

## SAFETY DATA SHEETS

**This SDS packet was issued with item:**

075908199

**The safety data sheets (SDS) in this packet apply to one or more components included in the items listed below. Items listed below may require one or more SDS. Please refer to invoice for specific item number(s).**

075908157 075908165 075908181 075908207

## MATERIAL SAFETY DATA SHEET: SEAL-RITE, SEAL-RITE LV

**IDENTITY**

Trade Name:

Seal-Rite Pit and Fissure Sealant

Seal-Rite Low Viscosity Pit and Fissure Sealant

Code:

SEAL, SEAL-3, RITE,

SEAL-LV, SEAL-LV3, RITE-LV

Chemical Description: Glass filler materials in methacrylate resins.

Product Use: Visible light-cure pit and fissure dental sealant.

**SECTION I**

Pulpdent Corporation

80 Oakland Street

Watertown, MA 02472 USA

Phone Numbers

24 Hour Emergency: 1-800-535-5053

Customer Service: 1-800-343-4342/1-617-926-6666

Date prepared: September 1, 2008

**SECTION II - HAZARDOUS INGREDIENTS**

| Ingredients                 | CAS Number  | Percent | PEL / TLV                                  |
|-----------------------------|-------------|---------|--------------------------------------------|
| Uncured Methacrylate resins | -----       | 66.0    | Not established                            |
| Amorphous silica            | 112945-52-5 | 5.0     | 6 mg/m <sup>3</sup> / 10 mg/m <sup>3</sup> |
| Sodium fluoride             | 7981-49-4   | 2.0     | 2.5 mg/m <sup>3</sup> (as F)               |

DOT HAZARD CLASSIFICATION: Not regulated

WHMIS CLASSIFICATION: D-2, Possible Irritation, Possible Sensitization

NFPA HMIS RATING: HEALTH: 1 FLAMMABILITY: 0 REACTIVITY: 1

**SECTION III - PHYSICAL / CHEMICAL CHARACTERISTICS**

Specific Gravity: SEAL 1.550, SEAL-LV 1.290

Vapor Pressure: &lt;1 mm Hg Vapor Density: 1

Solubility in water: Nil Odor Threshold: Not available

Appearance and Odor: Off-white, thickened liquid with faint characteristic odor.

**SECTION IV - FIRE AND EXPLOSION HAZARD DATA**

Flash Point: Not established Flammable limits: Not established

Extinguishing Media: Carbon dioxide, dry chemical, alcohol foam, or water fog; water spray to keep fire-exposed containers cool.

Special Fire Fighting Procedures: A self-contained breathing apparatus should be worn by fire fighting personnel. Cool exposed containers with water spray to prevent polymerization under fire conditions.

Hazardous Combustion Products: Hazardous polymerization with heat build up and release of carbon monoxide, carbon dioxide and oxides of nitrogen may occur under fire conditions.

**SECTION V - REACTIVITY DATA**

Stability: Stable

Conditions to avoid: Temperature &gt; 27°C / 80°F; intense light.

Incompatibility: Reducing and oxidizing agents.

Hazardous Decomposition Products: Carbon monoxide, carbon dioxide, oxides of nitrogen.

Hazardous Polymerization: None under normal conditions of use.

Conditions to avoid: Temperature &gt; 27°C / 80°F; intense light.

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**SECTION VI - HEALTH HAZARD DATA**

*Summary of Acute Hazards:* Minimal health hazard under normal conditions of use.

| <i>Route of Exposure</i> | <i>Signs &amp; Symptoms</i>                      |
|--------------------------|--------------------------------------------------|
| Inhalation               | May be irritating to mucous membranes            |
| Eye Contact              | May be irritating                                |
| Skin Absorption          | Not applicable                                   |
| Skin Contact             | Primary route of exposure, may cause irritation. |
| Ingestion                | May be irritating to mucous membranes.           |

*Summary of Chronic Hazards:* Sensitization with prolonged or repeated contact.

Carcinogenicity None known

Teratogenicity, Mutagenicity, Reproductive Toxicity: None known.

***Emergency First Aid Procedures:***

|              |                                                                                                |
|--------------|------------------------------------------------------------------------------------------------|
| Inhalation   | Move to fresh air. Administer artificial respiration, if required, and seek medical attention. |
| Eye contact  | Flush eyes with running water for 15+ minutes. Seek medical attention.                         |
| Ingestion    | Consult physician immediately.                                                                 |
| Skin contact | Wash skin with soap and running water.                                                         |

**SECTION VII - PRECAUTIONS FOR SAFE HANDLING & USE**

Handling / Storage Precautions: Store tightly capped in original container at cool room temperature. Avoid temperature extremes (>27°C/80°F, <15°C/60°F), intense light, moisture and contaminants. Remove applicator tip and recap immediately after use.

