



SAFETY DATA SHEET (SDS) BITECRYSTAL 70

1. IDENTIFICATION

Product Name: BiteCrystal 70
Other Names or Codes: 3402000
Use: Vinyl polysiloxane dental material
Supplier Name: DenPlus Inc.
Address: 333-M Chemin du Tremblay
Boucherville, QC, Canada, J4B 7M1
Phone Number for Information: 450.641.1330
Emergency Phone Number: 613.996.6666
Anti-Poison Center of Quebec 1.800.463.5060

2. HAZARDS IDENTIFICATION

2.1 Classification

Skin sensitization – Category 1 H317 May cause an allergic skin reaction
Serious eye damage/eye irritation - Category 2B H320 Cause eye irritation

2.2 Label elements



Signal word: Warning

Hazard statements: H317 May cause an allergic skin reaction
H320 Cause eye irritation

Precautionary statements: P264 Wash thoroughly after handling.
P272 Contaminated work clothing should not be allowed out of the workplace.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352 IF ON SKIN: Wash with plenty of water.
P333+P313 If skin irritation or rash occurs: get medical advice/attention.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Dispose of contents/container to hazardous waste in accordance with local, state or national legislation. Incinerate under approved controlled conditions, using incinerators suitable for the disposal of flammable organics.

3. INFORMATION ON INGREDIENTS

Mixture of addition-curing silicones.

Hazardous ingredients	CAS	Concentration range (by weight)
Polydimethylsiloxane vinyl terminated	68083-19-2	15 to 40 %
Dimethylsiloxane copolymer	68037-59-2	5 to 10 %
Quartz silica	14808-60-7	30 to 60 %
Polysiloxane	27306-78-1	1 to 5 %

4. FIRST-AID MEASURES

4.1 Description of first aid measures

Inhalation	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a poison center or doctor if you feel unwell.
Skin Contact	IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs, get medical attention.
Eye Contact	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention if ill effects occur.
Ingestion	IF SWALLOWED: rinse mouth. Do NOT induce vomiting. Obtain medical attention if ill effects occur.

4.2 Most important symptoms and effects, both acute and delayed

May cause an allergic skin reaction.

May cause an eye irritation.

4.3 Indication of any immediate medical attention and special treatment needed

None necessary.

5. FIREFIGHTING MEASURES

5.1 Extinguishing media

In case of fire, use water spray, carbon dioxide (CO₂), spray foam, dry powder. Do not use water jet.

5.2 Special hazards arising from the substance or mixture

No relevant information is available.

5.3 Advice for firefighters

None required.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Ventilate working area. Avoid contact with skin and eyes.

6.2 Environmental precautions

Avoid release to the environment.

6.3 Methods and material for containment and cleaning up

Collect in containers for disposal in accordance with local regulations.

6.4 Reference to other sections

See sections: 7, 8 and 13

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Adequately trained personnel should manipulate this product.

Do not eat, drink or smoke at the work place.

Wash thoroughly after handling.

Avoid contact with eyes. Avoid prolonged skin contact.

Keep container tightly closed.

7.2 Conditions for safe storage, including any incompatibilities

Keep containers in a clean, cool and dry area. Avoid direct sunlight. Natural ventilation is adequate.

Storage temperature (°C): Ambient.

Incompatible materials: Avoid contact with oxidizing agents, reducing agents, strong acids, strong bases and amines.

7.3 Specific end use(s)

Addition curing vinyl polysiloxane dental impression materials for bite registration, consisting of base and catalyst.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

8.1 Control parameters:

Substance	TWA
Quartz silica	
Dust (total dust)	0.3 mg/m ³
Dust (respirable dust)	0.1 mg/m ³

TWA: Time-Weighted Average

Other components in section 3 do not have available data.

8.2 Exposure controls

Appropriate engineering controls

Do not eat, drink or smoke at the work place. Provide adequate ventilation, including appropriate local extraction, to ensure that the occupational exposure limit is not exceeded. Consideration should be given to the work procedures involved and the potential extent of exposure as they may determine whether a higher level of protection is required. The following information is given as general guidance.

Eye/face protection	Wear eye/face protection. Safety spectacles/goggles/full face shield.
Skin protection	Use of vinyl or nitrile gloves is recommended. Suitability of gloves should be confirmed with glove manufacturer. Do not use latex gloves which inhibit the chemical reaction of polyvinylsiloxane.
Respiratory protection	Not required.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Bicomponent pastes
Odor	Characteristic
pH (Value)	Not applicable
Boiling Point (°C)	Not applicable
Flash Point (°C)	Not applicable
Flammability (solid, gas)	Not applicable
Flammable Limits	Not applicable
Vapor pressure (Pascal)	Not applicable
Vapor Density (Air=1)	Not applicable
Solubility (Water)	Insoluble in water
Solubility (Other)	Not applicable
Partition Coefficient (n-Octanol/water)	Not applicable
Auto Ignition Temperature (°C)	Not self igniting
Oxidizing properties	Not applicable
Density (g/ml)	1.2 – 1.8

10. STABILITY AND REACTIVITY

10.1 Reactivity

Non-reactive material.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

None known.

