

## **SAFETY DATA SHEETS**

**This SDS packet was issued with item:**


076346217

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

076346191 076346209 076346225

# Safety Data Sheet

Trade Name: **MONOCEM Resin Cement**

1.0 Commercial Product Name and Supplier				
1.1	Commercial product name	MONOCEM Resin Cement		
1.2	Application / Use	Dental material for use by dental professional only.		
1.2.2	SIC	851 Human health activity		
1.2.3	Use Category	55		
1.3	Manufacturer	Telephone: 1 800-827-4638		
	Shofu Dental Corporation	Fax: 1 760-736-3276		
	1225 Stone Drive	Email: customer-service@shofu.com		
	San Marcos, CA 92078 USA			
1.4	Emergency Telephone Number	1-800-535-5053 (24 Hour / USA)		
2.0 Hazards Identification				
2.1	Classification			
2.1.1	Classification according to Regulation (EC) No 1272/2008 [CLP]	Hazard Class	Hazard Category	Hazard Statement
		Eye irritation	2	H319
		STOT SE	3	H335
		Skin irritation	2	H315
		Skin sensitization	1	H317
2.1.2	Classification according to Directive 67/548/EEC	Irritant; Xi; R 36/37/38-43 (See SECTION 16 for full text of risk phrases)		
2.2	GHS Label Elements			
	Hazard Pictograms			
				
	Signal Word: <b>WARNING</b>			
	<b>Restricted to use by dental professional only.</b>			
	<b>Hazard Statements</b>			
	H319: Eye irritation. 2. May cause eye irritation.			
	H335: STOT SE. 3. May cause respiratory irritation.			
	H315: Skin irritation. 2. May cause skin irritation.			
	H317: Sensitization. 1. May cause an allergic skin reaction.			
	<b>Precautionary Statements</b>			
	P261: Avoid breathing vapor.			
	P280: Wear protective gloves and eye protection			
	P305+P351: If in eyes, rinse cautiously with water for several minutes.			
	P337+P313: If eye irritation persists, get medical advice/attention.			
	P302+P352: If on skin, wash with plenty of soap and water.			
	P333+P313: If irritation or rash occurs, get medical advice/attention.			
	P410+P411: Protect from sunlight. Store at temperature not exceeding 27°C / 80°F.			
3.0 Composition				
3.1	Chemical characterization of the preparation:	Acrylate ester monomers in two-part, glass-filled, dual-cure paste.		
3.2	Hazardous ingredients			
	CAS Number	Name of the Ingredient	Concentration	Classification per Regulation (EC) No.1278/2008 (CLP).

**Safety Data Sheet**Trade Name: **MONOCEM Resin Cement**

	Proprietary	Uncured acrylate ester monomers	55-60%	Irritant; Xi R 3637//38 - 43	Eye irritation, 2, H319 STOT SE 3, H335 Skin irritation, 2, H315 Skin sensitization, 1, H317
	112945-52-5	Silica, amorphous	5 %	Irritant; Xi, R 36/37/38	Eye irritation, 2, H319 STOT SE 3, H335 Skin irritation, 2, H315
4.0 First Aid Measures					
4.1	General Information		May be irritating to eyes, respiratory system and skin. Do not inhale vapors. May cause sensitization by skin contact. Show this safety data sheet to medical personnel. Get medical attention in case of uncertainty.		
4.2	Inhalation		Move to fresh air. If necessary, administer oxygen and/or artificial respiration. Seek medical attention.		
4.3	Skin Contact		Take off contaminated clothing. Wash thoroughly with soap and water.		
4.4	Eye Contact		Keep eyelids apart, flush with running water for 15+ minutes. Get medical attention.		
4.5	Ingestion		Rinse mouth with water. Do not induce vomiting. Get immediate medical attention. May be irritating to mucous membranes. Never give anything by mouth to an unconscious person.		
4.6	Precautions for first responders		Ventilate the area. Wear eye and skin protection.		
4.7	Information for physicians				
	Symptoms		Irritation or redness in eyes, throat or on skin.		
	Hazards		May be irritating to eyes, respiratory system, skin or sensitizing by skin contact.		
	Treatment		As above under First Aid.		
5.0 Fire Fighting Measures					
5.1	Suitable extinguishing media		Carbon dioxide, dry chemical, alcohol foam, or water fog. Water spray may be used to keep fire exposed containers cool.		
5.2	Extinguishing media to avoid		Do not use direct water stream		
5.3	Special exposure hazards in a fire		Heat may cause polymerization with rapid release of energy.		
5.4	Special protective equipment for fire-fighters		Self-contained breathing apparatus. Cool exposed containers with water spray to prevent polymerization under fire conditions.		
6.0 Accidental Release Measures					
6.1	Personal precautions.		Wear safety glasses, gloves and lab coat.		
6.2	Environmental precautions		Avoid releasing large amounts of uncured material into the environment. Cured / set-up material is, to our knowledge, inert.		
6.3	Method for clean up		Contain spilled material. Absorb or wipe up spill with paper towels or cloths. Collect for disposal in a covered container. Wash spill area with alcohol or soap and water.		