Release or Spill: Wipe up material with paper or cloth towels and collect for disposal.

Waste Disposal Method: Follow all government regulations.

Other Precautions: Wash hands after use.

**SECTION VIII - CONTROL MEASURES**

Respiratory Protection: None required under anticipated conditions of normal use.

Ventilation: No special ventilation required under anticipated conditions of normal use.

Protective Gloves: Recommended.

Eye Protection: Safety glasses are recommended.

Other Protective Clothing or Equipment: Emergency eye wash fountain should be close by and maintained.

Work/Hygienic Practices: Avoid prolonged contact with skin. Wash hands after use.

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*The information presented herein is believed to be factual as it has been derived from the works of persons believed to be qualified experts. However, nothing contained in this information is to be taken as a warranty or representation for which Pulpdent Corporation bears legal responsibility. The user should review any recommendations in the specific context of the intended use to determine whether they are appropriate.*

**Safety Data Sheet**Trade Name: **SEAL-RITE™ PIT AND FISSURE SEALANT**

| 1.0 Commercial Product Name and Supplier |                                                                                                           |                                                                                                                           |                        |                         |
|------------------------------------------|-----------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|------------------------|-------------------------|
| 1.1                                      | Commercial product name / designation                                                                     | Seal-Rite Pit and Fissure Sealant<br>Seal-Rite Low Viscosity Pit and Fissure Sealant                                      |                        |                         |
| 1.2                                      | Application / Use                                                                                         | Dental material for use by dental professional only.                                                                      |                        |                         |
| 1.2.2                                    | SIC                                                                                                       | 851 Human health activity                                                                                                 |                        |                         |
| 1.2.3                                    | Use Category                                                                                              | 55                                                                                                                        |                        |                         |
| 1.3                                      | Manufacturer<br><b>Pulpdent Corporation</b><br>80 Oakland Street, P.O. Box 780<br>Watertown, MA 02472 USA | Telephone: 1 617 926-6666 / Fax:1 617 926-6262<br>Email: <a href="mailto:Pulpdent@pulpdent.com">Pulpdent@pulpdent.com</a> |                        |                         |
| 1.4                                      | Emergency Telephone Number                                                                                | 1-800-535-5053 (24 Hour / USA)                                                                                            |                        |                         |
| 1.5                                      | Authorized European Representative                                                                        | Advena Ltd.<br>Pure Offices, Plato Close<br>Warwick, CV34 6WE<br>United Kingdom                                           |                        |                         |
| 2.0 Hazards Identification               |                                                                                                           |                                                                                                                           |                        |                         |
| 2.1                                      | Classification                                                                                            | Irritant.                                                                                                                 |                        |                         |
| 2.1.1                                    | Classification according to Regulation (EC)<br>No 1272/2008 [CLP]                                         | <u>Hazard Class</u>                                                                                                       | <u>Hazard Category</u> | <u>Hazard Statement</u> |
|                                          |                                                                                                           | Eye irritation                                                                                                            | 2                      | H319                    |
|                                          |                                                                                                           | STOT SE                                                                                                                   | 3                      | H335                    |
|                                          |                                                                                                           | Skin irritation                                                                                                           | 2                      | H315                    |
|                                          |                                                                                                           | Skin sensitization                                                                                                        | 1                      | H317                    |
| 2.1.2                                    | Classification according to Directive 67/548/EEC                                                          | Irritant; Xi; R 36/37/38 – 43 (See SECTION 16 for full text of risk phrases)                                              |                        |                         |
| 2.2                                      | <b>GHS Label Elements</b>                                                                                 |                                                                                                                           |                        |                         |
|                                          | Hazard Pictograms                                                                                         |                                                                                                                           |                        |                         |
|                                          |                        |                                                                                                                           |                        |                         |
|                                          | Signal Word: <b>WARNING</b>                                                                               |                                                                                                                           |                        |                         |
|                                          | <b>Restricted to use by dental professional only.</b>                                                     |                                                                                                                           |                        |                         |
|                                          | <b>Hazard Statements</b>                                                                                  |                                                                                                                           |                        |                         |
|                                          | H319: Eye irritation. 2. May cause eye irritation.                                                        |                                                                                                                           |                        |                         |
|                                          | H335: STOT SE. 3. May cause respiratory irritation.                                                       |                                                                                                                           |                        |                         |
|                                          | H315: Skin irritation. 2. May cause skin irritation.                                                      |                                                                                                                           |                        |                         |
|                                          | H317: Sensitization. 1. May cause an allergic skin reaction.                                              |                                                                                                                           |                        |                         |
|                                          | <b>Precautionary Statements</b>                                                                           |                                                                                                                           |                        |                         |
|                                          | P261: Avoid breathing vapor.                                                                              |                                                                                                                           |                        |                         |
|                                          | P280: Wear protective gloves and eye protection                                                           |                                                                                                                           |                        |                         |
|                                          | P305+P351: If in eyes, rinse cautiously with water for several minutes.                                   |                                                                                                                           |                        |                         |
|                                          | P337+P313: If eye irritation persists, get medical advice/attention.                                      |                                                                                                                           |                        |                         |
|                                          | P302+P352: If on skin, wash with plenty of soap and water.                                                |                                                                                                                           |                        |                         |
|                                          | P333+P313: If irritation or rash occurs, get medical advice/attention.                                    |                                                                                                                           |                        |                         |
|                                          | P410+P411: Protect from sunlight. Store at temperature not exceeding 27°C / 80°F.                         |                                                                                                                           |                        |                         |

