HUGE 沪鸽

Safety Data Sheet

Product Name：Ceramic Coupling Agent
Revision date：01/15/2026
Initial Preparation Date : 12/31/2017

Referde to GB/T16483、GB/T17519
SDS number：HGD/QT-CCA-21
Version：02

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

Chinese names of chemicals ：陶瓷偶联预处理剂
English names of chemicals:Ceramic Coupling Agent
Product identifier (EU):
Company Name: Rizhao HuGe Biomaterials Co., Ltd.
Address: No.2 North Zhaoyang Road, Donggang District
City, State, Zip Code: Shandong Province, 276800, P.R.China
Telephone:Tel: 86-633-2277285
Website:www.hugedental.com
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.

SECTION 2: Hazards identification

GHS risk categories:

H225 - Highly flammable liquid and vapor

H315 - Causes skin irritation

H317 - May cause an allergic skin reaction

H319 - Causes serious eye irritation.

Classification of substances/mixtures:
The product has been classified according to the legislation in force.
Classification according to Directive 67/548/EEC or 1999/45/EC as amended
Xn; R48/20

Label elements:

Health hazards:

Inhalation: May cause respiratory tract irritation.
Eye contact: Causes serious eye irritation.
Skin contact: May cause an allergic skin reaction.
Ingestion: May cause discomfort in the digestive system.
Other Health Effects**:** No other information noted.

Environmental hazards: Not regarded as dangerous for the environment.
No risks worthy of mention. Please observe the information on the safety data sheet at all times.

SECTION 3: Composition/information on ingredients

Chemical characterization

This Ceramic Coupling Agent is primarily made of MPTMS and MDP dispersed in solvents of ethyl alcohol.

Chemical name	CAS-No.	Concentration	Ec No
MPTMS	2530-85-0	≤ 4	219-785-8
MDP	85590-00-7	≤ 4	NA
Ethyl Alcohol	64-17-5	90-98	200-578-6

SECTION 4: First aid measures

After inhalation:

Remove person to fresh air and keep comfortable for breathing.

After contact with skin:

Immediately wash with soap and water. Remove contaminated clothing and wash before reuse. If signs/symptomsdevelop, get medical attention.

After contact with eyes:

Flush with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. If signs/symptoms persist, get medical attention.

After ingestion:

Call a poison center/doctor/physician if you feel unwell.

Most important symptoms and effects, both acute and delayed:

None known.

Indication of any immediate medical attention and special treatment needed:

Hazards: No specific recommendations.

Treatment: No specific recommendations.

SECTION 5: Firefighting measures

Suitable extinguishing media

In case of fire: Use a fire fighting agent suitable for ordinary combustible material such as water or foam to extinguish.

Extinguishing media which must not be used for safety reasons

None known.

Advice for firefighters Special Fire Fighting Procedures

Water spray should be used to cool containers.

Special protective equipment for fire-fighters

Wear full protective clothing, including helmet, self-contained, positive pressure or pressure demand breathing apparatus,bunker coat and pants, bands around arms, waist and legs, face mask, and protective covering for exposed areas of the head.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

Evacuate area. Ventilate the area with fresh air. For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust vapors, in accordance with good industrial hygiene practice. Refer to other sections of this SDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment.

Environmental precautions

Collect spillage. Do not discharge into drains, water courses or onto the ground.

Methods and material for containment and cleaning up

Collect as much of the spilled material as possible. Place in a closed container approved for transportation by appropriate authorities. Clean up residue. Seal the container. Dispose of collected material as soon as possible in accordance with applicable local/regional/national/international regulations.

SECTION 7: Handling and storage

Precautions for safe handling

A no-touch technique is recommended. If skin contact occurs, wash skin with soap and water. Acrylates may penetrate commonly-used gloves. If product contacts glove, remove and discard glove, wash hands immediately with soap and water and then re-glove. Do not get in eyes, on skin, or on clothing. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment. Wash contaminated clothing before reuse.

Conditions for safe storage, including any incompatibilities

Avoid direct sunlight and keep away from heat sources.

SECTION 8: Exposure controls/personal protection

Occupational exposure limits

Chemical name	CAS-No.	Exposure limit
MPTMS	2530-85-0	Not applicable
MDP	85590-00-7	Not applicable
Ethyl Alcohol	64-17-5	1900 mg/m³ for OSHA

Exposure controls

General information: No specific precautions.

Eye/Face protection: Select and use eye/face protection to prevent contact based on the results of an exposure assessment. The following eye/face protection(s) are recommended: Safety Glasses with side shields.

Hand/Skin protection: See Section 7.1 for additional information on skin protection.

Respiratory Protection: None required.

Hygiene measures: Provide eyewash station and safety shower.

Environmental Controls: No data available.

