

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1 Product identifier**

Trade name

-YuDent™ Dental PEEK Block**1.2 Relevant identified uses of the substance or mixture and uses advised against****Uses of the Substance/Mixture**

- Plastics industry

1.3 Details of the supplier of the safety data sheet**Company**

Yunyi (Beijing) Medical Device Co., Ltd.

Floor 1-4, Building 4, No.9 Tianfu Street, Biomedical Base, Daxing District, 102600 Beijing, PEOPLE'S REPUBLIC OF CHINA
+ 86 (10) 5633 0830**E-mail address**info@yunyimedical.com**1.4 Emergency telephone number**

+ 86 (10) 5633 0830

SECTION 2: Hazards identification**2.1 Classification of the substance or mixture****Classification (REGULATION (EC) No 1272/2008)**

- Not classified as hazardous product under the regulation above.

2.2 Label elements**Regulation (EC) No. 1272/2008**

- Not required to be labelled under the local regulation including regulation above.

2.3 Other hazards which do not result in classification

None known.

SECTION 3: Composition/information on ingredients**3.1 Substance**

- Not applicable, this product is a mixture.

3.2 Mixture**Information on Components and Impurities**

Chemical Name	CAS-No.	Identification number	GHS Classification	Concentration [%]
Polyetheretherketone	29658-26-2	Not applicable	Not classified	>= 99

Remarks

- Contains no hazardous ingredients according to GHS

SECTION 4: First aid measures**4.1 Description of first aid measures****In case of inhalation**

- Remove to fresh air.
- If symptoms persist, call a physician.

In case of skin contact

- Cool skin rapidly with cold water after contact with hot polymer.
- Do not peel polymer from the skin.
- Obtain medical attention.

In case of eye contact

- Flush eyes with running water for several minutes, while keeping the eyelids wide open.
- If eye irritation persists, consult a specialist.

In case of ingestion

- Never give anything by mouth to an unconscious person.
- If a large amount is swallowed, get medical attention.

4.2 Most important symptoms and effects, both acute and delayed**In case of inhalation****Effects**

- Mechanical irritation from the particulates generated by the product.
- Thermal decomposition can lead to release of hazardous gases and vapors

In case of skin contact**Effects**

- Mechanical irritation from the particulates generated by the product.

In case of eye contact**Effects**

- Mechanical irritation from the particulates generated by the product.

In case of ingestion**Effects**

- Low ingestion hazard.

4.3 Indication of any immediate medical attention and special treatment needed**Notes to physician**

- None

SECTION 5: Firefighting measures**5.1 Extinguishing media****Suitable extinguishing media**

- powder
- Foam
- Water
- Water spray
- Carbon dioxide (CO₂)

Unsuitable extinguishing media

- None known.

5.2 Special hazards arising from the substance or mixture

- Combustible material
- In a fire, the polymer melts, producing droplets which may propagate fire.
- Once started, a fire will tend to self extinguish (see section 9).
- Heating can release hazardous gases.

5.3 Advice for firefighters

Special protective equipment for firefighters

- In the event of fire, wear self-contained breathing apparatus.
- Firefighters must wear fire-resistant personnel protective equipment.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel

- Refer to protective measures listed in sections 7 and 8.

Advice for emergency responders

- Sweep up to prevent slipping hazard.
- Avoid dust formation.
- Refer to protective measures listed in sections 7 and 8.

6.2 Environmental precautions

- Should not be released into the environment.
- The product should not be allowed to enter drains, water courses or soil.

6.3 Methods and materials for containment and cleaning up

- Sweep up and shovel into suitable containers for disposal.
- Avoid dust formation.
- Keep in properly labelled containers.
- Keep in suitable, closed containers for disposal.
- Treat recovered material as described in the section "Disposal considerations".

6.4 Reference to other sections

- Refer to protective measures listed in sections 7 and 8.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

- Take measures to prevent the build up of electrostatic charge.
- Ensure all equipment is electrically grounded before beginning transfer operations.
- Use only equipment and materials which are compatible with the product.
- To avoid thermal decomposition, do not overheat.

Hygiene measures

- Wash hands before breaks and at the end of workday.
- Handle in accordance with good industrial hygiene and safety practice.

Dust explosion class

- St1

7.2 Conditions for safe storage, including any incompatibilities**Technical measures/Storage conditions**

- Keep container closed.
- Keep away from heat and sources of ignition.
- Keep away from open flames, hot surfaces and sources of ignition.
- To avoid thermal decomposition, do not overheat.
- Avoid dust formation.
- Refer to protective measures listed in sections 7 and 8.
- Do not smoke.

7.3 Specific end use(s)

- No data available

SECTION 8: Exposure controls/personal protection**8.1 Control parameters**

- We are not aware of any national exposure limits.

8.2 Exposure controls**Control measures****Engineering measures**

- Provide local ventilation appropriate to the product decomposition risk (see section 10).
- Provide appropriate exhaust ventilation at places where dust is formed.
- Refer to protective measures listed in sections 7 and 8.

Individual protection measures**Respiratory protection**

- When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.
- Use only respiratory protection that conforms to international/ national standards.

Hand protection

- When handling hot material, use heat-resistant gloves.

Eye protection

- Safety glasses with side-shields
- Dust proof goggles, if dusty.

Skin and body protection

- Long sleeved clothing

Hygiene measures

- Wash hands before breaks and at the end of workday.
- Handle in accordance with good industrial hygiene and safety practice.

Protective measures

- When using do not eat, drink or smoke.

