

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

FINOPEARL Retention crystals

REF 20670 / 20671

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

Coatings and paints, fillers, putties, thinners
for manufacturing mechanic retentions for veneers in the crown and bridge technique.

1.3. Details of the supplier of the safety data sheet

Company name:	FINO GmbH	
Street:	Mangelsfeld 18	
Place:	D-97708 Bad Bocklet	
Telephone:	+49-97 08-90 94 20	Telefax: +49-97 08-90 94 21
e-mail:	info@fino.com	Internet: www.fino.com
Contact person:	Joachim Mahlmeister	Telephone: +49-97 08-90 94 20
e-mail:	info@fino.com	
Responsible Department:	This number can only be reached during our office hours, Monday to Friday from 8 a.m. to 5 p.m.	

1.4. Emergency telephone number:

+49-89-1 92 40
POISON CENTER München
24 hour(s) 7 day(s)

SECTION 2: Hazards identification**2.1. Classification of the substance or mixture**

The mixture is classified as not hazardous according to regulation (EC) No 1272/2008 [CLP].

2.2. Label elements**GB CLP Regulation****Hazard components for labelling**

void

Signal word: Warning**Additional advice on labelling**

There is no requirement for the product to be specially labelled according to EC directives or the corresponding national laws.

SECTION 3: Composition/information on ingredients**3.2. Mixtures****Hazardous components**

none (according to UK REACH Regulation)

SECTION 4: First aid measures**4.1. Description of first aid measures****General information**

Consult physician if symptoms appear or if in doubt.
Remove affected person from the danger area and lay down.
No administration in cases of unconsciousness or cramps.

After inhalation

In case of irregular respiration or respiratory arrest apply artificial respiration.
If unconscious but breathing normally, place in recovery position and seek medical advice.

After contact with skin

Immediately wash with water and soap and rinse thoroughly.
Take off immediately all contaminated clothing and wash it before reuse.
Do not use solvents or thinners!

After contact with eyes

In case of contact with eyes, rinse immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart.
Call a physician immediately.
Remove contact lenses, if present and easy to do. Continue rinsing.

After ingestion

Rinse mouth thoroughly with water.
Immediately call a doctor.
Do NOT induce vomiting.

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**

Water spray jet alcohol resistant foam Dry extinguishing powder Carbon dioxide (CO₂)
Use water spray jet to protect personnel and to cool endangered containers.

Unsuitable extinguishing media

Full water jet

5.2. Special hazards arising from the substance or mixture

In case of fire thick, black fumes will form. Thermal decomposition may cause generation of irritant and harmful gases, so firefighters should wear proper protective equipment. Danger of serious damage to health by prolonged exposure.

5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus.
Use water spray jet to protect personnel and to cool endangered containers.
Residues of burned materials and fire water must be disposed in accordance with magisterial regulations.

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures****General advice**

Avoid contact with eyes.
No dangerous materials are released.

For non-emergency personnel

Emergency procedures
Remove persons to safety. Remove victim out of the danger area.
The danger areas must be delimited and identified using relevant warning and safety signs.

For emergency responders

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

For containment

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents).
Take up mechanically.

For cleaning up

Collect in closed and suitable containers for disposal.
Wash contaminated clothing before reuse.

6.4. Reference to other sections

Treat the recovered material as prescribed in the section on waste disposal. Disposal: see section 13
See protective measures under point 7 and 8.

SECTION 7: Handling and storage**7.1. Precautions for safe handling****Advice on safe handling**

If handled uncovered, arrangements with local exhaust ventilation should be used if possible.
Avoid contact with eyes and skin.
Do not eat, drink or smoke when using this product.

Advice on protection against fire and explosion

No special fire protection measures are necessary.

Advice on general occupational hygiene

Wash hands and face before breaks and after work and take a shower if necessary.
When using do not eat, drink or smoke.
The usual precautionary measures are to be adhered to when handling chemicals.

Further information on handling

No further measures if used according to specifications.

7.2. Conditions for safe storage, including any incompatibilities**Requirements for storage rooms and vessels**

Keep container tightly closed.

Hints on joint storage

No risks worthy of mention.

Further information on storage conditions

Stable under normal storage conditions.

7.3. Specific end use(s)

Auxiliary for dental technology

SECTION 8: Exposure controls/personal protection**8.1. Control parameters****Additional advice on limit values**

If local exhaust ventilation is not possible or not sufficient, the entire working area should be ventilated by technical means. In case of inadequate ventilation wear respiratory protection.

