

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Dental Zirconia

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

1.1. Product identifier

HT, ST, Pre-shaded ST, ST-Plus, Pre-shaded ST-Plus, Pre-shaded 3d Pro, UT, Pre-shaded UT

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

Use of the substance/mixture

Dental Zirconia DUT are dental milling blanks made of yttria-stabilized zirconia for the manufacture of dental restorations. Dental Zirconia DUT can be used for all dental constructions with up to two pontics in anterior and posterior region.

Uses advised against

No information available.

1.3. Details of the supplier of the safety data sheet

Company	Audental Bio-Material Co., Ltd 2-2 88, Jingche Road, Songjiang District, 201661 Shanghai, P.R. China
Marketer	Audental Bio-Material Co., Ltd 2-2 88, Jingche Road, Songjiang District, 201661 Shanghai, P.R. China
E-mail (competent person)	wangxi@audental-asia.com

1.4. Emergency telephone number: +86 (0) 335 8691917

Further Information

No information available.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No. 1272/2008

This mixture is not classified as hazardous according to Regulation (EC) No. 1272/2008.

2.2. Label elements

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

$\text{ZrO}_2 + \text{HfO}_2 + \text{Y}_2\text{O}_3 \geq 99\%$

$\text{Y}_2\text{O}_3 < 9.2\%$

$\text{Al}_2\text{O}_3 < 0.1\%$

Further Information

No information available.

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SECTION 4: First aid measures

4.1. Description of first aid measures

After inhalation

Remove person to fresh air and keep comfortable for breathing. In case of respiratory tract irritation, consult a physician.

After contact with skin

After contact with skin, wash immediately with plenty of water and soap. If skin irritation occurs: Get medical advice/attention.

After contact with eyes

Rinse immediately carefully and thoroughly with eye-bath or water. In case of eye irritation consult an ophthalmologist.

After ingestion

Rinse mouth immediately and drink plenty of water.

4.2. Most important symptoms and effects, both acute and delayed

No information available.

4.3. Indication of any immediate medical attention and special treatment needed

No information available.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Dry extinguishing powder. Carbon dioxide (CO₂). alcohol resistant foam. Water spray jet

Unsuitable extinguishing media

High power water jet

5.2. Special hazards arising from the substance or mixture

No information available.

5.3. Advice for firefighters

Co-ordinate fire-fighting measures to the fire surroundings. The product itself does not burn. In case of fire: Wear self-contained breathing apparatus.

Additional information

Do not allow run-off from fire-fighting to enter drains or water courses.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Use personal protection equipment.

6.2. Environmental precautions

Do not allow to enter into surface water or drains.

6.3. Methods and material for containment and cleaning up

Take up mechanically. Avoid dust formation. Collect in closed and suitable containers for disposal.

6.4. Reference to other sections

See protective measures under point 7 and 8. Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

See section 8.

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Advice on protection against fire and explosion

No special fire protection measures are necessary.

Further information on handling

Avoid dust formation. Protect from moisture. Provide adequate ventilation as well as local exhaust at critical locations. To follow: Occupational exposure limit values

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep/Store only in original container.

Advice on storage compatibility

Keep the packing dry and well sealed to prevent contamination and absorption of humidity.

Further information on storage conditions

Keep away from: Frost, Heat
Handle with care - avoid bumps, friction and impact.

7.3. Specific end use(s)

Observe instructions for use.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.2. Exposure controls

Appropriate engineering controls

Technical ventilation of workplace

Protective and hygiene measures

Work in well-ventilated zones or use proper respiratory protection.
Only wear fitting, comfortable and clean protective clothing.
Wash hands before breaks and after work.
Separate storage of work clothes.

Eye/face protection

Suitable eye protection:
Eye glasses with side protection
goggles

Hand protection

Suitable gloves type:
NBR (Nitrile rubber) DIN EN 374,
Butyl caoutchouc (butyl rubber) DIN EN 374,
NR (natural rubber, natural latex).
Wear cotton undermitten if possible.
Breakthrough times and swelling properties of the material must be taken into consideration.

Skin protection

Protective clothing.