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|     |                                                |                                     |                                                                                                                                                                                                                                  |                               |                                                                                                       |
|-----|------------------------------------------------|-------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|-------------------------------------------------------------------------------------------------------|
| 3.0 | Composition                                    |                                     |                                                                                                                                                                                                                                  |                               |                                                                                                       |
| 3.1 | Chemical characterization of the preparation:  |                                     | Methacrylate ester monomers in a light-cured, glass-filled paste.                                                                                                                                                                |                               |                                                                                                       |
| 3.2 | Hazardous ingredients                          |                                     |                                                                                                                                                                                                                                  |                               |                                                                                                       |
|     | CAS Number                                     | Name of the Ingredient              | Concentration                                                                                                                                                                                                                    | Classification per 67/548/EEC | Classification per Regulation (EC) No.1272/2008 (CLP)                                                 |
|     | Proprietary                                    | Uncured methacrylate ester monomers | 55-65%                                                                                                                                                                                                                           | Xi (Irritant), R36/37/38, R43 | Eye irritation, 2, H319<br>STOT SE 3, H335<br>Skin irritation, 2, H315<br>Skin sensitization, 1, H317 |
|     | 112945-52-5                                    | Amorphous silica                    | 5 %                                                                                                                                                                                                                              | Xi (Irritant), R36/37/38      | Eye irritation, 2, H319<br>STOT SE 3, H335<br>Skin irritation, 2, H315                                |
| 4.0 | First Aid Measures                             |                                     |                                                                                                                                                                                                                                  |                               |                                                                                                       |
| 4.1 | General Information                            |                                     | May be irritating to eyes, respiratory system and skin. Prolonged or repeated contact with methacrylate may cause sensitization. Show this safety data sheet to medical personnel. Get medical attention in case of uncertainty. |                               |                                                                                                       |
| 4.2 | Inhalation                                     |                                     | Move to fresh air. If necessary, administer oxygen and/or artificial respiration and seek medical attention.                                                                                                                     |                               |                                                                                                       |
| 4.3 | Skin Contact                                   |                                     | Take off contaminated clothing. Wash skin thoroughly with soap and water.                                                                                                                                                        |                               |                                                                                                       |
| 4.4 | Eye Contact                                    |                                     | Keep eyelids apart and flush with running water for 15+ minutes. Get medical attention.                                                                                                                                          |                               |                                                                                                       |
| 4.5 | Ingestion                                      |                                     | Rinse mouth with water. Do not induce vomiting. Get immediate medical attention. May be irritating to mucous membranes. Never give anything by mouth to an unconscious person.                                                   |                               |                                                                                                       |
| 4.6 | Precautions for first responders               |                                     | Ventilate the area. Wear eye and skin protection.                                                                                                                                                                                |                               |                                                                                                       |
| 4.7 | Information for physicians                     |                                     |                                                                                                                                                                                                                                  |                               |                                                                                                       |
|     | Symptoms                                       |                                     | Irritation or redness in eyes, throat or on skin.                                                                                                                                                                                |                               |                                                                                                       |
|     | Hazards                                        |                                     | May be irritating to eyes, respiratory system and skin. May cause sensitization by skin contact.                                                                                                                                 |                               |                                                                                                       |
|     | Treatment                                      |                                     | As above under First Aid.                                                                                                                                                                                                        |                               |                                                                                                       |
| 5.0 | Fire Fighting Measures                         |                                     |                                                                                                                                                                                                                                  |                               |                                                                                                       |
| 5.1 | Suitable extinguishing media                   |                                     | Carbon dioxide, dry chemical, alcohol foam, or water fog. Water spray may be used to keep fire exposed containers cool.                                                                                                          |                               |                                                                                                       |
| 5.2 | Extinguishing media to avoid                   |                                     | Do not use direct water stream                                                                                                                                                                                                   |                               |                                                                                                       |
| 5.3 | Special exposure hazards in a fire             |                                     | Heat may cause polymerization with rapid release of energy.                                                                                                                                                                      |                               |                                                                                                       |
| 5.4 | Special protective equipment for fire-fighters |                                     | Self-contained breathing apparatus.                                                                                                                                                                                              |                               |                                                                                                       |
| 6.0 | Accidental Release Measures                    |                                     |                                                                                                                                                                                                                                  |                               |                                                                                                       |
| 6.1 | Personal precautions.                          |                                     | Ventilate area. Wear safety glasses, gloves and lab coat.                                                                                                                                                                        |                               |                                                                                                       |
| 6.2 | Environmental precautions                      |                                     | Contain spilled material. Follow all government regulations.                                                                                                                                                                     |                               |                                                                                                       |

