

MATERIAL SAFETY DATA SHEET

SECTION I – Product/Company Information

1.1 Product Trade Name: **DYCAL[®] Radiopaque Calcium Hydroxide Composition**
1.2 Part (Item) Number: **623400 – 623452 Dentin and Ivory Shades - Base Pastes**
1.3 Division Name: DENTSPLY Caulk
1.4 Address: 38 West Clarke Avenue
City State Zip: Milford DE 19963-0359
Internet Address: <http://www.caulk.com>
1.5 Emergency Telephone Number: (800) 424-9300 (Chemtrec)
1.6 Telephone Number for Information: (302) 422-4511 (8:00 AM – 4:30 PM Eastern Time)
1.7 Date Prepared: 12/08/97 **Date Revised** 12/08/00

SECTION II – Hazardous Ingredients/Identity Information

<u>Hazardous Components</u>	<u>OSHA PEL</u>	<u>ACGIH TLV</u>	<u>CAS #</u>	<u>Percent</u>
Calcium Tungstate	5 mg\m ³	5 mg\m ³	7790-75-2	< 20%
Zinc Oxide	10 mg\m ³	10 mg\m ³	1314-13-2	< 15%
Disalicylate ester of 1,3 butylene glycol	N.E.	N.E.	73240-13-8	< 50%

SECTION III – Physical/Chemical Characteristics

3.1 Boiling point: N. A. **3.6 Specific Gravity:** 2.0 g/cm³
3.2 Vapor pressure: N. A. **3.7 Melting Point:** N. A.
3.3 Vapor density: N. A. **3.8 Evaporation rate:** N. A.
3.4 Solubility in water: Not Soluble
3.5 Appearance and odor: Tan or Dark beige colored paste with characteristic odor of wintergreen.

SECTION IV - Fire and Explosion Hazard Data

4.1 Flash point (method used): N. A.
4.2 Flammability (explosive limits): LEL: N.E. UEL: N.E.
4.3 Extinguishing media: Sand, foam, carbon dioxide, or dry chemical.
4.4 Special fire fighting procedures: Water may be ineffective unless used as a fine spray or fog. Use water spray to cool fire exposed containers. Firefighters should wear full protective clothing including a self contained breathing apparatus.
4.5 Unusual fire and explosion hazards: During a fire, irritating gasses from the decomposition of the Dycal ester may be present.

SECTION V – Reactivity Data

5.1 Stability: **Unstable:** **Stable:** X
5.2 Conditions to avoid (stability): Strong bases, such as calcium hydroxide may cause the material to harden.
5.3 Incompatibility (materials to avoid): Strong bases.
5.4 Hazardous decomposition or byproducts: Oxides of Zinc
5.5 Hazardous polymerization: **May occur:** **Will not occur:** X
5.6 Conditions to avoid (polymerization): Strong bases

SECTION VI - Health Hazard Data

6.1 Route(s) of entry:	Inhalation?: No Skin?: Yes Ingestion?: Possible
6.2 Health hazards (acute and chronic):	Ingestion may cause local irritation to soft tissue. Eyes: severe irritation caused by reaction of powder with water. Skin: May adhere to tissue. May dry the skin causing irritation.
6.3 Carcinogenicity:	NTP?: Not listed IARC monographs?: Not listed OSHA Regulated?: No
6.4 Signs and symptoms of exposure:	Minor skin irritation (redness).
6.5 Medical conditions generally aggravated by exposure:	Open wounds or sores of the skin.
6.6 Emergency first aid procedures:	Eyes: In case of eye contact, flush with flowing water for 15 minutes and call physician. Skin: Wash thoroughly with soap and water. Call physician if irritation persists.

SECTION VII – Precautions for Safe Handling and Use

7.1 Steps to be taken in case material is released or spilled:	Wipe up with clean cloth or paper towel. Place in an appropriately marked container. Scrub area with alcohol.
7.2 Waste disposal methods:	Dispose of in accordance with Federal, State and Local regulations.
7.3 Precautions to be taken in handling and storage:	Store at room temperature. Avoid storage above 50°C(122°F). Store away from food and beverages.
7.4 Other precautions:	Observe normal warehouse handling procedures.

SECTION VIII – Control Measures

8.1 Respiratory protection:	None required during normal use of this product.
8.2 Ventilation:	None required during the normal intended use of this product. Local exhaust can be used to keep vapors below threshold level.
8.3 Protective gloves:	Rubber gloves.
8.4 Eye protection:	Safety goggles.
8.5 Other protective clothing or equipment:	Chemically resistant apron or other impervious clothing.
8.6 Work/Hygienic practices:	Observe normal care when working with chemicals.

