



Safety Data Sheet

Ceramic Coupling Agent

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

1.1. Product identifier

Ceramic Coupling Agent

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

HuGe Ceramic Coupling Agent serves as priming agent and is used to create a durable adhesion between luting composites and glass/oxide ceramic, metal, composite and fiber-reinforced composite restorations.

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

Health effects are based on the uncured material.

Classification of the

substance or mixture: FLAMMABLE LIQUIDS - Category 2
SKIN IRRITATION - Category 2
EYE IRRITATION - Category 2A
SKIN SENSITIZATION - Category 1
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE)

(Respiratory tract irritation and Narcotic effects) - Category 3

Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 10%-30%

GHS label elements

Hazard statements : Highly flammable liquid and vapor.
Causes serious eye irritation.
Causes skin irritation.
May cause an allergic skin reaction.
May cause respiratory irritation.
May cause drowsiness and dizziness.

Hazard pictograms :



Precautionary statements

Prevention : Wear protective gloves. Wear eye or face protection. Keep away from heat, sparks, open flames and hot surfaces. - No smoking. Use explosion-proof electrical, ventilating, lighting and all material-handling equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Keep container tightly closed. Use only outdoors



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or in a well-ventilated area. Avoid breathing vapor. Wash hands thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace.

Response : IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or physician if you feel unwell.

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.

IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing. If skin irritation or rash occurs: Get medical attention.

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.

Storage : Store locked up. Store in a well-ventilated place. Keep cool.

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

Supplemental label elements: Avoid contact with skin and clothing. Wash thoroughly after handling.

Hazards not otherwise classified: Prolonged or repeated contact may dry skin and cause irritation

SECTION 3: Composition/information on ingredients

Element	CAS#	Exposure Limit (mg/m ³)	
		OSHA PEL	ACGIH TLV
Tri-functional acid methacrylate	Proprietary	N/A	N/A
Silane	2530-85-0	NE	NE
Acetone	67-64-1	2400	1188
Ethyl Alcohol	64-17-5	1900	1900

Chemical characteristics: This Ceramic Coupling Agent is primarily made of silane and trifunctional acid methacrylate dispersed in solvents of Acetone and Ethyl Alcohol.

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:	CO ₂ , water, foam, dry chemical
Protective 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:	Dispose according to Federal, State and local regulations.
Additional information:	Unknown.

SECTION 7: Handling and storage



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7.1. Precautions for safe handling

Use at room temperature. Practice good hygienic measures.

7.2. Conditions for safe storage, including any incompatibilities

Keep container closed; store between 2°C~25°C. Refrigeration when not in use is recommended; Store away from direct sunlight, oxidizing and/or reducing agents or other incompatible matters.

SECTION 8: Exposure controls/personal protection

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

SECTION 9: Physical and chemical properties

9.1 Appearance:

Form:	Liquid
Color:	Colorless or pale yellow
Odor:	Acetone and alcohol

9.2 Information on change in the physical state

Melting point/melting range:	Unknown
Boiling point/boiling range:	Unknown
Flash point:	Closed cup: -17.8°C (-0.04°F) [Acetone]
Auto-ignition temperature:	360°C (680°F)
Danger of explosion:	Unlikely
Density (combined):	Approximately 0.9 gm/cm ³
Vapor pressure:	24.5 kPa (184 mm Hg) [room temperature]
pH (combined):	Unknown
Solubility in/miscibility with water:	Yes
Contents of solvents:	None
Content of Solids (combined) :	≥ 2.0 % by weight

SECTION 10 : Stability and reactivity

IReactivity :	No specific test data related to reactivity available for this product or its ingredients.
Chemical Stability:	This product is stable.
Conditions to avoid:	Keep away from heat, sparks and flame. Loss of inhibitor or heat may cause polymerization.
Incompatible materials:	peroxide, amine, strong acids and alkalis.
Hazardous decomposition products:	Under normal conditions of storage and use, hazardous decomposition products should not be produced.



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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: Unknown

Classification of water endangerment: Not determined

SECTION 13 : Disposal considerations

Dispose in accordance with Federal, State and local regulations.

SECTION 14 : Transport information

UN number: None
class: Class 3; highly flammable liquid.
packaging group: None
ocean harmful substances: None
other relevant information: 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.

SECTION 15: Regulatory information

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

Classification according to EEC guidelines: Unknown

National Prescriptions: 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.