Respiratory protection

Particle filter device (DIN EN 143)

SECTION 9: Physical and chemical properties

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9.1. Information on basic physical and chemical properties

Physical state: solid
Colour: white
Odour: odourless

Test method

pH-Value: not applicable

Changes in the physical state

Melting point: not determined
Initial boiling point and boiling range: not determined
Sublimation point: not determined
Softening point: not determined
Pour point: not determined

Flash point:

not applicable

Flammability

Solid: not applicable
Gas: not applicable

Explosive properties not explosive
according to EU A.14 Lower explosion
limits:

not applicable

Upper explosion limits:

not applicable

Auto-ignition temperature

Solid: not determined
Gas: not determined

Decomposition temperature:

not determined

Oxidizing properties

Not oxidizing.

Vapour pressure:

not determined

Density:

not determined

Bulk density:

1000-1500 kg/m³

Water solubility:

insoluble

Solubility in other solvents

No information available.

Partition coefficient:

not applicable

Viscosity / dynamic:

not determined

Vapour density:

not determined

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Evaporation rate:

not determined

9.2. Other information

No information available.

SECTION 10: Stability and reactivity

10.1. Reactivity

No information available.

10.2. Chemical stability

No information available.

10.3. Possibility of hazardous reactions

No information available.

10.4. Conditions to avoid

No information available.

10.5. Incompatible materials

No information available.

10.6. Hazardous decomposition products

not applicable

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicokinetics, metabolism and distribution

No information available.

Acute toxicity

Based on available data, the classification criteria are not met.

Irritation and corrosivity

Based on available data, the classification criteria are not met.

Sensitising effects

Based on available data, the classification criteria are not met.

Carcinogenic/mutagenic/toxic effects for reproduction

Based on available data, the classification criteria are not met.

STOT-single exposure

Based on available data, the classification criteria are not met.

STOT-repeated exposure

Based on available data, the classification criteria are not met.

Aspiration hazard

Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

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12.1. Toxicity

No information available.

12.2. Persistence and degradability

No information available.

12.3. Bioaccumulative potential

No information available.

12.4. Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

12.6. Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Advice on disposal

Dispose of waste according to applicable legislation.

Contaminated packaging

Dispose of waste according to applicable legislation. Non-contaminated packages may be recycled.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number:

No dangerous good in sense of this transport regulation.

14.2. UN proper shipping name:

No dangerous good in sense of this transport regulation.

14.3. Transport hazard class(es):

No dangerous good in sense of this transport regulation.

14.4. Packing group:

No dangerous good in sense of this transport regulation.

Inland waterways transport (ADN)

14.1. UN number:

No dangerous good in sense of this transport regulation.

14.2. UN proper shipping name:

No dangerous good in sense of this transport regulation.

14.3. Transport hazard class(es):

No dangerous good in sense of this transport regulation.

14.4. Packing group:

No dangerous good in sense of this transport regulation.

Marine transport (IMDG)

14.1. UN number:

No dangerous good in sense of this transport regulation.

14.2. UN proper shipping name:

No dangerous good in sense of this transport regulation.

14.3. Transport hazard class(es):

No dangerous good in sense of this transport regulation.

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14.4. Packing group: No dangerous good in sense of this transport regulation.

Air transport (ICAO)

14.1. UN number: No dangerous good in sense of this transport regulation.

14.2. UN proper shipping name: No dangerous good in sense of this transport regulation.

14.3. Transport hazard class(es): No dangerous good in sense of this transport regulation.

14.4. Packing group: No dangerous good in sense of this transport regulation.

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

14.6. Special precautions for user

No dangerous good in sense of this transport regulation.

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

No dangerous good in sense of this transport regulation.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations

Regulations/legislation specific for the substance or mixture

National regulatory information

Water contaminating class (D): - - not water contaminating

15.2. Chemical safety assessment

For the following substances of this mixture a chemical safety assessment has been carried out:

SECTION 16: Other information

Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route
(European Agreement concerning the International Carriage of Dangerous Goods by Road)
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer
(Regulations Concerning the International Transport of Dangerous Goods by Rail)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)
ICAO: International Civil Aviation Organization
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)
CAS: Chemical Abstracts Service (division of the American Chemical Society)
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
CLP: Regulation on Classification, Labelling and Packaging of Substances and Mixtures,
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
EC50: Effect concentration, 50 percent
DNEL: Derived No Effect Level
PNEC: Predicted No Effect Concentration PBT:
Persistent, Bioaccumulative and Toxic vPvB:
very Persistent and very Bioaccumulative

Further Information

The above information describes exclusively the safety requirements of the product and is based on our

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present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

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