SAFETY DATA SHEETS

This SDS packet was issued with item:

074283305

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

074283149 074283156 074283164 074283172 074283180 074283198 074283297

Patterson Item Number: 74283149
Associated Item Numbers: 74283149,74283149
Product Name: Maxcem Paste Products Indirect Cement (Base and Catalyst Paste)
Actio MSDS ID: 540972

****
SECTION 1 : Chemical Product and Company Identification
****
MSDS Name:
Maxcem Elite Permanent Dental Cement
Manufacturer Name:
Kerr Corporation
Address:
1717 West Collins Avenue Orange, CA 92867-5422
Business Phone:
1-800-KERR-123
For information in North America, call:
1-800-KERR-123
For emergencies in the US, call CHEMTREC:
800-424-9300
Manufacturer MSDS Revision Date:
December, 2007
HMIS
Health Hazard:
2
Fire Hazard:
1
Reactivity:
2
rsonal Protection:

HMIS(Hazardous Material Identification System) Rating:
PPE-Gloves and safety glasses. Hazard information relates only to uncured material.
[HMIS Index:
4 - Severe Hazard; 3 -Serious Hazard; 2 - Moderate Hazard; 1 - Slight Hazard; 0 - Minimum Hazard]

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SECTION 2 : Hazardous Ingredients/Identity Information
****

Chemical Name	CAS#	Percent
Uncured Methacrylate	109-16-0 Ester Monomers	19-40%

OSHA PEL TWA:
Not Applicable
ACGIH TLV TWA:
Not Applicable
Other Ingredients:
Non-hazardous inert mineral fillers, Ytterbium Fluoride, activators, stabilizers and colorants

****
CTION 3 : Physical And Chemical Characteristics
****
Physical State/Appearance:
Paste
Color:

Colored
Odor:
Slight peppermint odor.
Vapor Pressure:
(mm Hg):
Not Determined
Vapor Density:
(AIR = 1):
Not Determined
Boiling Point:
Not Determined
Melting Point:
Not Determined
Solubility:
In Water:
Insoluble
Specific Gravity:
(H2O = 1):
2.5
FlashPoint:
Not Determined
Upper Flammable Explosive Limit:
Not Determined
Lower Flammable Explosive Limit:
Not Determined
Reactivity in Water:
Not Applicable

****
SECTION 4 : Fire And Explosion Hazards
****
Flash Point:
Not Determined
Flash Point Method:
Not Determined
Upper Flammable or Explosive Limit:
Not Determined
Lower Flammable or Explosive Limit:
Not Determined
Extinguishing Media:
Chemical foam, CO2, dry chemical
Fire Fighting Instructions:
Wear self contained breathing apparatus.
Unusual Fire Hazards:
Heat can cause polymerization with rapid release of energy.

****
SECTION 5 : Health Hazards
****
Uncured Methacrylate Ester Monomers:
Route of Exposure:
Skin, Eyes, Inhalation, Ingestion
Potential Health Effects:

Eye Contact:
May cause irritation and damage if not removed promptly.
Skin Contact:
Prolonged or repeated exposure to uncured material may cause irritation or skin rash especially in sensitive individuals.
Inhalation:
Prolonged or excessive inhalation may cause respiratory tract irritation.
Ingestion:
Uncured material may be harmful if swallowed.
Carcinogenicity:

OSHA Designation:
Regulated:
No
NTP Designation:
No
IARC Designation:
Monographs:
No

****
SECTION 6 : Emergency And First Aid Procedures
****
Eye Contact:
Flush with water for 15 minutes including under eyelids.
Skin Contact:
Wash thoroughly with soap and water.
Inhalation:
Remove to fresh air. Get medical attention if discomfort persists.
Ingestion:
Rinse mouth out with water. Do not induce vomiting. Seek medical attention.

****
SECTION 7 : Reactivity Data
****
Chemical Stability:
Stable if stored as directed.
Conditions to Avoid:
Heat, light, aging and sources of contamination.
Incompatibilities with Other Materials:

(Material to Avoid):
Reducing and oxidizing agents, peroxides and amines.
Reactivity:

In Water:
Not Applicable
Hazardous Polymerization:
May Occur
Hazardous Decomposition Products:
Oxides of carbon

****
SECTION 8 : Precautions For Safe Handling
****
Spill Cleanup Measures:

Absorb spills with inert material. Keep spilled material out of sewers.

Storage:

Store in a cool, dry place away from heat light and ignition.

