

Material Safety Data Sheet Cover-Sheet – This page provides additional New Zealand specific information for this product and must be read in conjunction with the Safety Data Sheet (SDS) attached

Product Name: Simplicity Kit (Maxcem, SimpliShade, OptiBond Universal)

Manufacturer: Kerr Corporation

SDS Expiry: 10 July 2025

Supplier Details: Henry Schein New Zealand
243-249 Bush Road, Rosedale, Auckland, 0632
PO Box 101 140, North Shore, Auckland 0745
Ph. 0800 808 855
www.henryschein.co.nz

Emergency Contacts: Poisons/Hazardous Chemical Info Centre –
0800POISON/0800764766 (24 Hours)
Phone 111 for Fire, Ambulance or Police

HSNO Class/Category: 3 / 6

HSNO Group Standard: Dental Products Flammable Group Standard 2020 HSR002556

Statements/Pictograms: As per attached Safety Data Sheet (SDS)

Date Prepared: This coversheet was prepared – June 2023

This SDS coversheet has been produced by Henry Schein NZ and has been prepared in accordance with NZ EPA advice on making overseas SDS compliant to HSNO Act. The above information is based on the present state of our knowledge of the product at the time of publication. It is given in good faith, no warranty is implied with respect to the quality or the specifications of the product. Users must satisfy that the product is entirely suitable for their purpose. The SDS and this coversheet may be revised from time to time, please ensure you have a current copy.

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.

SAFETY DATA SHEET

Section 1. Product And Company Identification

Product Name: SimpliShade

Product Use: Dental product: Composite

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: March 9, 2020

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 an allergic skin reaction.

May cause respiratory irritation.

Precautionary Phrases:

Avoid breathing vapor.

Wash hands thoroughly after handling.

Use only outdoors or in a well-ventilated area.

Wear eye protection, protective gloves.

IF ON SKIN: Wash with plenty of water. If skin irritation occurs: Get medical attention. Take off contaminated clothing and wash it before reuse.

IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/physician 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 advice/attention.

Store in a well-ventilated place. Keep cool.

Store locked up.

Dispose of contents and container in accordance with all local, regional, national and international regulations.

Section 3. Composition/Information on Ingredients

Component	CAS No.	Amount
Poly(oxy-1,2-ethanediyl), α,α' -[(1-methylethylidene)di-4,1-phenylene]bis[ω -[(2-methyl-1-oxo-2-propen-1-yl)oxy]-	41637-38-1	5-20%
Ytterbium Fluoride	13760-80-0	< 10%
2,2'-ethylenedioxydiethyl dimethacrylate	109-16-0	< 5%

Section 4. First Aid Measures

Inhalation: Immediately remove victim to fresh air. If breathing is difficult, oxygen should be administered by qualified personnel. If breathing has stopped, administer artificial respiration. Get immediate medical attention.

Skin Contact: Flush thoroughly with water. Get medical attention if irritation or symptoms of exposure develop. Remove and launder contaminated clothing before re-use.

Eye Contact: Rinse thoroughly with water. Get medical attention if irritation occurs and persists.

Ingestion: Do NOT induce vomiting. Rinse mouth with water. Never give anything by mouth to an unconscious or convulsing person. Keep the victim calm and warm. Get immediate medical attention.

Most important symptoms and effects, acute and delayed: Causes serious eye irritation and skin irritation. May cause respiratory irritation.

Indication of immediate medical attention and special treatment, if needed: Treat symptomatically. In all cases of doubt, or when symptoms persist, seek medical attention.

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, 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.

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
Poly(oxy-1,2-ethanediyl), α,α' -[(1-methylethylidene)di-4,1-phenylene]bis[ω -[(2-methyl-1-oxo-2-propen-1-yl)oxy]-	None Established
Ytterbium Fluoride	2.5 mg/m ³ PEL
2,2'-ethylenedioxydiethyl dimethacrylate	None Established

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

Respiratory Protection: In operations where exposure levels are exceeded, an approved dust/mist respirator or supplied air respirator should be used. Equipment selection depends on contaminant type and concentration. Select in accordance with applicable regulations and good industrial hygiene practice.

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:	Fruity ester
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:	1.97	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: None under recommended storage and handling conditions.

Incompatible Materials: Oxidizing materials and reducing materials, amine, peroxide.

Hazardous decomposition products: None if stored normally.

Section 11. Toxicological Information

Potential Health Effects:

Inhalation: May cause respiratory irritation.

Skin Contact: Causes skin irritation.

Eye Contact: Causes serious eye irritation.

Ingestion: May cause gastrointestinal irritation and nausea.

Chronic Hazards: None expected.

Skin Sensitization: No adverse effects expected. Components are not sensitizers.

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

Germ Cell Mutagenicity: None of the components are mutagenic.

