Material Safety Data Sheet (MSDS)

YP.Gum Light-curing Composite Resin

Document Standard: GHS, GB/T 16483-2008, GB/T 17519-2013

Version: V1.0

Date of preparation: June 25, 2026

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

1.1. Product Name

Dental Polymer Ceramic Composite

1.2. Synonyms

Resin ceramic restorative material

1.3. Recommended Use

For professional dental restoration only; used for inlays, veneers, partial crowns and tooth defect repair by licensed dentists.

1.4. Manufacturer Information

Company Name: Zhengzhou Yp Dental Co., Ltd.

Address: Room 15, 8F, Building 7, No. 289, West Third Ring Road, High-tech Industrial Development Zone, Zhengzhou City, Henan Province.

Contact Number: +86 150-3806-7080.

1.5. Emergency Telephone

National Chemical Emergency Hotline: 400-810-7999

SECTION 2: HAZARDS IDENTIFICATION

2.1. Hazard Classification

This product is not classified as a hazardous chemical under GHS criteria under normal ambient conditions.

2.2. Routes of Exposure

Skin contact, eye contact, inhalation of grinding dust, accidental ingestion.

2.3. Health Hazards

- Skin contact: Uncured resin may cause mild redness and itching on sensitive skin after prolonged exposure; fully cured material is non-irritating.
- Eye contact: Uncured paste or grinding dust entering eyes will cause transient dryness, tearing and foreign body sensation; no corrosive damage.
- Inhalation: Heavy inhalation of grinding dust may mildly irritate respiratory tract, resulting in dry throat and temporary cough.
- Ingestion: Small accidental intake causes no obvious harm; large intake may lead to mild nausea and gastrointestinal discomfort.

2.4. Environmental Hazards

Fully cured composite is chemically stable and poses no pollution risk to soil or water.

2.5. Fire and Explosion Risk

Non-flammable, no explosion risk; no flash point or autoignition point.

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

3.1. Substance Type

Mixture (medical dental restorative composite)

3.2. Main Constituents & Content

- Acrylic resin matrix: 40% ~ 60%
- Inorganic ceramic fillers (silica, fluoroaluminosilicate glass powder): 30% ~ 50%
- Photoinitiator, colorant, stabilizer: 1% ~ 5%

3.3. Hazardous Ingredient Statement

Contains no highly toxic, carcinogenic, teratogenic or restricted hazardous chemicals specified in GB 30000; no excessive heavy metals. No unified CAS number for the mixture.

SECTION 4: FIRST AID MEASURES

4.1. Skin Contact

Discontinue use if persistent allergic redness occurs; apply anti-allergy ointment and seek medical advice if symptoms worsen.

4.2. Eye Contact

Hold eyelids open and flush eyes continuously with saline or clean running water for 10–15 minutes. Consult an ophthalmologist if stinging or swelling persists after rinsing.

4.3. Inhalation of Dust

Remove victim to fresh air and encourage deep breathing. Seek medical attention for persistent chest tightness or coughing.

4.4. Ingestion

Drink plenty of water for small accidental intake. If vomiting or abdominal pain occurs after swallowing a large amount, DO NOT induce vomiting and go to hospital immediately.

SECTION 5: FIRE-FIGHTING MEASURES

5.1. Hazardous Combustion Properties

Non-combustible under normal and moderate high temperatures, no explosion limit; only minimal smoke will form under extreme high-temperature pyrolysis.

5.2. Hazardous Combustion Products

Trace carbon monoxide and carbon oxides generated by high-temperature decomposition; no highly toxic fumes.

5.3. Suitable Extinguishing Media

Water, dry powder, carbon dioxide and foam fire extinguishers can be used for surrounding fires.

5.4. Firefighting Protection

Firefighters shall wear dust masks and protective gloves, operate upwind to avoid inhaling high-temperature dust.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Spill Characteristics

The product is paste-like solid without liquid flowing leakage risk.

6.2. Clean-up Method

Collect scattered material and grinding debris with brushes and lint-free wipes.

6.3. Personal Protection

Wear disposable gloves and simple dust masks during cleaning to prevent skin contact and dust inhalation.

6.4. Environmental Control

Avoid discharging massive dust into sewers or ventilation ducts. Collect waste and dispose as medical solid waste.

SECTION 7: HANDLING AND STORAGE

7.1. Safe Handling Instructions

- Operated only by professional dental medical staff; unauthorized personnel are prohibited from contact.
- Wear medical gloves throughout operation to reduce direct skin contact with uncured resin.
- Equip grinding instruments with negative pressure suction devices and keep dental clinics well ventilated.
- Clean instruments, countertops and hands thoroughly after operation.

7.2. Storage Conditions

- Store at 5°C ~ 25°C, cool, dry and dark area; avoid direct sunlight and high-temperature heat sources.
- Store separately from strong acids, strong alkalis, strong oxidants and disinfection chemicals.
- Seal tightly after opening; do not freeze. Follow the shelf life marked on outer packaging strictly.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1. Occupational Exposure Limits

No national occupational exposure limit specified; no occupational hazards under routine dental operation.