SECTION 9: Physical and chemical properties

Appearance

Physical State:	Colorless or slightly yellow transparent liquid
Form:	Liquid.

Color:	Colorless or slightly yellow
Odor:	Alcohol-like odor
Odor Threshold:	No data available.
pH:	Not applicable
Melting Point:	No data available.
Boiling Point:	No data available.
Flash Point:	≤ 23℃
Evaporation Rate:	Similar to anhydrous ethanol.
Flammability (solid, gas):	No data available.
Flammability Limit - Upper (%)–:	19.0 .
Flammability Limit - Lower (%)–:	3.3.
Vapor pressure:	~5.3 kPa at 20℃ (approx., based on ethanol content).
Vapor density (air=1):	1.59 (approx., based on ethanol content).
Relative density:	0.81 - 0.83 g/cm³ (20℃)
Solubility：	Soluble in most organic solvents
Solubility in Water:	Practically insoluble in water
Solubility (other):	
Diethylether.:	Soluble
Common organic solvents.:	Soluble in alcohols, ketones, esters, aromatic hydrocarbons
Aromatic hydrocarbons.:	Soluble
Aliphatic hydrocarbons.:	Soluble
Acetone.:	Soluble
Ethanol.:	Miscible in all proportions
Partition coefficient (n-octanol/water):	No Data Available
Autoignition Temperature:	~363℃ (approx., based on ethanol content)
Decomposition Temperature:	No Data Available
Viscosity:	~1.0 - 1.5 mPa • s at 25℃ (approx.)
Explosive properties:	May form explosive vapor-air mixtures when exposed to heat or flame
Oxidizing properties:	None.

SECTION 10: Stability and reactivity

Reactivity: This material may be reactive with certain agents under certain conditions - see the remaining headings in this section.

Chemical stability: Stable under normal storage and handling conditions (sealed, away from heat and moisture).

Possibility of hazardous reactions: Hazardous polymerization will not occur. Strong exothermic reactions may occur when in contact with strong oxidizing agents (e.g., potassium permanganate, hydrogen peroxide)..

Conditions to avoid: Heat, open flame, strong sunlight, high temperature storage, and contact with moisture.

Incompatible materials: Strong oxidizing agents, strong acids, and strong bases.

Hazardous decomposition products: Thermal decomposition or combustion may liberate carbon oxides (CO, CO_2), methanol (from MPTMS hydrolysis/decomposition), and amorphous silica.

SECTION 11: Toxicological information

Acute toxicity: Ethanol may cause central nervous system depression if ingested in large amounts; MPTMS has low acute toxicity via oral/dermal routes.

Skin corrosion/irritation: Mild Skin Irritation: Signs/symptoms may include localized redness, swelling, itching, and dryness. Allergic Skin Reaction (non-photo induced): Signs/symptoms may include redness, swelling, blistering, and itching.

Irritation and corrosivity： No effects expected (assessment based on ingredients)

Germ cell mutagenicity: No effects expected (assessment based on ingredients).

Carcinogenicity: No effects expected (assessment based on ingredients). Neither ethanol nor MPTMS is classified as a carcinogen by IARC, OSHA, or ECHA.

Reproductive toxicity: Chronic excessive ethanol exposure may have reproductive toxicity, but this is not a concern under normal occupational use conditions.

Specific target organ toxicity - single exposure: No effects expected (assessment based on ingredients).

Specific target organ toxicity - repeated exposure: Prolonged repeated skin contact may cause dryness and chapping due to ethanol's defatting effect.

Aspiration hazard: No effects expected (assessment based on ingredients).

Other adverse effects: None known.

SECTION 12: Ecological information

Ecological Toxicity： Ethanol is readily biodegradable and has low toxicity to aquatic organisms; MPTMS may have slight inhibitory effects on algae at high concentrations.

Persistence and degradability： Ethanol: Readily biodegradable; MPTMS: Biodegradable under aerobic conditions. Overall, the mixture is not persistent in the environment.

Bioaccumulation potential: No data available

Further information: If the material causes hormonal effects or prevents them is unknown to us.

SECTION 13: Disposal considerations

Waste treatment methods:

Dispose of contents/ container in accordance with the local/regional/national/international regulations. Dispose of waste product in a permitted industrial waste facility.

General information

The user's attention is drawn to the possible existence of local regulations regarding disposal.

Disposal Methods

Dispose of waste at an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

SECTION 14: Transport information

Optimal storage and transportation conditions:

At cool place with temperature of 2-25℃ , avoiding direct sunlight and exposure.

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

National regulatory information

Chemical safety assessment:No data available

SECTION 16: Other information

Compared with the previous edition, the revised content:

1. Increase the identification of EU regulations
2. Increase the version number

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.