

MATERIAL SAFETY DATA SHEET

SECTION I – Product/Company Information

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|--|--|--|--|--|
| 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 Milford DE 19963-0359 | | | |
| City State Zip: | | | | |
| 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

| Hazardous Components | OSHA PEL | ACGIH TLV | CAS # | Percent |
|---|----------------------|----------------------|--------------|----------------|
| 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/cm ³ |
| 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

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|--|---|
| 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

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|---|---|--------------------------|
| 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

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|---|--|
| 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

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|--|--|
| 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

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|---------------------------------------|---|--|--|--|
| 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 | | | |
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| 1.7 Date Prepared: | 12/08/97 Date Revised 12/08/00 | | | |

SECTION II – Hazardous Ingredients/Identity Information

| Hazardous Components | OSHA PEL | ACGIH TLV | CAS # | Percent |
|----------------------|----------------------|----------------------|------------|---------|
| 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/cm ³ |
| 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

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| 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

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| 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. |

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| 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. |

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523899 (R-12/08/00)