NFPA HAZARD CLASSIFICATIONS	
Health	0
Flammability	0
Reactivity	0
Specific Hazard	N. A.

NFPA - National Fire Protection Association

N.A. - Not Applicable

N.E. - Not Established

MATERIAL SAFETY DATA SHEET

SECTION I – Product/Company Information

1.1 Product Trade Name: DYCAL[®] Radiopaque Calcium Hydroxide Composition
1.2 Part (Item) Number: 623400 – 623452 Dentin and Ivory Shades - Catalyst Pastes
1.3 Division Name: DENTSPLY Caulk
1.4 Address: 38 West Clarke Avenue
City State Zip: Milford DE 19963-0359
Internet Address: <http://www.caulk.com>
1.5 Emergency Telephone Number: (800) 424-9300 (Chemtrec)
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SECTION II – Hazardous Ingredients/Identity Information

<u>Hazardous Components</u>	<u>OSHA PEL</u>	<u>ACGIH TLV</u>	<u>CAS #</u>	<u>Percent</u>
Calcium Hydroxide	5 mg/m ³	5 mg/m ³	1305-62-0	< 55 %
Zinc Oxide	10 mg/m ³	10 mg/m ³	1314-13-2	< 15 %
Titanium Dioxide	10 mg/m ³	10 mg/m ³	13463-67-7	< 8 %

SECTION III – Physical/Chemical Characteristics

3.1 Boiling point: N. A. **3.6 Specific Gravity:** 1.8 g/cm³
3.2 Vapor pressure: N. A. **3.7 Melting Point:** N. A.
3.3 Vapor density: N. A. **3.8 Evaporation rate:** N. A.
3.4 Solubility in water: Not Soluble
3.5 Appearance and odor: Light Beige or Off-White colored paste with slight odor.

SECTION IV - Fire and Explosion Hazard Data

4.1 Flash point (method used): N. A.
4.2 Flammability (explosive limits): LEL: N. A. UEL: N. A.
4.3 Extinguishing media: Sand, foam, carbon dioxide, dry chemical.
4.4 Special fire fighting procedures: Fire fighter should wear full protective clothing including a self-contained breathing apparatus.
4.5 Unusual fire and explosion hazards: During a fire, irritating gases from the decomposition of the plasticizer may be present.

SECTION V – Reactivity Data

5.1 Stability: Unstable: Stable: X
5.2 Conditions to avoid (stability): High humidity and elevated temperatures over 50°C(122°F)
5.3 Incompatibility (materials to avoid): Avoid contact with strong acids.
5.4 Hazardous decomposition or byproducts: Oxides of Zinc
5.5 Hazardous polymerization: May occur: Will not occur: X
5.6 Conditions to avoid (polymerization): Strong acids.

SECTION VI – Health Hazard Data

6.1 Route(s) of entry:	Inhalation?: No Skin?: Yes Ingestion?: Possible
6.2 Health hazards (acute and chronic):	Ingestion may cause local irritation to soft tissue. Eyes: severe irritation caused by reaction of powder with water. May adhere to tissue. May dry the skin causing irritation.
6.3 Carcinogenicity:	NTP?: Not listed IARC monographs?: Not listed OSHA Regulated?: No
6.4 Signs and symptoms of exposure:	Minor skin irritation (redness).
6.5 Medical conditions generally aggravated by exposure:	Open wounds or sores of the skin.
6.6 Emergency first aid procedures:	In case of eye contact, flush with flowing water for 15 minutes and call physician. Skin: Wash thoroughly with soap and water. Call physician if irritation persists.

SECTION VII – Precautions for Safe Handling and Use

7.1 Steps to be taken in case material is released or spilled:	Wipe up with clean cloth or paper towel. Place in an appropriately marked container. Scrub area with alcohol.
7.2 Waste disposal methods:	Dispose of in accordance with Federal, State and Local regulations.
7.3 Precautions to be taken in handling and storage:	Store at room temperature. Avoid storage above 50°C(122°F). Store away from food and beverages.
7.4 Other precautions:	Observe normal warehouse handling procedures.

SECTION VIII – Control Measures

8.1 Respiratory protection:	None required during normal use of this product.
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8.3 Protective gloves:	Rubber gloves.
8.4 Eye protection:	Safety goggles.
8.5 Other protective clothing or equipment:	Chemically resistant apron or other impervious clothing.
8.6 Work/Hygienic practices:	Observe normal care when working with chemicals.

NFPA HAZARD CLASSIFICATIONS	
Health	1
Flammability	0
Reactivity	0
Specific Hazard	N. A.

NFPA - National Fire Protection Association
N.A. - Not Applicable
N.E. - Not Established

523899 (R-12/08/00)