8.2. Engineering Ventilation Control

Dental clinics shall be equipped with natural ventilation and negative pressure dust extraction systems; regularly clean dust accumulation areas.

8.3. Personal Protective Equipment (PPE)

- Respiratory protection: Dust mask required during grinding; not necessary for normal operation.
- Eye protection: Protective goggles for grinding and cutting procedures.
- Hand protection: Disposable medical rubber gloves for full operation; wash and disinfect hands after use.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

- Appearance: Multi-shade paste solid
- Odor: Faint mild resin odor, no pungent smell
- pH value (aqueous suspension): 6.5 ~ 7.5 (neutral)
- Density: 1.8 ~ 2.2 g/cm³
- Water solubility: Insoluble in water and ethanol at room temperature; completely insoluble after curing
- Curing mode: Visible light photo-curing
- Volatility: No volatile components under ambient temperature
- Flash point, ignition point: None (non-flammable substance)

SECTION 10: STABILITY AND REACTIVITY

10.1. Stability

Stable under standard storage and use conditions with no spontaneous decomposition. Fully cured material is acid & alkali resistant and long-term stable.

10.2. Conditions to Avoid

Long-term high-temperature exposure, continuous strong UV irradiation, open flame, concentrated acid and alkali environments.

10.3. Incompatible Materials

Strong oxidants, high-concentration strong acids, strong alkaline disinfectants.

10.4. Polymerization Risk

Uncured material cures normally under visible light; no runaway polymerization risk.

10.5. Decomposition Products

No decomposition products under normal use; carbon oxides generated under ultra-high temperature.

SECTION 11: TOXICOLOGICAL INFORMATION

- Acute oral & dermal LD50 ＞ 2000 mg/kg, classified as practically non-toxic.
- Skin irritation: Mild transient irritation, no skin corrosion.
- Eye irritation: Temporary slight irritation, no permanent eye damage.
- Sensitization: Extremely low sensitization potential; mild reactions only occur in a tiny number of hypersensitive individuals.
- Mutagenicity, reproductive toxicity, carcinogenicity: Raw materials meet medical standards; no clear evidence of related toxic hazards.

SECTION 12: ECOLOGICAL INFORMATION

- Ecotoxicity: No acute toxic effect on aquatic and terrestrial organisms.
- Biodegradability: Non-biodegradable after curing; no bioaccumulation effect.
- Mobility: Stable at room temperature, no toxic substance migration to soil and water.
- Other adverse environmental effects: No ozone depletion or greenhouse gas related hazards.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste Category

General medical solid waste, not hazardous waste.

13.2. Disposal Regulations

- Collect expired paste and grinding debris in sealed containers and deliver to qualified medical waste disposal agencies.
- Prohibit random disposal into domestic garbage or direct discharge into sewers.
- 13.3 Packaging Disposal
- Clean empty outer packages and dispose as general medical waste; recyclable packages shall be recycled uniformly.

SECTION 14: TRANSPORT INFORMATION

- UN Hazard Goods Number: None
- Proper Shipping Name: YP.Gum Light-curing Composite Resin (Non-Hazardous Goods)
- Hazard Class: None
- Packing Group: General sealed medical packaging
- Marine Pollutant: No

Transport Precautions

- Road transport, air transport and express delivery are not subject to hazardous goods control regulations.
- Keep packages fully sealed during transit to avoid extrusion, high-temperature exposure and rain dampness.
- Do not ship together with strong acid or toxic chemical products.

SECTION 15: REGULATORY INFORMATION

15.1. Applicable Domestic Regulations

- Regulations on the Safety Administration of Hazardous Chemicals: This product is not hazardous chemical, and relevant hazardous chemical control clauses are not applicable.
- GB/T 16483-2008, GB/T 17519-2013 MSDS national preparation standards
- GB 30000 Chemical Classification and Warning Label Specifications
- Regulations on the Supervision and Administration of Medical Devices for oral medical material management

15.2. International Compliance

Compliant with GHS Globally Harmonized System of Classification and Labelling of Chemicals and REACH regulation; free of EU restricted hazardous substances.

15.3. Compliance Statement

This product is supporting restorative material for Class II oral medical devices; all raw materials meet medical access standards.

SECTION 16: OTHER INFORMATION

16.1. Preparation Statement

This MSDS is compiled based on general industry formulas, physical, chemical and toxicological data, applicable only to this dental polymer ceramic product for warehouse management, transportation, clinical safety management and import & export filing.

16.2. Disclaimer

All information in this document is collected from current available technical data and cannot cover all extreme working conditions. Operators must follow standard dental clinical specifications. The compiler shall not be liable for consequences caused by irregular operation.

16.3. Usage Restriction

Only permitted for oral clinical restorative treatment; industrial, daily chemical and other non-medical applications are forbidden.