	ELINCS	ENCS	IECSC	KECL	PICCS	AICS
2-Hydroxyethyl methacrylate	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**

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).

## <u>SARA 313</u>

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
4-Methoxyphenol	Х	Х	Х
150-76-5			

# **16. OTHER INFORMATION**

<u>NFPA</u> HMIS	Health Hazards 2 Health Hazards Not determined	Flammability 0 Flammability Not determined	<b>Instability</b> 1 <b>Physical Hazards</b> Not determined	Special Hazards Not determined Personal Protection Not determined
Issue Date: Revision Date: Revision Note:	21-Feb-2013 13-Jan-2015 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: 21-Feb-2013	Revision Date:	13-Jan-2015		Version	1
	1. IDENT	IFICATION			
Product Identifier Product Name	Amalgambond Base				
Other means of identification SDS #	S372				
UN/ID No	UN1247				
Recommended use of the chemical and restrictions on useRecommended UseDental Adhesive System.					
Details of the supplier of the safety data sheet Supplier Address Parkell, Inc. 300 Executive Drive Edgewood, NY 11717					
<u>Emergency Telephone Number</u> Company Phone Number Emergency Telephone (24 hr)	(631) 249-1134 INFOTRAC 1-352-323-3 1-800-535-5053 (North A	· · · · · · · · · · · · · · · · · · ·			

# 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 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-%
Chemical Name		weight-76
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. 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

SymptomsCauses serious eye irritation and skin irritation. May cause an allergic skin reaction.<br/>Ingestion may cause headache, dizziness, nausea, tinnitus, dyspnea, etc. Inhalation can<br/>cause irritation of the upper respiratory tract and mucous membranes; at high<br/>concentrations, can cause symptoms similar to those which may be experienced upon<br/>ingestion.

## Indication of any immediate medical attention and special treatment needed

Notes to Physician

Treat symptomatically.

# **5. FIRE-FIGHTING MEASURES**

#### **Suitable Extinguishing Media**

Foam. Dry chemical. 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 80-62-6	STEL: 100 ppm TWA: 50 ppm	TWA: 100 ppm TWA: 410 mg/m <sup>3</sup> (vacated) TWA: 100 ppm (vacated) TWA: 410 mg/m <sup>3</sup>	IDLH: 1000 ppm TWA: 100 ppm TWA: 410 mg/m <sup>3</sup>
Polymerizable Methacrylates	TWA: 5 mg/m <sup>3</sup>	(vacated) TWA: 5 mg/m <sup>3</sup>	TWA: 5 mg/m <sup>3</sup>

## 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		
Appearance	Colorless, transparent liquid	Odor	Not determined
Color	Colorless, transparent	Odor Threshold	Not determined
<b>–</b> <i>i</i>			
Property	Values	Remarks • Method	
рН	Not determined		
Melting Point/Freezing Point	Not determined		
Boiling Point/Boiling Range	101 °C / 214 °F		
Flash Point	10 °C / 50 °F	Tag Closed Cup	
Evaporation Rate	Not applicable		
Flammability (Solid, Gas)	Liquid-not applicable		
Upper Flammability Limits	8.2%		
Lower Flammability Limit	1.7%		
Vapor Pressure	40 mm HG		
Vapor Density	3.45	(Air=1)	
Specific Gravity	0.944	(Water = 1)	
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**

# 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 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.

## **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 Contact	Causes skin irritation. May cause an allergic skin reaction.
Inhalation	May cause respiratory irritation. May be harmful if inhaled.
Ingestion	Do not ingest.

## Component Information

Chemical Name	Chemical Name Oral 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	
Polymerizable Methacrylates	= 1600 mg/kg (Rat)	-	-	

## 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 microorganisms	Crustacea
Methyl methacrylate	170: 96 h	243 - 275: 96 h Pimephales		69: 48 h Daphnia magna
80-62-6	Pseudokirchneriella	promelas mg/L LC50		mg/L EC50
	subcapitata mg/L EC50	flow-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		
Polymerizable Methacrylates		84.3: 96 h Pimephales	EC50 = 3.66 mg/L 5 min	
		promelas mg/L LC50	EC50 = 4.30 mg/L 15 min	
		flow-through 28.5: 96 h	EC50 = 4.61 mg/L 30 min	
		Oncorhynchus mykiss mg/L		
		LC50 flow-through		

# Persistence/Degradability

Not determined.