Hygiene Practices:

Handle in accordance with good personal hygiene and safety practices. These practices include avoiding unnecessary exposure to uncured material.

Waste Disposal:

Unpolymerized (uncured) material may be RCRA hazardous waste. Incinerate uncured material in accordance with all federal, state and local regulations.

Transportation Information:

Not regulated.

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SECTION 9 : Control Measures

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Ventilation System:

Mechanical (General):

Good general ventilation recommended.

Local Exhaust:

Good general ventilation should be sufficient to control airborne levels of vapors released by uncured material.

Hand Protection Description:

Protective Gloves:

Protective gloves recommended when contacting uncured material.

Eye/Face Protection:

Safety glasses recommended.

Protective Clothing/Body Protection:

Not Applicable

Respiratory Protection:

(Specify Type):

Avoid prolonged or excessive breathing of vapors of uncured material.

Work/Hygiene Practices:

Handle in accordance with good personal hygiene and safety practices. These practices include avoiding unnecessary exposure to uncured material.

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SECTION 10 : Other Information

****

Uncured Methacrylate Ester Monomers:

OSHA 29 CFR 1200:

Note:

This MSDS was prepared in accordance with the requirements of the OSHA Hazard Communication Standard (29 CFR 1910.1200) and is to be used only for this product.

HMIS:

Health Hazard:

2

SAFETY DATA SHEET

Section 1. Product And Company Identification

Product Name: Maxcem Elite
Product Use: Dental product: Permanent cement

Manufacturer: Kerr Corporation
1717 W. Collins Ave.
Orange, CA 92867-5422
U.S.A.

Information Phone Number: 1-800-841-1428 (Customer Service)

Chemical Emergency Phone Number (Chemical Spills, Leaks, Fire, Exposure or Accident only):
CHEMTREC 1-800-424-9300 (in the US) 1-703-527-3887 (Outside the US)

SDS Date of Preparation/Revision: April 12, 2019

Section 2. Hazards Identification

GHS Classification:
Skin Irritation Category 2
Eye Irritation Category 2A
Specific Target Organ Toxicity Single Exposure Category 3

Label Elements:
Warning!

Hazard Phrases
Causes skin irritation.
Causes serious eye irritation.
May cause respiratory irritation.

Precautionary Phrases:
Avoid breathing vapors.
Wash hands thoroughly after handling.
Use only outdoors or in a well-ventilated area.
Contaminated work clothing should not be allowed out of the workplace.
Wear protective gloves and eye or face protection.
IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical attention.
Take off contaminated clothing and wash it before reuse.
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor if you feel unwell.
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 attention.

Store locked up.
Dispose of contents and container in accordance with local and national regulations.

Section 3. Composition/Information on Ingredients

Component	CAS No.	Amount
Barium aluminoborosilicate glass	65997-17-3	30-60%
Ytterbium fluoride	13760-80-0	10-30%
1,6-hexanediyl bismethacrylate	6606-59-3	5-10%
2-hydroxy-1,3-propanediyl bismethacrylate	1830-78-0	5-10%
7,7,9(or 7,9,9)-trimethyl-4,13-dioxo-3,14-dioxa-5,12-diazahexadecane-1,16-diyl bismethacrylate	72869-86-4	1-5%
3-trimethoxysilylpropyl methacrylate	2530-85-0	1-5%
Fumed silica	68909-20-6	1-5%

Section 4. First Aid Measures

Inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if you feel unwell.

Skin Contact: Remove contaminated clothing and shoes. Flush skin thoroughly with water for several minutes. Get medical attention if irritation or rash occurs. Launder clothing before re-use.

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

Ingestion: If swallowed, rinse mouth with water (only if the person is conscious). Call a POISON CENTER or doctor if you feel unwell.

Most important symptoms and effects, acute and delayed: Causes skin irritation and serious eye irritation. Inhalation may cause respiratory irritation. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure. Ingestion may be irritating to mouth, throat and stomach.

Indication of immediate medical attention and special treatment, if needed: Treat symptomatically.

Section 5. Fire Fighting Measures

Suitable (and Unsuitable) Extinguishing Media: Use any media appropriate for the surrounding fire. Cool fire exposed containers with water.

Specific Hazards Arising from the Chemical: Combustion may produce carbon dioxide, carbon monoxide, nitrogen oxides, phosphorus oxides, halogenated compounds, and metal oxides.