**Safety Data Sheet**Trade Name: **MONOCEM Resin Cement**

<b>7.0</b>	<b>Handling and Storage</b>	
7.1	Handling	For use only by dental professionals. Follow good hygiene practices. Avoid direct/strong light sources, temperature extremes (>27°C/80°F, <5°C/40°F), contamination and cross contamination. Recap immediately after use.
7.2	Storage	Store product tightly capped in original container at cool room temperature (<25°C). Avoid direct, strong light, sources of ignition and extremes of temperature. Shelf life for unopened product is two years from date of manufacture, provided that the material has been stored properly.
7.3	Specific uses	Dental restorative materials
<b>8.0</b>	<b>Exposure Controls / Personal Protection</b>	
8.1	Exposure limit values	PEL: Not established. TLV: Not established.
8.2	Exposure controls	
8.2.1	Occupational exposure controls	No special equipment required under normal conditions of use.
8.2.1.1	Respiratory protection	Good general ventilation will control airborne vapors from uncured material.
8.2.1.2	Hand protection	No special requirements other than the usual surgical gloves.
8.2.1.3	Eye protection	No special requirements other than the usual safety glasses.
8.2.1.4	Skin protection	Good personal hygiene and safety practices; wearing a lab coat
8.2.1.5	Other controls	Emergency eye wash fountain should be available. Wash hands after use.
8.2.2	Environmental exposure controls	Cure material before disposing.
<b>9.0</b>	<b>Physical and Chemical Properties</b>	
9.1	Characteristics	
9.1.1	Appearance /Color / Physical state	Two thin pastes: one white, one yellow.
9.1.2	Odor	Faint, characteristic
9.2	Important health, safety and environmental information	
9.2.1	pH	Not determined
9.2.2	Boiling point	Not determined
9.2.3	Flash point	Not determined
9.2.4	Flammability (solid, gas)	Not applicable
9.2.5	Explosive properties	Not applicable
9.2.6	Oxidizing properties	Not determined
9.2.7	Vapor pressure	< 1 mm Hg
9.2.8	Specific gravity	1.400
9.2.9	Solubility in water	Nil
9.2.10	Partition coefficient	Not determined
9.2.11	Viscosity	Not determined
9.2.12	Vapor density	Not determined
9.2.13	Evaporation rate	Not determined

**Safety Data Sheet**Trade Name: **MONOCEM Resin Cement**


<b>10.0</b>	<b>Stability and reactivity</b>	
10.1	Conditions to avoid	Temperature > 38°C, intense light, cross-contamination.
10.2	Materials to avoid	Reducing and oxidizing agents, peroxides, amines.
10.3	Hazardous decomposition products	Under fire conditions and with amounts greater than that supplied in this product, hazardous polymerization may occur with heat build-up release of carbon monoxide, carbon dioxide, and oxides of nitrogen.
10.4	Further information	Stable material if stored and used as directed. Polymerization will occur when light-cured material is exposed to direct light.
<b>11.0</b>	<b>Toxicological information</b>	
11.1	Acute toxicity	Not toxic. Minimal health hazard under normal conditions of use.
11.2	Irritation and corrosiveness	May be irritating to eyes, respiratory tract, mucous membranes or skin on contact or with prolonged exposure.
11.3	Sensitization	May be sensitizing. Prolonged or frequent skin contact may cause allergic skin reactions in some susceptible individuals.
11.4	Sub-acute, sub-chronic and prolonged toxicity	Prolonged and/or frequent skin contact may cause allergic skin reactions in susceptible individuals.
11.5	Carcinogenicity, Mutagenicity, Reproductive Toxicity	None known
11.6	Empirical data	Not available
11.7	Clinical experience	Has been used safely and effectively by dentists in the US and internationally for more than 10 years with no reports of adverse events.
<b>12.0</b>	<b>Ecological Information</b>	
12.1	Ecotoxicity	Avoid release of uncured material into the environment. To the best of our knowledge, polymerized material is inert. No other information is available. Follow all government regulations.
<b>13.0</b>	<b>Disposal Considerations</b>	
13.1	Regulations	Follow all local and national government regulations in disposing material or contaminated packaging.
<b>14.0</b>	<b>Transport Information</b>	
14.1	Restrictions	None. Not regulated.
<b>15.0</b>	<b>Regulatory Information</b>	
15.1	EU	Class IIa medical device under MDD 93/42/EEC.
15.2	US FDA	Class II medical device
15.3	Health Canada	Class III medical device
<b>16.0</b>	<b>Other information</b>	
16.1	List of relevant R phrases	R 36 / 3 7/ 38: Irritating to eyes, respiratory system and skin. R 43: Sensitizing by skin contact.