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6.3 Method for clean up Absorb/wipe up spill with paper towels or cloths. Collect for disposal in a covered container. Wash area of spill with alcohol or soap and water.

**7.0 Handling and Storage**

7.1 Handling For use only by dental professionals trained in its use. Follow good hygiene practices. Remove applicator tip from syringe and cap container immediately after use. Keep light-cured materials shaded from intense light sources.

7.2 Storage Store product tightly capped in original container at cool room temperature (<25°C). Avoid direct, strong light, ignition sources, temperature extremes (>27°C/80°F, <5°C/40°F). Shelf life for unopened product is two years from date of manufacture, provided that the material has been stored properly.

7.3 Specific uses Dental material

**8.0 Exposure Controls / Personal Protection**

8.1 Exposure limit values PEL: Not established. TLV: Not established.

8.2 Exposure controls

8.2.1 Occupational exposure controls No special equipment required under normal conditions of use.

8.2.1.1 Respiratory protection Good general ventilation is sufficient to control any airborne vapors.

8.2.1.2 Hand protection No special requirements other than the usual surgical gloves.

8.2.1.3 Eye protection No special requirements other than the usual safety glasses..

8.2.1.4 Skin protection Good personal hygiene and safety practices; wearing a lab coat.

8.2.1.5 Other controls Emergency eye wash fountain. Wash hands after use.

8.2.2 Environmental exposure controls Cure material before disposing. To the best of our knowledge, cured material is inert. Follow all government regulations.

**9.0 Physical and Chemical Properties**

9.1 Appearance / Color .

9.1.1 Color / Physical state Off-white paste

9.1.2 Odor Faint, characteristic

9.2 Important health, safety and environmental information

9.2.1 pH Not determined

9.2.2 Boiling point Not determined

9.2.3 Flash point Not determined

9.2.4 Flammability (solid, gas) Not applicable

9.2.5 Explosive properties Not applicable

9.2.6 Oxidizing properties Not determined

9.2.7 Vapor pressure < 1 mm Hg / 133 Pa / Id: B

9.2.8 Specific gravity Seal-Rite: 1.550; Seal-Rite LV: 1.290

9.2.9 Solubility in water Nil

9.2.10 Partition coefficient Not determined

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|        |                  |                |
|--------|------------------|----------------|
| 9.2.11 | Viscosity        | Not determined |
| 9.2.12 | Vapor density    | > 1            |
| 9.2.13 | Evaporation rate | Not determined |

**10.0 Stability and reactivity**

|      |                                  |                                                                                                                                                                                                                 |
|------|----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 10.1 | Conditions to avoid              | Temperature extremes (>27°C/80°F, <5°C/40°F), light.                                                                                                                                                            |
| 10.2 | Materials to avoid               | Reducing and oxidizing agents, peroxides, amines.                                                                                                                                                               |
| 10.3 | Hazardous decomposition products | Under fire conditions and with amounts far greater than that supplied in this product, hazardous polymerization may occur with heat buildup and release of carbon monoxide, carbon dioxide, oxides of nitrogen. |
| 10.4 | Further information              | Direct light will polymerize light-cured material.                                                                                                                                                              |

