1. Chemical Product and company identification

Identification of the product
Product name: Procera® Zirconia core material

Manufacturer/supplier identification
Company: 1. Procera Sandvik Inc. 18-72 McBride Ave, Fair Lawn, NJ, 07410, USA
2. Procera Sandvik AB, 12680, Stockholm, Sweden

Telephone number: 1. +1 201 398 7411
2. +46 8 7266 300

2. Chemical composition/information on ingredients

Composition: > 99% ZrO₂ + Y₂O₃ +HfO₂, 4,5-5,3% Y₂O₃, < 0.5% Al₂O₃

3. Hazard identification


4. First-aid procedures

After skin contact: -
After eye contact: After grinding, rinse with plenty of water for at least 10 minutes with the eyelid held wide open. Consult a physician.
After inhalation: After grinding, move to fresh air.
After swallowing: Drink plenty of water

5. Fire-fighting procedure instructions

Not flammable

6. Accidental release measures

No harmful release

7. Handling and storage

Handling: No further requirements
Storage: No further requirements
8. Exposure controls/personal protection
   Specific control parameters

   Respiratory protection: Required when dust is generated
   Eye protection: Required when grinding
   Hand protection: -
   Industrial hygiene: Wash hand after grinding the core material

9. Physical and chemical properties

   Form: Solid
   Color: White
   Odor: Odorless
   Melting range: > 2000°C
   Boiling point: > 2000°C
   Ignition temperature: No information available
   Flash point: No information available
   Explosion limit lower: Non explosive
   Explosion limit higher: Non explosive
   Density: ≥ 6, g/cm³
   Solubility in water: Insoluble

10. Stability and reactivity

   Condition to be avoided
   None
   Substances to be avoided
   None
   Hazardous decomposition products
   None

11. Toxicological information

   Acute toxicity: Non-toxic
   Primary irritant effects: -
   After eye contact: Dust during grinding may cause irritation
   After skin contact: No irritation
   After inhalation: Dust during grinding may cause irritation
   After swallowing: May cause irritation
   Sensitization: No sensitization effect known

   When used and handled according to specification, the product does not have any harmful effects according to our experience and the information supplied to us.
12. Ecological information
   No ecological problems are to be expected

13. Disposal
   Product: The product contains > 99 % ZrO₂ + Y₂O₃ + HfO₂ and can not
   cause any harm to the environment
   Packing: Disposal in compliance with official regulations

14. Transportation
   Not subjected to transportation regulations.

15. Regulations

16. Other information

   Date of issue: 28-Nov-00

   The information contained herein is based on the present state of our knowledge. It characterizes the
   product with regard to the appropriate safety precautions. It does not represent a guarantee for the
   properties of the product.
1 PRODUCT AND COMPANY IDENTIFICATION

Product Name: CZ Press Pellets
Revision Date: 04/05/07
MSDS Number: 210A
Product Code: All pellet shades
Product Use: Dental Restorations

Provident Dental Products
500 Memorial Drive
Somerset, NJ 08873

For MSDS assistance:
Chemtrec: (800) 424-9300 (24 hours/7 days)
Chemtrec International: (202) 483-7616
Poison Control Center: If over-exposure occurs, call your poison control center at 1-800-222-1222 (24 hours/7 days)

For Emergencies, call 911 immediately (in the US).