**Safety Data Sheet**Trade Name: **MONOCEM Resin Cement**

16.2	Hazard Statements	<p>H319: Eye irritation. Hazard category 2.</p> <p>H335: Specific Target Organ Toxicity - Single exposure; hazard category. 3. Respiratory tract irritation.</p> <p>H315: Skin irritation. Hazard category 2.</p> <p>H317: Skin Sensitization. Hazard category 1.</p>
16.3	Precautionary Statements	<p>P261: Avoid breathing vapor.</p> <p>P280: Wear protective gloves and eye protection</p> <p>P305 + P351: If in eyes, rinse cautiously with water for several minutes.</p> <p>P337 + P313: If eye irritation persists, get medical advice/attention.</p> <p>P302 + P352: If on skin, wash with plenty of soap and water.</p> <p>P333 + P313: If irritation or rash occurs, get medical advice / attention.</p> <p>P410 + P411: Protect from sunlight. Store at temperature not exceeding 27°C / 80°F.</p>
16.4	Restrictions on use	To be sold to and used by dental professionals only.
16.5	Further information	<p>The information presented herein is believed to be factual as it has been derived from the works of persons believed to be qualified experts. However, nothing contained in this information is to be taken as a warranty or representation for which Shofu Dental Corporation bears legal responsibility. The user should review any recommendations in the specific context of the intended use to determine whether they are appropriate.</p>
16.6	Sources of key data	<p>National Institute for Occupational Safety (NIOSH)</p> <p>US Occupational Safety and Health Administration (OSHA)</p> <p>Eur-Lex European Union Law: Regulation (EC) No. 1272/2008 (CLP) and Regulation (EC) No. 1907/2006 (REACH).</p> <p>Guidance on the compilation of safety data sheets. Version 1.1; December 2011. European Chemicals Agency</p>
16.7	Information which has been added, deleted or revised.	<p>This Safety Data Sheet has been revised to meet the GHS SDS format and the requirements of Regulation (EC) No. 1272/2008 (CLP) and Regulation (EC) No. 1907/2006 (REACH). Specifically Sections 2.1, 2.2, 3.2, 16.2, 16.3 have been modified.</p>

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1.1	Commercial product name	MONOCEM Resin Cement		
1.2	Application / Use	Dental material for use by dental professional only.		
1.2.2	SIC	851 Human health activity		
1.2.3	Use Category	55		
1.3	Manufacturer	Telephone: 1 800-827-4638		
	Shofu Dental Corporation	Fax: 1 760-736-3276		
	1225 Stone Drive	Email: customer-service@shofu.com		
	San Marcos, CA 92078 USA			
1.4	Emergency Telephone Number	1-800-535-5053 (24 Hour / USA)		
2.0 Hazards Identification				
2.1	Classification			
2.1.1	Classification according to Regulation (EC) No 1272/2008 [CLP]	Hazard Class	Hazard Category	Hazard Statement
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		Skin sensitization	1	H317
2.1.2	Classification according to Directive 67/548/EEC	Irritant; Xi; R 36/37/38-43 (See SECTION 16 for full text of risk phrases)		
2.2	GHS Label Elements			
	Hazard Pictograms			
				
	Signal Word: <b>WARNING</b>			
	<b>Restricted to use by dental professional only.</b>			
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3.0 Composition				
3.1	Chemical characterization of the preparation:	Acrylate ester monomers in two-part, glass-filled, dual-cure paste.		
3.2	Hazardous ingredients			
	CAS Number	Name of the Ingredient	Concentration	Classification per Regulation (EC) No.1278/2008 (CLP).