**11.0 Toxicological information**

|      |                                                      |                                                                                                                                                                                              |
|------|------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 11.1 | Acute toxicity                                       | Not toxic. Minimal health hazard in the quantities present in this product and under normal conditions of use.                                                                               |
| 11.2 | Irritation and corrosiveness                         | May be irritating to eyes, mucous membranes or skin on contact or with prolonged exposure.                                                                                                   |
| 11.3 | Sensitization                                        | May be sensitizing. Prolonged or frequent skin contact may cause allergic skin reactions in some susceptible individuals.                                                                    |
| 11.4 | Sub-acute, sub-chronic and prolonged toxicity        | Prolonged/frequent skin contact may cause allergic skin reactions in susceptible individuals. Prolonged exposure to large amounts of this material may cause eye and respiratory irritation. |
| 11.5 | Carcinogenicity, Mutagenicity, Reproductive Toxicity | None known.                                                                                                                                                                                  |
| 11.6 | Empirical data                                       | None available.                                                                                                                                                                              |
| 11.7 | Clinical experience                                  | Seal-Rite and Seal-Rite-LV have been used safely and effectively by dentists in the US and internationally for more than 15 years with no reports of adverse events.                         |

**12.0 Ecological Information**

|      |             |                                                                                                 |
|------|-------------|-------------------------------------------------------------------------------------------------|
| 12.1 | Ecotoxicity | To the best of our knowledge, polymerized material is inert. No other information is available. |
|------|-------------|-------------------------------------------------------------------------------------------------|

**13.0 Disposal Considerations**

|      |             |                                                                                                                                   |
|------|-------------|-----------------------------------------------------------------------------------------------------------------------------------|
| 13.1 | Regulations | Polymerize before disposal. Follow all local and national government regulations in disposing material or contaminated packaging. |
|------|-------------|-----------------------------------------------------------------------------------------------------------------------------------|

**14.0 Transport Information**

|      |              |                      |
|------|--------------|----------------------|
| 14.1 | Restrictions | None. Not regulated. |
|------|--------------|----------------------|

**15.0 Regulatory Information**

|      |               |                                                |
|------|---------------|------------------------------------------------|
| 15.1 | EU            | Class IIa medical devices under MDD 93/42/EEC. |
| 15.2 | US FDA        | Class II medical devices                       |
| 15.3 | Health Canada | Class III medical devices                      |

**Safety Data Sheet**Trade Name: **SEAL-RITE™ PIT AND FISSURE SEALANT**

| 16.0 | Other information                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|------|-------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 16.1 | List of relevant R phrases                            | R36/37/38: Irritating to eyes, respiratory system and skin.<br>R43: Sensitizing by skin contact                                                                                                                                                                                                                                                                                                                                                                 |
| 16.2 | Hazard Statements                                     | H319: Eye irritation. Hazard category 2.<br>H335: Specific Target Organ Toxicity - Single exposure; hazard category. 3. Respiratory tract irritation.<br>H315: Skin irritation. Hazard category 2.<br>H317: Skin Sensitization. Hazard category 1.                                                                                                                                                                                                              |
| 16.3 | Precautionary Statements                              | P261: Avoid breathing vapor.<br>P280: Wear protective gloves and eye protection<br>P305+P351: If in eyes, rinse cautiously with water for several minutes.<br>P337+P313: If eye irritation persists, get medical advice/attention.<br>P302+P352: If on skin, wash with plenty of soap and water.<br>P333+P313: If irritation or rash occurs, get medical advice/attention.<br>P410+P411: Protect from sunlight. Store at temperature not exceeding 27°C / 80°F. |
| 16.4 | Restrictions on use                                   | Pulpdent products are to be sold to and used by dental professionals only.                                                                                                                                                                                                                                                                                                                                                                                      |
| 16.5 | Further information                                   | The information presented herein is believed to be factual as it has been derived from the works of persons believed to be qualified experts. However, nothing contained in this information is to be taken as a warranty or representation for which Pulpdent Corporation bears legal responsibility. The user should review any recommendations in the specific context of the intended use to determine whether they are appropriate.                        |
| 16.6 | Sources of key data                                   | National Institute for Occupational Safety (NIOSH)<br>US Occupational Safety and Health Administration (OSHA)<br>Eur-Lex European Union Law: Regulation (EC) No. 1272/2008 (CLP) and Regulation (EC) No. 1907/2006 (REACH).<br>Guidance on the compilation of safety data sheets. Version 1.1; December 2011. European Chemicals Agency                                                                                                                         |
| 16.7 | Information which has been added, deleted or revised. | This Safety Data Sheet has been revised to meet the requirements of GHS SDS format and Regulations (EC) No. 1272/2008 (CLP) and (EC) No. 1907/2006 (REACH). Specifically Sections 2.1, 2.2, 3.2, 16.2, 16.3 have been modified.                                                                                                                                                                                                                                 |