# Bioaccumulation Not determined.

# **Mobility**

Chemical Name	Partition Coefficient
Methyl methacrylate 80-62-6	0.7
Polymerizable Methacrylates	1.34

# **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.

# **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.

pollutant

DOT	
UN/ID No	UN1247
Proper Shipping Name	Methyl methacrylate monomer, stabilized
Hazard Class	3
Packing Group	II
IATA	
UN/ID No	UN1247
Proper Shipping Name	Methyl methacrylate monomer, stabilized
Hazard Class	3
Packing Group	Ш
IMDG	
UN/ID No	UN1247
Proper Shipping Name	Methyl methacrylate monomer, stabilized
Hazard Class	3
Packing Group	11
Marine Pollutant	This material may meet the definition of a marine p

# **15. REGULATORY INFORMATION**

## International Inventories

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



# Safety Data Sheet

Issue Date: 21-Feb-2013	Revision Date: 1	13-Jan-2015		Version
	1. IDENTII	FICATION		
Product Identifier				
Product Name	Amalgambond Dentin Activ	vator		
Other means of identification				
SDS #	S394			
UN/ID No	UN2582			
Recommended use of the chemic	al and restrictions on use			
Recommended Use	Dental Adhesive System.			
Details of the supplier of the safet	v 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 1-352-323-350			
	1-800-535-5053 (North An	nerica)		
	2. HAZARDS ID			
Appearance Green-yellow, thick li	quid	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				
<u>Signal Word</u> Danger				
Daligei				
Hazard Statements	lamage			
<u>Hazard Statements</u> Causes severe skin burns and eve o				
Causes severe skin burns and eye o	lanaye			
Causes severe skin burns and eye of	amaye			
Causes severe skin burns and eye o	amaye			
Hazard Statements Causes severe skin burns and eye of Flammable liquid and vapor	amaye			
Causes severe skin burns and eye o	amaye			

# 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 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
F	Citric Acid 77-92-9	-	15 mg / m3 (Total)	-
	Iron(III) Chloride, Ferric Chloride 7705-08-0	TWA: 1 mg/m <sup>3</sup> Fe	(vacated) TWA: 1 mg/m <sup>3</sup> Fe	TWA: 1 mg/m <sup>3</sup> 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 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	Liquid		
Appearance	Green-yellow, thick liquid	Odor	Not determined
Color	Green-yellow	Odor Threshold	Not determined
Property	<u>Values</u>	Remarks • Method	
рН	Not determined		
Melting Point/Freezing Point	Not determined		
Boiling Point/Boiling Range	100 °C / 212 °F		
Flash Point	>38 °C / >100 °F	Tag Closed Cup	
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**

# 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 Contact	Causes severe eye damage.
Skin Contact	Causes severe skin burns.
Inhalation	Avoid breathing vapors or mists.
Ingestion	May 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		Group 3		
9002-89-5				

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

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 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
Iron(III) Chloride, Ferric Chloride	Toxic
7705-08-0	Corrosive

# **14. TRANSPORT INFORMATION**

## Note

Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

# DOT

UN/ID No Proper Shipping Name Hazard Class Packing Group	UN2582 Ferric chloride solution 8 III
IATA UN/ID No Proper Shipping Name Hazard Class Packing Group	UN2582 Ferric chloride solution 8 III
IMDG UN/ID No Proper Shipping Name Hazard Class Packing Group	UN2582 Ferric chloride solution 8 III

# **15. REGULATORY INFORMATION**

## International Inventories

Chemical Name	TSCA	DSL	NDSL	EINECS	ELINCS	ENCS	IECSC	KECL	PICCS	AICS
Citric Acid	Present	Х		Present		Present	Х	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