10.4 Conditions to avoid

None known.

10.5 Incompatible materials

Avoid oxidizing agents, reducing agents, strong acids, strong bases and amine leading to decomposition.

10.6 Hazardous decomposition products

Carbon dioxide, carbon monoxide.

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Ingestion

Low oral toxicity. Possibility of gastrointestinal irritation.

Inhalation

Unlikely to be hazardous by inhalation.

Skin contact

May cause skin irritation.

Eye contact

May cause irritation.

All the information presented below corresponds to the uncured components included in the product. Once the product is mixed according to the instructions for use, it is safe for its intended use. Other components in section 3 do not have available data.

Carcinogenicity:

C.A.S. No.	Component	Class description	Regulation
14808-60-7	Quartz silica	Group 1: Carcinogenic to humans	International Agency for Research on Cancer

Acute toxicity

Component	Route	Species	Value
Polydimethylsiloxane vinyl terminated	Dermal	Rabbit	LD50 > 15,440 mg/Kg
	Ingestion	Rat	LD50 > 15,440 mg/Kg
Dimethylsiloxane copolymer	Dermal	Rabbit	LD50 > 2,000 mg/Kg
	Ingestion	Rat	LD50 > 2,000 mg/Kg
	Inhalation	Rat	LC50 4.2 mg/l
Quartz silica	Dermal		LD50 > 5,000 mg/Kg
	Ingestion		LD50 > 5,000 mg/Kg
Polysiloxane	Dermal	Rabbit	LD50 > 2,000 mg/Kg
	Ingestion	Rat	LD50 > 2,000 mg/Kg
	Inhalation	Rat	LC50 2 mg/l

Skin corrosion/irritation

Component	Species	Value
Polydimethylsiloxane vinyl terminated	Rabbit	Mild irritation
Quartz silica		No significant irritation
Polysiloxane	Rabbit	No significant irritation

Serious eye damage/Irritation

Component	Species	Value
Polydimethylsiloxane vinyl terminated	Rabbit	Mild irritation
Polysiloxane	Rabbit	Severe irritation

Skin sensitization

Component	Species	Value
Polysiloxane	Guinea pig	Not sensitizing

Germ cell mutagenicity

Component	Route	Value
Polysiloxane	In vitro	Not mutagenic
Quartz silica	In vitro	Not mutagenic

Carcinogenicity

Component	Route	Species	Value
Quartz silica	Inhalation	Human and Animal	Carcinogenic

Reproduced and/or development effects

Component	Route	Value	Species	Test Result	Exposure duration
Polysiloxane	Ingestion	There is evidence for positive reproduction but limited data for classification	Rat	NOAEL 450 mg/Kg/day	pre-mating & during gestation

Specific target organ toxicity – repeated exposure

Component	Route	Target organ / Illness	Value	Species	Test Result	Exposure duration
Quartz silica	Inhalation	Lung / silicosis	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	Occupational exposure

12. ECOLOGICAL INFORMATION

12.1 Toxicity

This product is not ecotoxic if properly used and handled.

12.2 Persistence and degradability

This product has not been tested.

12.3 Bioaccumulative potential

This product has not been tested.

12.4 Mobility in soil

This product has not been tested.

12.5 Results of PBT and vPvB assessment

This product has not been tested.

12.6 Other adverse effects

None known.

13. DISPOSAL CONSIDERATIONS

The waste is considered to be non hazardous. Dispose in accordance with local regulations.

13.1 Waste treatment methods

May be disposed by landfill in accordance with local regulations.

14. TRANSPORTATION CONSIDERATIONS

Not classified as Dangerous for Transport.

14.1 UN number

Not applicable.

14.2 UN Proper Shipping Name

Not applicable.

14.3 Transport hazard class(es)

Not applicable.

14.4 Packing group

Not applicable.

14.5 Environmental hazards

Not applicable.

14.6 Special precautions for user

Not applicable.

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

Not applicable.

15. REGULATORY INFORMATION

WHMIS 2015

Canadian Hazardous Products Regulations (SOR/2015-17)

Canadian Hazardous Products Act (R.S.C., 1985, c. H-3)

Hazardous Products Information Regulation (Quebec S-2.1, r. 8.1)

16. OTHER INFORMATION

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