SECTION 9: Physical and chemical properties**9.1 Information on basic physical and chemical properties****Appearance**Form: PelletsPhysical state: SolidColour: Beige**Odour**

Odourless

Odour Threshold

No data available

pH

Not applicable

<u>Melting point/range</u>	340 °C
<u>Boiling point/boiling range</u>	Not applicable
<u>Flash point</u>	Not applicable
<u>Evaporation rate (Butylacetate = 1)</u>	No data available
<u>Flammability (solid, gas)</u>	May form combustible dust concentrations in air, The product is not flammable.
<u>Flammability/Explosive limit</u>	No data available
<u>Auto-ignition temperature</u>	No data available
<u>Vapour pressure</u>	Not applicable
<u>Vapour density</u>	Not applicable
<u>Density</u>	No data available
<u>Solubility</u>	<u>Water solubility</u> : negligible
<u>Partition coefficient: n-octanol/water</u>	Not applicable
<u>Thermal decomposition</u>	> 430 °C Extended period of exposure (ca. 1 hour).
<u>Viscosity</u>	No data available
<u>Explosive properties</u>	No data available
<u>Oxidizing properties</u>	No data available

9.2 Other information

<u>Dust explosion constant</u>	153 m.bar/s St1
<u>Minimum ignition energy</u>	30 - 100 mJ

SECTION 10: Stability and reactivity

10.1 Reactivity

- No dangerous reaction known under conditions of normal use.

10.2 Chemical stability

- Stable under normal conditions.

10.3 Possibility of hazardous reactions

- No dangerous reaction known under conditions of normal use.

Polymerisation

- Hazardous polymerisation does not occur.

10.4 Conditions to avoid

- Heat, flames and sparks.
- To avoid thermal decomposition, do not overheat.
- Avoid dust formation.

- The normal temperature for processing this resin exceeds the decomposition and/or ignition temperature of some other polymeric resins, such as polyacetal, polyvinyl chloride (PVC), polypropylene, etc. If PVC or any other resin with a decomposition temperature below 371°C / 700°F is molded or handled in your equipment, these materials can rapidly decompose and/or react with this resin at the temperatures used to process this resin. Inadvertent contamination of this resin with these materials from the material handling system or other equipment can result in a rapid, possibly violent release of decomposition fumes, when the contaminated material is brought to processing temperature. To avoid, thoroughly clean molding and other processing equipment prior to changeover and prevent cross contamination of material handling systems.

10.5 Incompatible materials

- Polymeric resins

10.6 Hazardous decomposition products

- Carbon monoxide
- Sulphur oxides
- Hydrocarbons
- Hydrogen fluoride
- The release of other hazardous decomposition products is possible.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Acute oral toxicity No data available
Acute inhalation toxicity No data available

Acute dermal toxicity No data available
Acute toxicity (other routes of administration) No data available

Skin corrosion/irritation No data available

Serious eye damage/eye irritation No data available

Respiratory or skin sensitisation No data available

Mutagenicity

Genotoxicity in vitro No data available
Genotoxicity in vivo No data available

Carcinogenicity No data available

Toxicity for reproduction and development

Toxicity to reproduction/Fertility No data available
Developmental Toxicity/Teratogenicity No data available

STOT

STOT - single exposure No data available
STOT - repeated exposure No data available

Aspiration toxicity

No data available

Further information

Because the components are encapsulated in the resin and may not be bioavailable in the body, they may not exert the above mentioned health effects. Description of possible hazardous to health effects is based on experience and/or toxicological characteristics of several components.

SECTION 12: Ecological information**12.1 Toxicity**

No data available

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

No data available

12.6 Other adverse effects

No data available

SECTION 13: Disposal considerations**13.1 Waste treatment methods****Product Disposal**

- In accordance with local and national regulations.
- Waste characterizations and compliance with applicable laws and regulations are the responsibility of the waste generator.
- Must be incinerated in a suitable incineration plant holding a permit delivered by the competent authorities.
- Can be landfilled or incinerated, when in compliance with local regulations.

- Do not dispose of waste product into drains or watercourses.

Advice on cleaning and disposal of packaging

- Empty containers.
- Dispose of as unused product.
- For unused and uncontaminated product, the preferred options include sending to a licensed, permitted: recycler, reclaimer, incinerator or other thermal destruction device or industrial landfill.

SECTION 14: Transport information**CN DG**

Not regulated

ADR

Not regulated

RID

Not regulated

IMDG

Not regulated

IATA

Not regulated

Note: The above regulatory prescriptions are those valid on the date of publication of this sheet. Given the possible evolution of transport regulations for hazardous materials, it would be advisable to check their validity with your sales office.

SECTION 15: Regulatory information**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture****Notification status**

Inventory Information	Status
United States TSCA Inventory	- Listed on Inventory
Canadian Domestic Substances List (DSL)	- Listed on Inventory
Australia Inventory of Chemical Substances (AICS)	- Listed on Inventory
Japan. CSCL - Inventory of Existing and New Chemical Substances	- Listed on Inventory
Korea. Korean Existing Chemicals Inventory (KECI)	- Listed on Inventory
Philippines Inventory of Chemicals and Chemical Substances (PICCS)	- One or more components not listed on inventory
China. Inventory of Existing Chemical Substances in China (IECSC)	- Listed on Inventory
EU. European Registration, Evaluation, Authorisation and Restriction of Chemical (REACH)	- If product is purchased from Solvay in Europe, it is in compliance with REACH, if not, please contact the supplier.

15.2 Chemical Safety Assessment

- No data available

SECTION 16: Other information

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. Such information is only given as guidance to help the user handle, use, process, store, transport, dispose and release the product in satisfactory safety conditions and is not to be considered as a warranty or quality specification. It should be used in conjunction with technical sheets but do not replace them. Thus, the information only relates to the designated specific product and may not be applicable if such product is used in combination with other materials or in any other manufacturing process, unless otherwise specifically indicated. It does not release the user from ensuring he is in conformity with all regulations linked to its activity.