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	112945-52-5	Silica, amorphous	5 %	Irritant; Xi, R 36/37/38	Eye irritation, 2, H319 STOT SE 3, H335 Skin irritation, 2, H315
4.0 First Aid Measures					
4.1	General Information		May be irritating to eyes, respiratory system and skin. Do not inhale vapors. May cause sensitization by skin contact. Show this safety data sheet to medical personnel. Get medical attention in case of uncertainty.		
4.2	Inhalation		Move to fresh air. If necessary, administer oxygen and/or artificial respiration. Seek medical attention.		
4.3	Skin Contact		Take off contaminated clothing. Wash thoroughly with soap and water.		
4.4	Eye Contact		Keep eyelids apart, flush with running water for 15+ minutes. Get medical attention.		
4.5	Ingestion		Rinse mouth with water. Do not induce vomiting. Get immediate medical attention. May be irritating to mucous membranes. Never give anything by mouth to an unconscious person.		
4.6	Precautions for first responders		Ventilate the area. Wear eye and skin protection.		
4.7	Information for physicians				
	Symptoms		Irritation or redness in eyes, throat or on skin.		
	Hazards		May be irritating to eyes, respiratory system, skin or sensitizing by skin contact.		
	Treatment		As above under First Aid.		
5.0 Fire Fighting Measures					
5.1	Suitable extinguishing media		Carbon dioxide, dry chemical, alcohol foam, or water fog. Water spray may be used to keep fire exposed containers cool.		
5.2	Extinguishing media to avoid		Do not use direct water stream		
5.3	Special exposure hazards in a fire		Heat may cause polymerization with rapid release of energy.		
5.4	Special protective equipment for fire-fighters		Self-contained breathing apparatus. Cool exposed containers with water spray to prevent polymerization under fire conditions.		
6.0 Accidental Release Measures					
6.1	Personal precautions.		Wear safety glasses, gloves and lab coat.		
6.2	Environmental precautions		Avoid releasing large amounts of uncured material into the environment. Cured / set-up material is, to our knowledge, inert.		
6.3	Method for clean up		Contain spilled material. Absorb or wipe up spill with paper towels or cloths. Collect for disposal in a covered container. Wash spill area with alcohol or soap and water.		



**Safety Data Sheet**Trade Name: **MONOCEM Resin Cement**

<b>7.0</b>	<b>Handling and Storage</b>	
7.1	Handling	For use only by dental professionals. Follow good hygiene practices. Avoid direct/strong light sources, temperature extremes (>27°C/80°F, <5°C/40°F), contamination and cross contamination. Recap immediately after use.
7.2	Storage	Store product tightly capped in original container at cool room temperature (<25°C). Avoid direct, strong light, sources of ignition and extremes of temperature. Shelf life for unopened product is two years from date of manufacture, provided that the material has been stored properly.
7.3	Specific uses	Dental restorative materials
<b>8.0</b>	<b>Exposure Controls / Personal Protection</b>	
8.1	Exposure limit values	PEL: Not established. TLV: Not established.
8.2	Exposure controls	
8.2.1	Occupational exposure controls	No special equipment required under normal conditions of use.
8.2.1.1	Respiratory protection	Good general ventilation will control airborne vapors from uncured material.
8.2.1.2	Hand protection	No special requirements other than the usual surgical gloves.
8.2.1.3	Eye protection	No special requirements other than the usual safety glasses.
8.2.1.4	Skin protection	Good personal hygiene and safety practices; wearing a lab coat
8.2.1.5	Other controls	Emergency eye wash fountain should be available. Wash hands after use.
8.2.2	Environmental exposure controls	Cure material before disposing.
<b>9.0</b>	<b>Physical and Chemical Properties</b>	
9.1	Characteristics	
9.1.1	Appearance /Color / Physical state	Two thin pastes: one white, one yellow.
9.1.2	Odor	Faint, characteristic
9.2	Important health, safety and environmental information	
9.2.1	pH	Not determined
9.2.2	Boiling point	Not determined
9.2.3	Flash point	Not determined
9.2.4	Flammability (solid, gas)	Not applicable
9.2.5	Explosive properties	Not applicable
9.2.6	Oxidizing properties	Not determined
9.2.7	Vapor pressure	< 1 mm Hg
9.2.8	Specific gravity	1.400
9.2.9	Solubility in water	Nil
9.2.10	Partition coefficient	Not determined
9.2.11	Viscosity	Not determined
9.2.12	Vapor density	Not determined
9.2.13	Evaporation rate	Not determined