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): May cause respiratory irritation.

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

Aspiration Toxicity: Not an aspiration hazard.

Acute Toxicity Values:

Poly(oxy-1,2-ethanediyl), α,α' -[(1-methylethylidene)di-4,1-phenylene]bis[ω -[(2-methyl-1-oxo-2-propen-1-yl)oxy]-: LD50 Oral rat: > 2000 mg/kg; LD50 Dermal rat: > 2000 mg/kg
2,2'-ethylenedioxydiethyl dimethacrylate: LD50 Oral rat: 10837 mg/kg

Section 12. Ecological Information

Toxicity:

Poly(oxy-1,2-ethanediyl), α,α' -[(1-methylethylidene)di-4,1-phenylene]bis[ω -[(2-methyl-1-oxo-2-propen-1-yl)oxy]-: 96 hr LD50 fish > 100 mg/L; 48 hr EC50 Daphnia magna > 100 mg/L; 72 hr Algae > 100 mg/L

This product is classified as toxic to the aquatic environment with long-term adverse effects. Releases to the environment should be avoided.

Persistence and degradability: 2,2'-ethylenedioxydiethyl dimethacrylate is readily diodegradable.

Bioaccumulative Potential:

Poly(oxy-1,2-ethanediyl), α,α' -[(1-methylethylidene)di-4,1-phenylene]bis[ω -[(2-methyl-1-oxo-2-propen-1-yl)oxy]-: log P_{ow} 3.43 to 5.62, potential for bioaccumulative is high
2,2'-ethylenedioxydiethyl dimethacrylate: log P_{ow} 1.88, 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	UN3082	Environmentally hazardous substance, liquid, n.o.s.	9	III	Yes
EU ADR/RID	UN3082	Environmentally hazardous substance, liquid, n.o.s.	9	III	Yes

IMDG	UN3082	Environmentally hazardous substance, liquid, n.o.s.	9	III	Yes
IATA/ICAO	UN3082	Environmentally hazardous substance, liquid, n.o.s.	9	III	Yes

Special Precautions for User: Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

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.

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.

Canadian Regulations:

Canadian Environmental Protection Act: All of the components in this product are listed on the Domestic Substances List (DSL) or exempt.

National Pollutant Release Inventory (NPRI): This Product Contains the Following Chemicals Subject to Annual Release Reporting Requirements NPRI: None.

International Inventories

Australia: All of the components in this product are listed on the Australian Inventory of Chemical Substances (AICS) or exempt.

China: All of the components in this product are listed on the Inventory of Existing Chemical Substances in China (IECSC) or exempt.

European Union: All the components in this product are listed on the EINECS inventory or exempt.

Korea: All of the components in this product are listed on the Korean Existing Chemicals List (KECL) or

exempt.

New Zealand: All of the components in this product are listed on the New Zealand Inventory of Chemicals (NZIoC) or exempt.

Section 16. Other Information

Effective Date: March 9, 2020

Supersedes Date: New SDS

Revision Summary: New SDS

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.

1. Identification

Product name: OptiBond® Universal

Recommended use: Bonding agent

Restrictions on use: None known

Supplier: Kerr Corporation
1717 W. Collins Ave.
Orange, CA 92867-5422 - U.S.A.
T 1-800-841-1428 (Customer Service)

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

Issue date: 10/07/2020

2. Hazard(s) identification

Classification:

Physical hazards	Health hazards
Flammable liquids, Category 2	Skin corrosion/irritation, Category 2 Eye irritation, Category 2 Skin sensitisation, Category 1 Specific target organ toxicity — Single exposure, Category 3, Narcosis

GHS US labelling:

Danger!



Hazard statements (GHS US)	Precautionary statements (GHS US)
H225 - Highly flammable liquid and vapour. H315 - Causes skin irritation. H317 - May cause an allergic skin reaction. H319 - Causes serious eye irritation. H336 - May cause drowsiness or dizziness.	P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P233 - Keep container tightly closed. P240 - Ground/Bond container and receiving equipment. P241 - Use explosion-proof electrical, lighting, ventilating equipment. P242 - Use only non-sparking tools. P243 - Take precautionary measures against static discharge. P261 - Avoid breathing mist, vapors. P264 - Wash hands thoroughly after handling. P271 - Use only outdoors or in a well-ventilated area.