8.2. Exposure controls**Appropriate engineering controls**

Technical measures and the application of suitable work processes have priority over personal protection equipment.

Individual protection measures, such as personal protective equipment

Eye/face protection

Protective goggles with side protection recommendable.

Hand protection

Tested protective gloves must be worn

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

The precise time of rupture can be found out from the manufacturer of the protective gloves and must be observed.

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. EN ISO 374

Thorough skin-cleansing after handling the product.

After cleaning apply high-fat content skin care cream. Protect skin by using skin protective cream.

Skin protection

Wear suitable protective clothing. Wear antistatic work clothing.

Respiratory protection

If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn.

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

Physical state:	solid
Colour:	whitish
Odour:	neutral

Changes in the physical state

Melting point/freezing point:	Not available.
Boiling point or initial boiling point and boiling range:	Not available.
Softening point:	90-120 °C
Flash point:	390 °C

Flammability

Solid/liquid:	Not available.
Gas:	Not available.

Explosive properties

Product is not explosive.

Auto-ignition temperature:	465 °C
pH-Value:	not applicable
Water solubility:	not determined

Solubility in other solvents

The study does not need to be conducted because the substance is known to be insoluble in water.

Partition coefficient n-octanol/water:	not determined
Density (at 20 °C):	1,18 g/cm ³
Relative vapour density:	Not available.

9.2. Other information**Information with regard to physical hazard classes**

Sustaining combustion:	No data available
Oxidizing properties	
Not oxidising.	

Other safety characteristics

Evaporation rate:

Not available.

Further Information**SECTION 10: Stability and reactivity****10.1. Reactivity**

No information available.

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

No hazardous reaction when handled and stored according to provisions.

10.4. Conditions to avoid

Conditions for safe storage, including any incompatibilities, No specific if used according to specifications.

Keep/Store only in original container.

Only use containers specifically approved for the substance/product.

10.5. Incompatible materials

None if product is used according to specifications.

10.6. Hazardous decomposition productsMethyl methacrylate, Carbon dioxide (CO₂), Carbon monoxide**SECTION 11: Toxicological information****11.1. Information on hazard classes as defined in GB CLP Regulation****Toxicokinetics, metabolism and distribution**

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-repeated exposure

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

Specific effects in experiment on an animal

Toxicological data are not available.

Additional information on tests

none

Practical experience

No special references.

11.2. Information on other hazards**Other information**

No special references.

SECTION 12: Ecological information**12.1. Toxicity**

Environmental and ecotoxicological analyses of the product are not available.

12.2. Persistence and degradability

none Evidence exists for biodegradation processes.

12.3. Bioaccumulative potential

No indication of bioaccumulation potential.

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 UK REACH.

12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

SECTION 13: Disposal considerations**13.1. Waste treatment methods****Disposal recommendations**

Prevent from reaching waters or soil. Do not allow to enter into surface water or drains. Dispose of waste according to applicable legislation.

Must not be disposed together with household garbage.

Contaminated packaging

Contaminated packages must be completely emptied and can be re-used following proper cleaning. Packing which cannot be properly cleaned must be disposed of. Dispose of waste according to applicable legislation.

Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information**Land transport (ADR/RID)**

14.1. UN number or ID 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 or ID 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 or ID 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.

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number or ID 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. Maritime transport in bulk according to IMO instruments

No dangerous good in sense of this transport regulation.

SECTION 15: Regulatory information
15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture
EU regulatory information

Information according to 2012/18/EU (SEVESO III): Not subject to 2012/18/EU (SEVESO III)

National regulatory information

Water hazard class (D): - - non-hazardous to water

15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information
Changes

* Data changed compared with the previous version.

Abbreviations and acronyms

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
 "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)"
 ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
 IMDG: International Maritime Code for Dangerous Goods
 IATA: International Air Transport Association
 GHS: Globally Harmonized System of Classification and Labelling of Chemicals
 EINECS: European Inventory of Existing Commercial Chemical Substances
 ELINCS: European List of Notified Chemical Substances
 CAS: Chemical Abstracts Service (division of the American Chemical Society)
 LC50: Lethal concentration, 50 percent
 LD50: Lethal dose, 50 percent

Further Information

The above information describes exclusively the safety requirements of the product and is based on our 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 information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights.

Identified uses

No	Short title	LCS	SU	PC	PROC	ERC	AC	TF	Specification
1	Auxiliary for dental technology	PW	20	0	0	4	0	94	100

LCS: Life cycle stages

PC: Product categories

ERC: Environmental release categories

TF: Technical functions

SU: Sectors of use

PROC: Process categories

AC: Article categories

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