**Safety Data Sheet**Trade Name: **MONOCEM Resin Cement**

<b>10.0</b>	<b>Stability and reactivity</b>	
10.1	Conditions to avoid	Temperature > 38°C, intense light, cross-contamination.
10.2	Materials to avoid	Reducing and oxidizing agents, peroxides, amines.
10.3	Hazardous decomposition products	Under fire conditions and with amounts greater than that supplied in this product, hazardous polymerization may occur with heat build-up release of carbon monoxide, carbon dioxide, and oxides of nitrogen.
10.4	Further information	Stable material if stored and used as directed. Polymerization will occur when light-cured material is exposed to direct light.
<b>11.0</b>	<b>Toxicological information</b>	
11.1	Acute toxicity	Not toxic. Minimal health hazard under normal conditions of use.
11.2	Irritation and corrosiveness	May be irritating to eyes, respiratory tract, mucous membranes or skin on contact or with prolonged exposure.
11.3	Sensitization	May be sensitizing. Prolonged or frequent skin contact may cause allergic skin reactions in some susceptible individuals.
11.4	Sub-acute, sub-chronic and prolonged toxicity	Prolonged and/or frequent skin contact may cause allergic skin reactions in susceptible individuals.
11.5	Carcinogenicity, Mutagenicity, Reproductive Toxicity	None known
11.6	Empirical data	Not available
11.7	Clinical experience	Has been used safely and effectively by dentists in the US and internationally for more than 10 years with no reports of adverse events.
<b>12.0</b>	<b>Ecological Information</b>	
12.1	Ecotoxicity	Avoid release of uncured material into the environment. To the best of our knowledge, polymerized material is inert. No other information is available. Follow all government regulations.
<b>13.0</b>	<b>Disposal Considerations</b>	
13.1	Regulations	Follow all local and national government regulations in disposing material or contaminated packaging.
<b>14.0</b>	<b>Transport Information</b>	
14.1	Restrictions	None. Not regulated.
<b>15.0</b>	<b>Regulatory Information</b>	
15.1	EU	Class IIa medical device under MDD 93/42/EEC.
15.2	US FDA	Class II medical device
15.3	Health Canada	Class III medical device
<b>16.0</b>	<b>Other information</b>	
16.1	List of relevant R phrases	R 36 / 3 7/ 38: Irritating to eyes, respiratory system and skin. R 43: Sensitizing by skin contact.

## Safety Data Sheet

Trade Name: **MONOCEM Resin Cement**

16.2	Hazard Statements	<p>H319: Eye irritation. Hazard category 2.</p> <p>H335: Specific Target Organ Toxicity - Single exposure; hazard category. 3. Respiratory tract irritation.</p> <p>H315: Skin irritation. Hazard category 2.</p> <p>H317: Skin Sensitization. Hazard category 1.</p>
16.3	Precautionary Statements	<p>P261: Avoid breathing vapor.</p> <p>P280: Wear protective gloves and eye protection</p> <p>P305 + P351: If in eyes, rinse cautiously with water for several minutes.</p> <p>P337 + P313: If eye irritation persists, get medical advice/attention.</p> <p>P302 + P352: If on skin, wash with plenty of soap and water.</p> <p>P333 + P313: If irritation or rash occurs, get medical advice / attention.</p> <p>P410 + P411: Protect from sunlight. Store at temperature not exceeding 27°C / 80°F.</p>
16.4	Restrictions on use	To be sold to and used by dental professionals only.
16.5	Further information	<p>The information presented herein is believed to be factual as it has been derived from the works of persons believed to be qualified experts. However, nothing contained in this information is to be taken as a warranty or representation for which Shofu Dental Corporation bears legal responsibility. The user should review any recommendations in the specific context of the intended use to determine whether they are appropriate.</p>
16.6	Sources of key data	<p>National Institute for Occupational Safety (NIOSH)</p> <p>US Occupational Safety and Health Administration (OSHA)</p> <p>Eur-Lex European Union Law: Regulation (EC) No. 1272/2008 (CLP) and Regulation (EC) No. 1907/2006 (REACH).</p> <p>Guidance on the compilation of safety data sheets. Version 1.1; December 2011. European Chemicals Agency</p>
16.7	Information which has been added, deleted or revised.	<p>This Safety Data Sheet has been revised to meet the GHS SDS format and the requirements of Regulation (EC) No. 1272/2008 (CLP) and Regulation (EC) No. 1907/2006 (REACH). Specifically Sections 2.1, 2.2, 3.2, 16.2, 16.3 have been modified.</p>