Special Protective Equipment and Precautions for Fire-fighters: Firefighters should wear positive pressure self-contained breathing apparatus and full protective clothing for fires in areas where chemicals are used or stored. Cool fire-exposed containers with water. Contain water used in firefighting from entering sewers or natural waterways.

Section 6: Accidental Release Measures

Personal precautions, Protective equipment, and Emergency procedures: Evacuate spill area and keep unprotected personnel away. Avoid contact with eyes, skin and clothing. Wear appropriate protective clothing and equipment. Avoid breathing dust and vapors from dried paste.

Environmental Precautions: Avoid releases to the environment. Report spill as required by local and federal regulations.

Methods and Materials for Containment and Cleaning up: Prompt cleanup and removal are necessary. Absorb spills with an inert material and place in an appropriate waste disposal container.

Section 7. Handling and Storage

Precautions for Safe Handling: Prevent contact with eyes, skin and clothing. Always wear impervious gloves, chemical safety goggles and protective clothing when handling this material. Wash thoroughly with soap and water after handling. Do not eat, drink or smoke in the work area. Do not breathe dust or vapors. Use with adequate ventilation. Remove and wash contaminated clothing before reuse.

Empty containers retain product residues which can be hazardous. Follow all SDS precautions when handling empty containers.

Conditions for Safe Storage, Including any Incompatibilities: Store in a cool, dry, well-ventilated area away from direct sunlight. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers.

Section 8. Exposure Controls / Personal Protection

Exposure Limits

Chemical	Exposure Limit
Barium aluminoborosilicate glass	10 mg/m^3 TWA ACGIH TLV (total) 5 mg/m^3 TWA ACGIH TLV (inhalable fraction)
Ytterbium fluoride	2.5 mg/m^3 TWA ACGIH TLV
1,6-hexanediyl bismethacrylate	None Established
2-hydroxy-1,3-propanediyl bismethacrylate	None Established
7,7,9(or 7,9,9)-trimethyl-4,13-dioxo-3,14-dioxa-5,12-diazahexadecane-1,16-diyl bismethacrylate	None Established
3-trimethoxysilylpropyl methacrylate	None Established
Fumed silica (as amorphous silica)	10 mg/m^3 TWA ACGIH TLV (inhalable) 3 mg/m^3 TWA ACGIH TLV (respirable)

Appropriate Engineering Controls: Use with adequate general or local exhaust ventilation to maintain exposure levels below the occupational exposure limits.

Respiratory Protection: None under normal use conditions with adequate ventilation. For operations where the occupational exposure limits are exceeded, an approved respirator with particulate cartridges

is recommended. Equipment selection depends on contaminant type and concentration. Select in accordance with applicable regulations and good industrial hygiene practice. For firefighting, use self-contained breathing apparatus.

Hand protection: Impervious gloves are suggested to prevent skin contact. Contact your glove supplier for selection assistance.

Eye Protection: Chemical safety goggles are recommended if contact is possible.

Skin Protection: Wear protective clothing as needed to avoid skin contact and contamination of personal clothing.

Hygiene measures: Suitable eye and skin washing facilities should be available in the work area.

Section 9. Physical and Chemical Properties

Appearance:	Various colored paste	**Odor:**	Slight peppermint-like
Odor Threshold:	Not available	**pH:**	Not available
Melting/Freezing Point:	Not available	**Boiling Point/Range:**	Not available
Flash Point:	Not flammable	**Evaporation Rate:**	Not available
Flammability: (Solid, Gas)	Not applicable	**Flammability Limits:**	LEL: Not applicable UEL: Not applicable
Vapor Pressure:	Not available	**Vapor Density:**	Not available
Relative Density:	2	**Solubilities:**	Insoluble in water
Partition Coefficient: (N-Octanol/Water)	Not available	**Autoignition Temperature:**	Not available
Decomposition Temperature:	Not available	**Viscosity:**	Not available

Section 10. Stability and Reactivity

Reactivity: The product is not expected to be reactive.
Chemical Stability: Stable under normal storage and handling conditions.
Possibility of Hazardous Reactions: Hazardous polymerization will not occur.
Conditions to avoid: Avoid heat and direct sunlight. Heat can cause polymerization with rapid release of energy.
Incompatible Materials: Oxidizing materials, reducing materials, peroxides, and amines.
Hazardous decomposition products: None if stored normally.

Section 11. Toxicological Information

Potential Health Effects:
Inhalation: May cause respiratory irritation. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
Skin Contact: Causes skin irritation.
Eye Contact: Causes serious eye irritation.
Ingestion: May be irritating to mouth, throat and stomach.

