

Luting

Page 1 of 4

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

## 1.1. Product identifier

Resin Modified Glass Ionomer Cement -Luting (RMGI-Luting)

## 1.2. Relevant identified uses of the substance or mixture and uses advised against

Resin Modified Glass Ionomer Cement -Luting is a dental luting system designed for cementation of some dental restorations.Indications for Use:

- 1. Cementation of porcelain-fused-tometal (PFM) crowns and bridges.
- 2. Cementation of metal crowns, inlays and onlays.
- 3. Cementation of all-alumina or allzirconia strengthened core ceramic restorations .
- 4. Cementation of resin inlays, onlays, crowns and bridges.

5. Final cementation of PFMs, metal crowns, all-alumina or allzirconia strengthened core ceramic restorations to implant abutments.

6. Orthodontic bands.

## 1.3. Details of the supplier of the safety data sheet

Company Name:	Rizhao HuGe Biomaterials Co., Ltd.
Address:	2 North Zhaoyang Road, Donggang District
City, State, Zip Code:	Rizhao City, Shandong Province, China, 276800
Telephone:	Tel: 86-633-2277268, Fax: 86-633-2277298
Email address:	marketing@hugedental.com
Website:	www.hugedental.com

## **SECTION 2: Hazards identification**

## 2.1 Health Hazard

Emergency Overview Specific Physical Form: Paste

Odor, Color, Grade: Methacrylate resin odor, Opaque, tooth-colored paste of various shades

General Physical Form: Solid

**Immediate health, physical, and environmental hazards:** May cause allergic skin reaction. This document has been prepared in accordance with the U.S. OSHA Hazard Communication Standard, which requires the inclusion of all known hazards of the product or ingredients regardless of the potential risk. The risks of the hazards communicated in this document may vary depending on the potential for exposure. **Risk identification:** None known

## Special risks for human

**Beings and environment:** None known **Classification:** Not hazardous. Those people known to be allergic to dental methacrylate resins should avoid the use of this product.

## **SECTION 3: Composition/information on ingredients**

**Chemical characteristics:** paste-paste form of dual curable mixture of UDMA, TEGDMA and methacrylate phosphate resins; inorganic fillers of silane-treated bariumsilicate glass, barium-calcium-aluminum-silicate glass, zinc oxide, calcium phosphate and amorphous silica; with minor amounts of initiators, stabilizer, and inorganic pigment(s).



Luting

Page 2 of 4

Element	CAS#	Exposure Limit (mg/m <sup>3</sup> )	
		OSHA PEL	ACGIH TLV
Water	7732-18-5	NE	NE
UDMA	74389-53-0	NE	NE
TEGDMA	109-16-0	NE	NE
Methacrylate Phosphate	32435-46-4	NE	NE
Light curing initiator	10373-78-1	NE	NE
Light curing initiator	10287-53-3	NE	NE
Benzoyl Peroxide	94-36-0	5	5
Silane treated barium glass	None	N/A	N/A
Dental ionomer glass	65997-17-3	NE	NE
USP grade Zinc Oxide	1314-13-2	15	10
Calcium Phosphate	12167-74-7	NE	NE
Silica (amorphous)	69012-64-2	NE	2R
Minor additives	Various	NE	NE

## **SECTION 4: First aid measures**

## 4.1 General Information:

After skin contact:	Wash with plenty of soap and water.
After eye contact:	Rinse with plenty of water and contact an ophthalmologist.
After swallowing:	Seek medical advice immediately.

## **SECTION 5: Firefighting measures**

Extinguishing media:CO2, water, foam, dry chemicalProtective equipment:Common gear for small commodities.

#### **SECTION 6: Accidental release measures**

Personal precautions:	Avoid skin contact, wear protective equipment.
Environmental precautions:	Absorb with inert material. Collect in closed containers and dispose of as recommended.
Methods for cleaning up: Additional information:	Dispose according to Federal, State and local regulations. Unknown.

## **SECTION 7: Handling and storage**

## 7.1. Precautions for safe handling

Avoid contact with skin and eyes. Use at room temperature. Practice good hygienic measures.

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

Keep container closed; store between  $2^{\circ}C \sim 25^{\circ}C$ . Refrigeration when not in use is recommended; Store away from direct sunlight, oxidizing and/or reducing agents or other incompatible matters.



Luting

Page 3 of 4

## SECTION 8: Exposure controls/personal protection

Personal protective equipment:Protective gloves, goggles are recommended.General Measure of protection:Normal hygienic measures.Respiration:Not necessaryHands:Protective gloves.Eyes:OSHA approved goggles or glasses.

#### **SECTION 9: Physical and chemical properties**

### 9.1 Appearance:

Form:	Paste
Color:	Shaded base part, white catalyst part.
Odor:	Ester-like

## 9.2 Information on change in the physical state

Melting point/melting range:	Unknown
Boiling point/boiling range:	Unknown
Flash point:	Unknown
Auto-ignition temperature:	Unknown
Danger of explosion:	Unlikely
Density (combined):	Approximately 1.7 gm/cm <sup>3</sup>
Vapor pressure:	Unknown
pH (combined):	Unknown
Solubility in/miscibility with water:	Slightly
Contents of solvents:	None
Content of Solids (combined) :	<u>&gt;</u> 60 % by weight

## SECTION 10 : Stability and reactivity

Incompatibility with other substances:	Stable. Avoid exposure the material to peroxide, amine and excessive heat.
Hazardous decomposition products:	Unknown.

## **SECTION** 11 : Toxicological information

This product has been found complying with ISO 10993 for complete biocompatibility assessments based on the criteria of the test protocols.

### **SECTION** 12 : Ecological information

General information:UnknownClassification of water endangerment:Not determined

### **SECTION 13 : Disposal considerations**

Dispose in accordance with Federal, State and local regulations.

### **SECTION** 14 : Transport information



Luting

Page 4 of 4

UN number:	None
class:	None
packaging group:	None
ocean harmful substances:	None
other relevant information:	Not classified as dangerous goods.Protect it against humidity .Store it away from
	food stuffs.acids.and bases.

### **SECTION 15: Regulatory information**

**311/312 Hazard Categories:** Fire Hazard – No; Pressure Hazard – No; Reactivity Hazard – No; Immediate Hazard – Yes; Delayed Hazard – No

Classification according to EEC guidelines:	Unknown
National Prescriptions:	Unknown
Classification according to VbF:	Unknown

## **SECTION 16: Other information**

No further technical information

The present data sheet contains technical-scientific information processed at best of our knowledge. We recommend verifying national and regional regulations applicable to the specific utilize field as well as regulations relative hygienic and safety on work and environment worship.

All information contained in the present data sheet is correct and processed in good faith. However they do not involve any obligation, guarantee and patent concession.

The characteristics mentioned in the following document do not constitute contractual specifications.

The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.