

SAFETY DATA SHEET

Section 1: Identification

Day of issue: 2017-04-07

Product identifier:Ceramir[®] Crown & Bridge QuikCap**Recommended use of the chemical and restrictions on use:**

Dental cement intended for permanent cementation of restorations.

Uses advised against: Applications other than the intended use.

Details of the supplier of the safety data sheet:**Manufacturer:**

Doxa Dental

Axel Johanssons gata 4-6 Tel.: +46 (0) 18 478 20 00 1(855)Doxa – USA (369-2872)

SE-754 50 Uppsala

SWEDEN

Responsible for SDS (e-mail): info@doxa.se**US importer:**

Doxa Dental Inc.

1(855)Doxa – USA (369-2872)

www.ceramirUS.com

Emergency phone number:

Poison Emergency call 1-800-222-1222 (anywhere in the US)

CHEMTREC Tel. No.US: 1-800-424-9300

Section 2: Hazard(s) identification

The product is not controlled under GHS or OSHA Hazard Communication Standard, 29 CFR 1910.1200, but under Federal Food, Drug, and Cosmetic Act as Medical Device. The labelling text is therefore shown below for safety purposes.

Classification of the chemical:

None

Signal word

None

Pictogram(s)/Symbol(s)

None

Hazard statement(s)

None.

Precautionary statement(s)

None

Other hazards not otherwise classified:

Do not use in patients who have an allergy to polyacrylic acid. In very rare cases, the product may cause hypersensitivity symptoms in some patients. Discontinue use of the product if such symptoms occur and consult a doctor.

Ingredients with unknown acute toxicity:

Not relevant.

Section 3: Composition/Information on Ingredients

Mixtures: The product consist of a powder base and a liquid base enclosed in a capsule (content 0.5 g).

| % w/w | Substance name | CAS No. | Note |
|-------|--------------------|-----------|------|
| 5-<10 | Polyacrylic acid | 9003-01-4 | 1 |
| <5 | Strontium fluoride | 7783-48-4 | 1 |
| <5 | Tartaric acid | 87-69-4 | 1 |

1) The exact percentage of this component is withheld and considered a trade secret information.

Section 4: First-Aid Measures

Description of necessary measures:

Inhalation: Remove to fresh air. Get medical attention if any discomfort continues.

Skin contact: Wash skin thoroughly with soap and water. If irritation occur: Seek medical advice.

Eye contact: Flush with water or physiological salt water, holding eye lids open, remember to remove contact lenses, if any.
If irritation persists: Seek medical advice.

Ingestion: Rinse mouth and drink plenty of water. **Do not induce vomiting.** Keep at rest. Get medical attention if any discomfort continues.

Most important symptoms/effects, acute and delayed:

Inhalation of dust may irritate throat and respiratory system and cause coughing. May cause slight irritation of skin and eyes. May cause hypersensitivity symptoms in some patients.

Indication of immediate medical attention and special treatment needed:

Show this safety data sheet to a physician or emergency ward. Treat symptomatically.

Section 5: Fire-Fighting Measures

Suitable (and unsuitable) extinguishing media:

Dry-powder, water mist (never water jet), alcohol resistant foam or carbon dioxide (CO₂).

Specific hazards arising from the chemical:

Not combustible. In case of surrounding fire the product may form hazardous decomposition products such as hydrofluoric acid.

Special protective equipment and precautions for fire-fighters:

When extinguishing fires use breathing apparatus with an independent source of air.

Section 6: Accidental Release Measures

Personal precautions, protective equipment, and emergency procedures:

Use personal protective equipment - see section 8.

Do not empty into drains. Inform appropriate authorities in accordance with local regulations.

Methods and materials for containment and cleaning up:

Sweep up and place in a suitable container. Flush area of spill with plenty of water. Further handling of spillage - see section 13.

Section 7: Handling and Storage

Precautions for safe handling:

Use only as described in "Instruction for use".

Provide adequate ventilation. Avoid contact with skin and eyes. Wash with water and soap after work. Do not eat, drink or smoke during use.

Conditions for safe storage, including any incompatibilities:

Store dry at temperatures between +4 and +25°C. Keep away from substances mentioned in section 10.

Section 8: Exposure Controls/Personal Protection

OSHA Permissible Exposure Limits (PEL):

| Substance | OSHA PEL | Cal/OSHA PEL | NIOSH REL | ACGIH TLV |
|---|------------------------------------|-----------------------|-----------------------|-----------------------|
| Strontium fluoride (as F) (listed under Fluorides) | 2.5 mg/m ³ (as dust) | 2.5 mg/m ³ | 2.5 mg/m ³ | 2.5 mg/m ³ |

National Institute for Occupational Safety and Health = NIOSH Recommended Exposure Limit = REL
American Conference of Governmental Industrial Hygienists = ACGIH Threshold Limit Value = TLV

Other exposure limit used or recommended: None known.

