

Issue Date: 18-Jun-2013

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Version 1

## 1. IDENTIFICATION

### Product Identifier

**Product Name** SmarTemp® Dual Cure (All Shades)

### Other means of identification

**SDS #** S338, VAR.

### Recommended use of the chemical and restrictions on use

**Recommended Use** Composite Resin-Based, Temporary Crown & Bridge Material.

### Details of the supplier of the safety data sheet

#### **Supplier Address**

Parkell, Inc.  
300 Executive Drive  
Edgewood, NY 11717

### Emergency Telephone Number

**Company Phone Number** (631) 249-1134  
**Emergency Telephone (24 hr)** INFOTRAC 1-352-323-3500 (International)  
1-800-535-5053 (North America)

## 2. HAZARDS IDENTIFICATION

**Appearance** Colored paste

**Physical State** Liquid

**Odor** Mild fruity ester-like odor

### Classification

Skin sensitization	Category 1
Reproductive toxicity	Category 1B
Specific target organ toxicity (single exposure)	Category 3

### Hazards Not Otherwise Classified (HNOC)

May be harmful if swallowed  
May be harmful in contact with skin

### Signal Word

**Danger**

### Hazard Statements

May cause an allergic skin reaction  
May damage fertility or the unborn child  
May cause respiratory irritation



**Precautionary Statements - Prevention**

Obtain special instructions before use  
 Do not handle until all safety precautions have been read and understood  
 Use personal protective equipment as required  
 Avoid breathing dust/fume/gas/mist/vapors/spray  
 Contaminated work clothing should not be allowed out of the workplace  
 Use only outdoors or in a well-ventilated area

**Precautionary Statements - Response**

If exposed or concerned: Get medical advice/attention  
 IF ON SKIN: Wash with plenty of soap and water  
 Wash contaminated clothing before reuse  
 If skin irritation or rash occurs: Get medical advice/attention  
 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing  
 Get medical attention if symptoms persist

**Precautionary Statements - Storage**

Store locked up  
 Store in a well-ventilated place. Keep container tightly closed

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Other Hazards**

Toxic to aquatic life with long lasting effects

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
Uncured Methacrylate Ester Monomers	Proprietary	Proprietary
Silanated glass and silica fillers	Proprietary	Proprietary
Dibutyl phthalate	84-74-2	Proprietary
Benzoyl peroxide	94-36-0	Proprietary

\*\*If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.\*\*

### 4. FIRST-AID MEASURES

**First Aid Measures**

<b>General Advice</b>	If exposed or concerned: Get medical advice/attention.
<b>Eye Contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.
<b>Skin Contact</b>	IF ON SKIN: Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical advice/attention.
<b>Inhalation</b>	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Seek medical attention if irritation persists.
<b>Ingestion</b>	Get medical attention.

**Most important symptoms and effects**

<b>Symptoms</b>	May cause an allergic skin reaction. May be irritating to skin and eyes. May cause respiratory irritation. May be irritating to the mouth, throat and stomach.
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**Indication of any immediate medical attention and special treatment needed**

**Notes to Physician** Treat symptomatically.

**5. FIRE-FIGHTING MEASURES****Suitable Extinguishing Media**

Foam. Carbon dioxide (CO<sub>2</sub>). Dry chemical.

**Unsuitable Extinguishing Media** Not determined.

**Specific Hazards Arising from the Chemical**

Heat can cause polymerization with rapid release of energy.

**Hazardous Combustion Products** Carbon oxides.

**Protective equipment and precautions for firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

**6. ACCIDENTAL RELEASE MEASURES****Personal precautions, protective equipment and emergency procedures**

**Personal Precautions** Use personal protection recommended in Section 8.

**Environmental Precautions** Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological Information. See Section 13: DISPOSAL CONSIDERATIONS.

**Methods and material for containment and cleaning up**

**Methods for Containment** Prevent further leakage or spillage if safe to do so.

**Methods for Clean-Up** Contain and collect with an inert absorbent and place into an appropriate container for disposal.

**7. HANDLING AND STORAGE****Precautions for safe handling**

**Advice on Safe Handling** Handle in accordance with good industrial hygiene and safety practice. Use personal protection recommended in Section 8. Avoid contact with skin, eyes or clothing. Avoid breathing dust/fume/gas/mist/vapors/spray. Use only outdoors or in a well-ventilated area. Contaminated work clothing should not be allowed out of the workplace. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.

**Conditions for safe storage, including any incompatibilities**

**Storage Conditions** Keep container tightly closed and store in a cool, dry and well-ventilated place. Store locked up. Store away from heat, sparks, open flame or any other ignition source.

**Incompatible Materials** Oxidizing agents. Peroxides. Free radical initiators.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Silanated glass and silica fillers	TWA: 1 fiber/cm <sup>3</sup> respirable fibers: length >5 µm, aspect ratio >=3:1, as determined by the membrane filter method at 400-450X magnification [4-mm objective], using phase-contrast illumination TWA: 5 mg/m <sup>3</sup> inhalable fraction	-	-
Dibutyl phthalate 84-74-2	TWA: 5 mg/m <sup>3</sup>	TWA: 5 mg/m <sup>3</sup> (vacated) TWA: 5 mg/m <sup>3</sup>	IDLH: 4000 mg/m <sup>3</sup> TWA: 5 mg/m <sup>3</sup>
Benzoyl peroxide 94-36-0	TWA: 5 mg/m <sup>3</sup>	TWA: 5 mg/m <sup>3</sup> (vacated) TWA: 5 mg/m <sup>3</sup>	IDLH: 1500 mg/m <sup>3</sup> TWA: 5 mg/m <sup>3</sup>

### Appropriate engineering controls

**Engineering Controls**                      Ensure adequate ventilation, especially in confined areas. Eyewash stations. Showers.