2 COMPOSITION/INFORMATION ON INGREDIENTS

CAS #     Component
12041-22-7     Dental Porcelain

Pressable ceramics is a variety of dental porcelain in the form of solid pellets/ingots. This material does not contain any forms of crystalline silica. In addition to silicon (Si) and oxygen (O), dental porcelains comprise the following chemical elements: Al, K, Na, Ca, and may also comprise Li, Mg, Ba, Ce, Ti, Zr, Sn, Y, B, F and Fe. All these elements are not present in their pure or individual oxide forms but rather chemically bonded together within insoluble alumino-silicate glass matrix. By convention the composition of dental porcelain, same as composition of many other glass-ceramic materials, is still reported on an individual oxide basis. In that representation composition of dental porcelain may be given as about 50-80% of SiO2, about 5-15% of Al2O3 and the balance comprised of chemical constituents listed above and below. Dental porcelain also contains small amounts of non-silica inclusions: pigments, opacifiers, opalescing and fluorescing agents, which are based on crystalline forms of TiO2, ZrO2, Al2O3, zirconium silicate (ZrSiO4) and yttrium silicate (Y2SiO5). In pressable ceramics, sold in the form of pellets/ingots, these components are fused and completely encapsulated in chemically durable, insoluble glass matrix specifically designed and tested to resist wear and corrosion in oral environment.

OSHA Regulatory Status: This MSDS contains valuable information critical to the safe handling and proper use of the product. This MSDS should be retained and made available for employees and other users of this product.

3 HAZARDS IDENTIFICATION

Route of Entry: Inhalation, Eye contact, Respiratory
Target Organs: Lungs
Inhalation: Dust over a prolonged period of time may result in lung damage. May irritate respiratory system.
Skin Contact: May irritate skin.
Eye Contact: Airborne dust may irritate eyes.
Ingestion: Not available
4 FIRST AID MEASURES

Inhalation: Remove to fresh air. Contact a physician if necessary.
Skin Contact: Rinse with soap and water.
Eye Contact: Flush with copious amounts of water for at least 15 minutes.
Consult an ophthalmologist or medical attention if necessary.
Ingestion: Rinse out mouth. Seek medical attention.

5 FIRE FIGHTING MEASURES

Non-flammable.
Use the correct fire fighting measures for the surrounding area.

6 ACCIDENTAL RELEASE MEASURES

Vacuum chips or shards of material.
Avoid contact with potentially sharp edges or shards.
Vacuum powder dust from grinder, being careful not to generate airborne dust.

7 HANDLING AND STORAGE

Handling Precautions: Do not inhale or ingest.
Storage Requirements: Store pellets in original container.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls: Grind in a well ventilated area or an area with a proper exhaust fan.
Protective Equipment: Use NIOSH-approved safety glasses and dust mask during grinding.
Exposure Guidelines/Other: This product has not been evaluated as a whole.

9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Beige/white solid ingot
Physical State: solid
Odor: odorless
pH: not applicable
Vapor Pressure: not applicable
Vapor Density: not applicable
Boiling Point: not applicable
Freezing/Melting Pt.: not applicable
Solubility: not applicable
Spec Grav./Density: not applicable

Bulk Density: 2.3-2.4 g/cm³
Fusion Point: 1580-1616 deg F (860-880 deg C)
10 STABILITY AND REACTIVITY

Stability: Stable

Conditions to avoid: None known

Materials to avoid (incompatibility): None known

Hazardous Decomposition products: None known

Hazardous Polymerization: None known

11 TOXICOLOGICAL INFORMATION

Not available

12 ECOLOGICAL INFORMATION

Not available

13 DISPOSAL CONSIDERATIONS

This information applies to the material as manufactured; processing, use, or contamination may make the information inappropriate, inaccurate, or incomplete.

Waste must be handled in accordance with all applicable regulations. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state, and local requirements.

14 TRANSPORT INFORMATION

Not available

15 REGULATORY INFORMATION

Not available

16 OTHER INFORMATION

The information and recommendations set forth herein (hereinafter "Information") are presented in good faith and believed in good faith and believed to be correct as of the date hereof. Provident Dental Products however, makes no representations as to the completeness or accuracy of this information and supplies it on the condition that the persons receiving same will make their own determinations as to its suitability for their purpose prior to use. In no event will Provident Dental Products be responsible for damages of any nature whatsoever resulting from the use of or reliance upon this information.

Rev# 0

END OF MSDS DOCUMENT