Appropriate engineering controls (e.g., use local exhaust ventilation, or use only in an enclosed system):

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Provide adequate ventilation in working areas to keep airborne concentrations low.

Section 8: Exposure Controls/Personal Protection (continued)

Individual protection measures, such as personal protective equipment (PPE):

PPE must follow OSHA regulations found in 29 CFR 1910.132 and should be chosen in collaboration with the supplier of such equipment. The recommended PPE and the specified standards are only suggestions, as a risk assessment of the relevant current work/operation may lead to other control measures.

Eye/face protection

Wear tight fitting safety goggles (as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or EN166) when risk of dust formation.

Skin/hand protection

By prolonged contact: Wear protective gloves of for instance nitrile rubber. Breakthrough time of the ingredients is not available. Discard gloves at any suspicion of contamination.

Respiratory protection

Respiratory equipment is normally not required. In case of dust formation: Use a NIOSH/MSHA or EN149 approved respirator with a particle filter type P2. The filter has a limited lifetime and must be changed. Read the instruction.

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149.

Section 9: Physical and Chemical Properties

| | |
|---|-------------------------|
| Appearance (physical state, color, etc.): | Capsules |
| Odor: | No characteristic odour |
| Odor threshold: | Not determined |
| pH: | Not determined |
| Melting point/freezing point (°C): | Not determined |
| Initial boiling point and boiling range (°C): | Not determined |
| Flash point (°C): | Not determined |
| Evaporation rate: | Not determined |
| Flammability (solid, gas): | Not relevant |
| Upper/lower flammability or explosive limits (vol-%): | Not determined |
| Vapor pressure: | Not determined |
| Vapor density: | Not determined |
| Relative density: | Not determined |
| Solubility(ies): | Insoluble in water |
| Partition coefficient: n-octanol/water: | Not determined |
| Auto-ignition temperature (°C): | Not determined |
| Decomposition temperature (°C): | Not determined |
| Viscosity: | Not relevant |

Section 10: Stability and Reactivity

Reactivity:

Capsule content reacts with water.

Chemical stability:

Stable under normal conditions and recommended use.

Possibility of hazardous reactions:

None known.

Conditions to avoid:

Water and moisture.

Incompatible materials:

Strong oxidizers, strong acids and strong bases.

Hazardous decomposition products:

When heated to high temperatures (decomposition), the product emits very toxic fumes such as oxides of carbon and strontium and corrosive hydrogen fluoride.

Section 11: Toxicological Information

Information on toxicological (health) effects:

Likely routes of exposure: Inhalation, skin and ingestion.

Symptoms:

Symptoms may occur if dust is released from the capsule by accident.

Inhalation:

Inhalation may cause irritation of the respiratory system.

Skin Contact:

May cause slight irritation with redness.

Eye Contact:

May cause slight irritation with redness and stinging.

Ingestion:

May cause irritation of the gastrointestinal tract, nausea, vomiting, salivation, fever and headache.

Delayed (chronic) effects:

High concentration of inorganic fluorides may cause skeletal fluorosis with symptoms such as periodical pain and stiffness in the joints, headache, abdominal pain and muscle weakness. Later osteoporosis and bone damages may occur. Loss of weight. Anorexia and anaemia are common findings in fluorine poisoning. Skin sensitization to polyacrylic acid may occur in very rare cases. Symptoms are redness, itching and eczema.

Acute Toxicity

| Hazard class | Data | Test | Data source |
|-----------------------|---|----------|-------------|
| Acute toxicity: | | | |
| Inhalation | No available data | - | - |
| Dermal | LD ₅₀ (rat) > 2000 mg/kg (Tartaric acid) | OECD 402 | RTECS |
| Oral | LD ₅₀ (rat) = 2500 mg/kg (Polyacrylic acid) | No data | Supplier |
| | LD ₅₀ (rat) > 10600 mg/kg (Strontium fluoride) | No data | RTECS |
| | LD ₅₀ (rat) > 2000 mg/kg (Tartaric acid) | OECD 423 | RTECS |
| Corrosion/irritation: | Irritant to skin and eyes (Polyacrylic acid) | No data | Supplier |
| | In vitro eye irritant (Tartaric acid) | OECD 437 | ECHA diss. |
| | No skin irritation, rabbit (Tartaric acid) | OECD 404 | RTECS |
| Sensitization: | Not a skin sensitizer (Tartaric acid) | OECD 429 | RTECS |

The chemical, physical and toxicology properties of strontium fluoride have not been thoroughly investigated and recorded.

Mutagenic toxicity

No available data/insufficient data.

Reproductive toxicity

No available data/insufficient data.

Carcinogenic toxicity

No available data/insufficient data.