# <u>SARA 313</u>

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			Х

# 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	Х	Х	Х
7705-08-0			

# **16. OTHER INFORMATION**

<u>NFPA</u> HMIS	Health Hazards 1 Health Hazards Not determined	Flammability 2 Flammability Not determined	Instability 0 Physical Hazards Not determined	Special Hazards Not determined Personal Protection Not determined
Issue Date: Revision Date: Revision Note:	21-Feb- 13-Jan- New for	2015		

**Disclaimer** 

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## **End of Safety Data Sheet**



# **Safety Data Sheet**

Issue Date: 21-Feb-2013

Revision Date: 13-Jan-2015

Version 1

# **1. IDENTIFICATION**

Product Identifier Product Name

Amalgambond HPA Powder

Other means of identification SDS #

Recommended use of the chemical and restrictions on useRecommended UseDental Adhesive System.

S376

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 Emergency Telephone (24 hr) (631) 249-1134 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-%
Polymethylmethacrylate (PMMA)	Proprietary	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.

#### 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. Carbon dioxide (CO2).

#### 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 Materials	None known based on information supplied.	

# 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

## Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Zirconium Oxide	STEL: 10 mg/m <sup>3</sup> Zr	TWA: 5 mg/m <sup>3</sup> Zr	IDLH: 25 mg/m <sup>3</sup> Zr
1314-23-4	TWA: 5 mg/m <sup>3</sup> Zr	(vacated) TWA: 5 mg/m <sup>3</sup> Zr	TWA: 5 mg/m <sup>3</sup> except Zirconium
	_	(vacated) STEL: 10 mg/m <sup>3</sup> Zr	tetrachloride Zr
			STEL: 10 mg/m <sup>3</sup> 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		
Appearance	Tan powder	Odor	Not determined
Color	Tan	Odor Threshold	Not determined
Description	Malaaa	Demoster - Methed	
Property	<u>Values</u>	<u>Remarks • Method</u>	
рН	Not determined		
Melting Point/Freezing Point	Not determined		
Boiling Point/Boiling Range	Not applicable		
Flash Point	None		
Evaporation Rate	Not applicable		
Flammability (Solid, Gas)	Not determined		
Upper Flammability Limits	Not applicable		
Lower Flammability Limit	Not applicable		
Vapor Pressure	Not applicable		
Vapor Density	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		
oxidizing i roporties	Not determined		

# **10. STABILITY AND REACTIVITY**

## 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

Carbon monoxide. Carbon dioxide (CO2).

# **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

## 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
<u>Note</u>	Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.
DOT	Not regulated
IATA	Not regulated
IMDG	Not regulated

**15. REGULATORY INFORMATION** 

## International Inventories

Chemical Name	TSCA	DSL	NDSL	EINECS	ELINCS	ENCS	IECSC	KECL	PICCS	AICS
Polymethylmethacrylate (PMMA)	Present	Х				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**

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		Х	
1314-23-4			

# **16. OTHER INFORMATION**

<u>NFPA</u>	Health Hazards	<b>Flammability</b> 0	<b>Instability</b> 0	Special Hazards Not determined
<u>HMIS</u>	Health Hazards Not determined	Flammability Not determined	Physical Hazards Not determined	Personal Protection Not determined
Issue Date:	21-Feb-	2013		
Revision Date:	13-Jan-2	2015		
Revision Note:	New for	mat		

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## End of Safety Data Sheet

# 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 80-62-6	Х	X	Х
Polymerizable Methacrylates	Х	X	Х

# **16. OTHER INFORMATION**

<u>NFPA</u> HMIS	Health Hazards 2 Health Hazards Not determined	Flammability 3 Flammability Not determined	<b>Instability</b> 2 <b>Physical Hazards</b> Not determined	Special Hazards Not determined Personal Protection Not determined
Issue Date: Revision Date: Revision Note:	21-Feb-2013 13-Jan-2015 New format			

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**End of Safety Data Sheet**