P272 - Contaminated work clothing must not be allowed out of the workplace.
P280 - Wear eye protection, protective gloves, protective clothing.
P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing.
P312 - Call a poison center or doctor if you feel unwell.
P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.
P363 - Wash contaminated clothing before reuse.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313 - If eye irritation persists: Get medical advice/attention.
P370+P378 - In case of fire: Use Water fog, alcohol resistant foam, carbon dioxide (CO₂), dry extinguishing powder to extinguish.
P403+P235 - Store in a well-ventilated place. Keep cool.
P405 - Store locked up.
P501 - Dispose of contents or container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation

3: Composition/information on ingredients

Component	CAS-No.	Amount (%)
Acetone	67-64-1	30 - 60
2-hydroxyethyl methacrylate	868-77-9	7 - 13
Ethanol	64-17-5	5 - 10
Glyceryl dimethacrylate	1830-78-0	1 - 5

*Chemical name, CAS number and/or exact concentration have been withheld as a trade secret

4. First-aid measures

Inhalation: Remove person to fresh air and keep comfortable for breathing. Get medical attention if symptoms occur. Move the affected person to the fresh air.

Skin: Rinse skin with water/shower. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

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.

Ingestion: Rinse mouth thoroughly with water. Do NOT induce vomiting. Call a poison center or a doctor if you feel unwell.

Symptoms/effects: May cause moderate irritation to the eyes. May cause irritation to skin. May cause an allergic skin reaction. Inhalation of vapours may cause respiratory irritation. Inhalation may affect the nervous system causing headache, possibly dizziness, nausea, weakness, loss of coordination and unconsciousness.

Immediate medical attention and special treatment, if necessary: Not required.

5. Fire-fighting measures

Suitable extinguishing media: Use dry chemical, CO₂, water spray or alcohol-resistant foam.

Unsuitable extinguishing media: None.

Fire hazard: Highly flammable liquid and vapour. Vapours are heavier than air and may travel considerable distance to an ignition source and flash back to source of vapours. On combustion, forms: carbon oxides (CO and CO₂). Phosphorus oxides.

Special protective equipment and precautions for fire-fighters: In case of fire: stop leak if safe to do so. Cool down the containers exposed to heat with a water spray. Do not attempt to take action without suitable protective equipment.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures: Remove ignition sources. Avoid contact with eyes, skin and clothing. Wear suitable protective clothing. Ventilate area.

Methods and material for containment and cleaning up: Stop leak if safe to do so. Use non-sparking tools. Take up liquid spill into absorbent material. Do not flush down sewers. Notify authorities if product enters sewers or public waters. Place in a suitable container for disposal in accordance with the waste regulations (see Section 13).

7. Handling and storage

Precautions for safe handling: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid contact with eyes, skin and clothing. Wear personal protective equipment. Avoid breathing mist, vapors. Use only outdoors or in a well-ventilated area. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Flammable vapours may accumulate in the container. Refer to product label for additional information on use and handling.

Storage conditions: Store in dry, cool, well-ventilated area. Keep away from heat and direct sunlight. Store away from strong oxidizers, strong bases, strong acids. Keep container closed when not in use.

8. Exposure controls/personal protection

Exposure guidelines:	
Glyceryl dimethacrylate	None established.
2-hydroxyethyl methacrylate	None established.
Ethanol	1900 mg/m ³ TWA OSHA PEL; 1000 ppm TWA OSHA PEL; 1000 ppm STEL ACGIH TLV;
Acetone	2400 mg/m ³ TWA OSHA PEL; 1000 ppm TWA OSHA PEL; 250 ppm TWA ACGIH TLV; 500 ppm STEL ACGIH TLV;

Appropriate engineering controls: Ensure good ventilation of the work station. No particular/specific measures required.

Environmental exposure controls: Avoid release to the environment.

Personal protective equipment:

Hand protection: Wear impervious gloves.

Eye protection: Chemical goggles

Skin and body protection: Wear suitable protective clothing

Respiratory protection: No respiratory protection needed under normal use conditions. In operations where exposure limits are exceeded or exposure levels are excessive, an approved respirator should be used. Respirator selection and use should be based on contaminant type, form and concentration. Follow applicable regulations and good Industrial Hygiene practice.

9. Physical and chemical properties

Appearance: Liquid.

Physical state	: Liquid	Solubility	: Partially soluble.
Colour	: Light yellow	Log Pow	: No data available
Odour	: Fruity	Auto-ignition temperature	: Not applicable
Odour threshold	: No data available	Decomposition temperature	: No data available
pH	: No data available	Viscosity, kinematic	: Not applicable
Melting point	: Not applicable	Viscosity, dynamic	: No data available
Freezing point	: Not applicable	Explosive limits	: Lower explosive limit (LEL): 2.5 vol % Acetone Upper explosive limit (UEL): 19 vol % Ethanol
Boiling point	: 56.08 °C Acetone (132.94 °F)	Explosive properties	: No data available
Flash point	: < 12.78 °C (closed cup) (55 °F)	Oxidising properties	: No data available
Relative evaporation rate (butylacetate=1)	: No data available		
Flammability (solid, gas)	: Not applicable.		
Vapour pressure	: No data available		
Relative vapour density at 20 °C	: No data available		
Relative density	: No data available		

No additional information available

10. Stability and reactivity

Reactivity: The product is non-reactive under normal conditions of use, storage and transport.