Substances are not mentioned on NTP's Report on Carcinogens (RoC), latest ed.

Substances are not found to be potential carcinogens in IARC Monographs, or by OSHA.

Specific Target Organ Toxicity

No known effects.

Section 12: Ecological Information

Ecotoxicity:

| Aquatic | Data | Test (Media) | Data source |
|-------------|---|---------------|-------------|
| Fish | LC ₅₀ (Brachydanio rerio, 96h) > 100 mg/l (Polyacrylic acid) | No data (FW) | Supplier |
| Crustaceans | EC ₅₀ (Daphnia magna, 48h) > 100 mg/l (Polyacrylic acid) | No data (FW) | Supplier |
| | EC ₅₀ (Daphnia magna, 48h) = 93.3 mg/l (Tartaric acid) | OECD 202 (FW) | Supplier |
| Algae | EC ₅₀ (Scenedesmus subspicatus, 72h) > 180 mg/l (Polyacrylic acid) | No data (FW) | Supplier |
| | EC ₅₀ (Algae, 72h) = 51.4 mg/l (Tartaric acid) | OECD 201 (FW) | Supplier |

Persistence and degradability

Methods for determination of degradability are not valid for inorganic compounds.

Polyacrylic acid is not considered readily biodegradable.

Tartaric acid was degraded 85% in 28 days at an OECD 306 test and is considered rapidly degradable.

The cured product is not expected to be biodegradable.

Bioaccumulative potential

Polyacrylic acid: Log K_{ow} = 0.44 (no significant bioaccumulative effect).

Tartaric acid: Log K_{ow} = 0.24 (no significant bioaccumulative effect).

Mobility in soil

Low mobility in soil is expected.

Other adverse effects

None known.

Section 13: Disposal Considerations

Disposal considerations

Dispose of contents/container in accordance with applicable local/regional/national/international regulations. See Section 8 for guidance on PPE.

Incinerate and dispose of waste product in a permitted waste incineration facility/industrial waste facility.

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

RCRA P-Series: None listed.

RCRA U-Series: None listed.

Section 14: Transport Information

Not dangerous goods according to US DOT.

UN-no.: None.

UN proper shipping name: None.

Hazard Class: None.

Packing Group: None.

IMDG: None.

Canadian Transportation of Dangerous Goods (TDG): None.

Section 15: Regulatory Information

US Federal Regulations

NATIONAL INVENTORY STATUS - U.S. Inventory (TSCA):

CAS No. 7783-48-4 is listed on TSCA inventory.

TSCA section 12b:

None of the chemicals in the product are listed.

SARA Title III (Superfund Amendments and Reauthorization Act)

SARA Title III Sect. 302 Extremely Hazardous Substances (40 CFR 355):

None of the chemicals are listed.

SARA Title III Sect. 311/312 Extremely Hazardous Categories (40 CFR 370.21):

Immediate Hazard: None of the chemicals are listed.

Clean Air Act:

This product does not contain any hazardous air pollutants, no class 1 Ozone depletors and no class 2 Ozone depletors.

Clean Water Act:

None of the chemicals in this product are listed as Hazardous Substances, as Priority Pollutants or as Toxic Pollutants under the CWA.

STATE REGULATIONS:

Proposition 65: Not regulated.

CAS No. 7783-48-4 can be found on the following state right to know lists:

California, (listed as Fluorides) and (listed as Fluorides, inorganic)

New Jersey, (listed as Fluorides)

Pennsylvania, (listed as Fluorides)

Minnesota, (listed as Fluorides, inorganic) and (listed as Fluorides)

This SDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Section 16: Other Information

Abbreviations:

ACGIH = American Conference of Governmental Industrial Hygienists

AIHA = American Industrial Hygiene Association Workplace Environmental Exposure Level (WEEL)

CERCLA = Comprehensive Environmental Response Compensation and Liability Act

CMR = Carcinogenicity, mutagenicity and reproductive toxicity.

EC₅₀ = Effect Concentration 50%

FW = Fresh Water

LC₅₀ = Lethal Concentration 50%

LD₅₀ = Lethal Dose 50%

NFPA = National Fire Protection Association

NIOSH = National Institute for Occupational Safety and Health

OSHA = Occupational Safety and Health Administration

STEL = Short-term exposure limits

Literature:

ECHA diss. = REACH Registration dossier from ECHA's home page.

IARC = International Agency for Research on Cancer

RTECS = Register of Toxic Effects of Chemical Substances

Other information:

No special training is required. However, the user should be well instructed in the execution of his/her task, be familiar with this Safety Data Sheet and have normal training in the use of personal protective equipment.

The above information, which is accurate to the best of our knowledge and belief, describes the safety aspects of our product but does not warrant any product properties.

Changes since the previous edition:

Not relevant.

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