Chronic Hazards: None expected.

Skin Sensitization: Product is categorized in Grade I (weak sensitizer) in Kligman test.

Respiratory Sensitization: No data available. This product is not expected to cause respiratory sensitization.

Germ Cell Mutagenicity: None of the components have shown mutagenic activity in animal studies.

Carcinogen: None of the components are listed as a carcinogen or potential carcinogen by IARC, NTP, ACGIH, or OSHA.

Developmental / Reproductive Toxicity: None of the components have been shown to cause reproductive or developmental toxicity.

Specific Target Organ Toxicity (Single Exposure): Single exposure to 1,6-hexanediyl bismethacrylate, 2-hydroxy-1,3-propanediyl bismethacrylate, and 7,7,9(or 7,9,9)-trimethyl-4,13-dioxo-3,14-dioxa-5,12-diazahexadecane-1,16-diyl bismethacrylate may cause respiratory tract irritation.

Specific Target Organ Toxicity (Repeated Exposure): No data available.

Aspiration Toxicity: Not an aspiration hazard.

Acute Toxicity Values:
Ytterbium fluoride: Oral rat LD50: >2000 mg/kg
3-trimethoxysilylpropyl methacrylate: LD50 Oral rat: 23504 mg/kg
Fumed silica: Oral rat LD50: >5000 mg/kg, Inhalation rat LC0: >0.139 mg/L/4hr (no mortality), Skin rat LD50: >5000 mg/kg

Section 12. Ecological Information

Toxicity:
Ytterbium fluoride: 48 hr EC50 Daphnia magna: >0.52 mg/L
7,7,9(or 7,9,9)-trimethyl-4,13-dioxo-3,14-dioxa-5,12-diazahexadecane-1,16-diyl bismethacrylate: 72 hr EC50 Desmodesmus subspicatus 0.6 mg/L; 48 hr EC50 Daphnia magna 1.2 mg/L

Persistence and degradability: Biodegradation is not applicable to inorganic substances.

Bioaccumulative Potential:
7,7,9(or 7,9,9)-trimethyl-4,13-dioxo-3,14-dioxa-5,12-diazahexadecane-1,16-diyl bismethacrylate: log P_{ow} 3, potential for bioaccumulative is low.
3-trimethoxysilylpropyl methacrylate: log P_{ow} 2.1, potential for bioaccumulative is low.

Mobility in Soil: No data available.

Other Adverse Effects: No data available.

Section 13. Disposal Considerations

Disposal: For unused product, dispose of in accordance with Federal and local regulations.

Container Disposal: Dispose of empty container in accordance with Federal and local regulations.

Section 14. Transport Information

	UN Number	UN Proper Shipping Name	Hazard Class(s)	Packing Group	Environmental Hazards
US DOT	None	Not Regulated	None	None	None
EU ADR/RID	None	Not Regulated	None	None	None
IMDG	None	Not Regulated	None	None	None
IATA/ICAO	None	Not Regulated	None	None	None

Special Precautions for User: None identified

Transport in Bulk According to Annex II MARPOL 73/78 and the IBC Code: Not applicable – product is transported only in packaged form.

Section 15. Regulatory Information

U.S. Federal Regulations:

EPA SARA 311/312 Hazard Classification: Refer to Section 2 for OSHA Hazard Classification.

EPA SARA 313: This Product Contains the Following Chemicals Subject to Annual Release Reporting Requirements Under SARA Title III, Section 313 (40 CFR 372): None

Protection Of Stratospheric Ozone: This product is not known to contain or to have been manufactured with ozone depleting substances as defined in 40 CFR Part 82, Appendix A to Subpart A.

CERCLA SECTION 103: This product is not subject to CERCLA reporting requirements; however, many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.

International Inventories

US EPA TSCA Inventory: All of the components of this product are listed on the Toxic Substances Control Act (TSCA) Chemical Substances Inventory or exempt.

Canada CEPA: All of the components of this material are listed on the DSL or exempt.

Section 16. Other Information

Effective Date: April 12, 2019
Supersedes Date: October 27, 2014
Revision Summary: All Sections – New SDS format

The information and recommendations set forth herein are taken from sources believed to be accurate as of the date of preparation, however, KERR Corporation makes no warranty with respect to the accuracy or suitability of the recommendations, and assumes no liability to any use thereof.