Chemical stability: Stable under normal conditions.

Possibility of hazardous reactions: No dangerous reactions known under normal conditions of use. Hazardous polymerization may occur if exposed to high temperature.

Conditions to avoid: Keep away from open flames, hot surfaces and sources of ignition.

Incompatible materials : Oxidizing agents, reducing agents, acids, bases.

Hazardous decomposition products: Thermal decomposition generates: Carbon oxides (CO, CO₂). Phosphorus oxides.

11. Toxicological information

Inhalation: May cause minor irritation to the respiratory tract and to other mucous membranes. High concentration of vapours may induce: headache, nausea, dizziness.

Skin: May cause moderate irritation. May cause an allergic skin reaction.

Eyes: May cause moderate irritation, including burning sensation, tearing, redness or swelling.

Ingestion: May cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Chronic symptoms: None known.

Carcinogenicity:	Not classified
Glyceryl dimethacrylate:	This component is not listed as a carcinogen or suspected carcinogen by IARC, NTP, ACGIH, OSHA or the EU CLP.
2-hydroxyethyl methacrylate:	This component is not listed as a carcinogen or suspected carcinogen by IARC, NTP, ACGIH, OSHA or the EU CLP.
Ethanol:	This component is not listed as a carcinogen or suspected carcinogen by IARC, NTP, ACGIH, OSHA or the EU CLP.
Acetone:	This component is not listed as a carcinogen or suspected carcinogen by IARC, NTP, ACGIH, OSHA or the EU CLP.
Germ cell mutagenicity:	Not classified
Reproductive toxicity:	Not classified

Numerical measures of toxicity:

The following are the toxicity values for the components:

Glyceryl dimethacrylate:	No data available
2-hydroxyethyl methacrylate:	Oral rat LD50- 5564 mg/kg bodyweight; Dermal rabbit LD50- > 5000 mg/kg bodyweight;
Ethanol:	Oral rat LD50- ≈ 10470 mg/kg;
Acetone:	Oral rat LD50- 5800 mg/kg bodyweight; Inhalation rat LC50- 76 mg/l;
Skin corrosion/irritation	Causes skin irritation.
Serious eye damage/irritation	Causes serious eye irritation.
Respiratory or skin sensitisation	May cause an allergic skin reaction.
STOT-single exposure	May cause drowsiness or dizziness.
STOT-repeated exposure	Not classified

12. Ecological information

Ecology - general: The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.

Ecotoxicity:

2-hydroxyethyl methacrylate	100 mg/L Fish LC50; 380 mg/L Daphnia EC50
Ethanol	14.2 g/L Fish LC50; 100 mg/L Daphnia EC50

Persistence and degradability: No data available

Bioaccumulative potential: No data available

Mobility in soil: No data available

Other adverse effects:

No data available

13. Disposal considerations

Regional legislation (waste): Dispose of in accordance with applicable federal, state, and local regulations.

Additional information: Flammable vapours may accumulate in the container.

14. Transport information

Department of Transportation (DOT)

Proper Shipping Name (DOT) : Adhesives (Acetone ; Ethanol; ethyl alcohol)
UN-No.(DOT) : UN1133
Class (DOT) : 3
Packing group (DOT) : II
Hazard labels (DOT) : Flammable liquid

Transport by sea

Proper Shipping Name (IMDG) : ADHESIVES (Acetone ; Ethanol; ethyl alcohol)
UN-No. (IMDG) : 1133
Class (IMDG) : 3
Packing group (IMDG) : II

Air transport

Proper Shipping Name (IATA) : Adhesives (Acetone ; Ethanol; ethyl alcohol)
UN-No. (IATA) : 1133
Class (IATA) : 3
Packing group (IATA) : II

15. Regulatory information

SARA Section 313 - Emission Reporting: Not subject to reporting requirements of the United States SARA Section 313

CERCLA Section 103:

Acetone	67-64-1	5000 lb
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SARA 302:

Not applicable

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

California Proposition 65:

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

TSCA: All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

INTERNATIONAL INVENTORIES

Australia AICS: One or more ingredient(s) are not listed
Canada DSL: One or more ingredient(s) are not listed
China IECSC: One or more ingredient(s) are not listed

EU EINECS: One or more ingredient(s) are not listed
Japan ENCS: One or more ingredient(s) are not listed
Korea KECL: One or more ingredient(s) are not listed
New Zealand: One or more ingredient(s) are not listed
Philippines PICCS: One or more ingredient(s) are not listed
Taiwan CSNN One or more ingredient(s) are not listed

16. Other information

Revision date : 10/07/2020

NFPA	
NFPA health hazard:	2
NFPA fire hazard:	3
NFPA reactivity:	0

NOTICE

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.