### Individual protection measures, such as personal protective equipment

**Eye/Face Protection**                      Safety goggles or glasses.

**Skin and Body Protection**                      Wear latex or other impervious rubber gloves.

**Respiratory Protection**                      Use in well-ventilated area.

**General Hygiene Considerations** Handle in accordance with good industrial hygiene and safety practice.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

<b>Physical State</b>	Liquid	<b>Odor</b>	Mild fruity ester-like odor
<b>Appearance</b>	Colored paste	<b>Odor Threshold</b>	Not determined
<b>Color</b>	Not determined		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
<b>pH</b>	Not determined	
<b>Melting Point/Freezing Point</b>	Not determined	
<b>Boiling Point/Boiling Range</b>	Not determined	
<b>Flash Point</b>	Not determined	
<b>Evaporation Rate</b>	Not determined	
<b>Flammability (Solid, Gas)</b>	Not determined	
<b>Upper Flammability Limits</b>	Not determined	
<b>Lower Flammability Limit</b>	Not determined	
<b>Vapor Pressure</b>	Not determined	
<b>Vapor Density</b>	Not determined	
<b>Specific Gravity</b>	Not determined	(Water = 1)
<b>Water Solubility</b>	Insoluble in water	
<b>Solubility in other solvents</b>	Not determined	
<b>Partition Coefficient</b>	Not determined	
<b>Auto-ignition Temperature</b>	Not determined	
<b>Decomposition Temperature</b>	Not determined	
<b>Kinematic Viscosity</b>	Not determined	
<b>Dynamic Viscosity</b>	Not determined	
<b>Explosive Properties</b>	Not determined	
<b>Oxidizing Properties</b>	Not determined	

## 10. STABILITY AND REACTIVITY

### Reactivity

Not reactive under normal conditions.

### Chemical Stability

Stable under recommended storage conditions.

### Possibility of Hazardous Reactions

None under normal processing.

#### **Hazardous Polymerization**

Hazardous polymerization will not occur when using clinical amounts of this material.

### Conditions to Avoid

Keep separated from incompatible substances. Keep out of reach of children. Avoid heat, aging, and contamination.

### Incompatible Materials

Oxidizing agents. Peroxides. Free radical initiators.

### Hazardous Decomposition Products

Carbon oxides.

## 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure

#### **Product Information**

#### **Eye Contact**

Avoid contact with eyes.

#### **Skin Contact**

May cause an allergic skin reaction. May be harmful in contact with skin.

#### **Inhalation**

May cause respiratory irritation.

#### **Ingestion**

May be harmful if swallowed.

### Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Uncured Methacrylate Ester Monomers	= 3300 mg/kg ( Rat )	-	-
Silanated glass and silica fillers	> 5000 mg/kg ( Rat )	> 2000 mg/kg ( Rabbit )	> 2.2 mg/L ( Rat ) 1 h
Dibutyl phthalate 84-74-2	= 6300 mg/kg ( Rat )	> 20000 mg/kg ( Rabbit )	-
Benzoyl peroxide 94-36-0	= 6400 mg/kg ( Rat )	-	-

### Information on physical, chemical and toxicological effects

#### **Symptoms**

Please see section 4 of this SDS for symptoms.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Sensitization** May cause an allergic skin reaction.

**Carcinogenicity** Group 3 IARC components are "not classifiable as human carcinogens".

Chemical Name	ACGIH	IARC	NTP	OSHA
Silanated glass and silica fillers		Group 3		
Benzoyl peroxide 94-36-0		Group 3		

**Legend**

**IARC (International Agency for Research on Cancer)**

Group 3 IARC components are "not classifiable as human carcinogens"

**Reproductive toxicity** May damage fertility or the unborn child.

**STOT - single exposure** May cause respiratory irritation.

**Numerical measures of toxicity**

Not determined

**12. ECOLOGICAL INFORMATION****Ecotoxicity**

Toxic to aquatic life with long lasting effects.

**Component Information**

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Silanated glass and silica fillers	440: 72 h Pseudokirchneriella subcapitata mg/L EC50	5000: 96 h Brachydanio rerio mg/L LC50 static		7600: 48 h Ceriodaphnia dubia mg/L EC50
Dibutyl phthalate 84-74-2	1.2: 72 h Desmodesmus subspicatus mg/L EC50 0.4: 96 h Pseudokirchneriella subcapitata mg/L EC50 static	0.71 - 1.2: 96 h Pimephales promelas mg/L LC50 flow-through 0.31 - 5.45: 96 h Pimephales promelas mg/L LC50 static 1.24: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 1.24 - 5.3: 96 h Oncorhynchus mykiss mg/L LC50 static 1.38 - 1.74: 96 h Lepomis macrochirus mg/L LC50 flow-through 0.42 - 1.28: 96 h Lepomis macrochirus mg/L LC50 static	EC50 = 10.9 mg/L 30 min EC50 = 10.9 mg/L 5 min EC50 = 11.1 mg/L 15 min EC50 = 2.2 mg/L 24 h	2.99: 48 h Daphnia magna mg/L EC50 Static 3.4: 48 h Daphnia magna mg/L EC50

**Persistence/Degradability**

Not determined.

**Bioaccumulation**

Not determined.

**Mobility**

Chemical Name	Partition Coefficient
Dibutyl phthalate 84-74-2	5.38

**Other Adverse Effects**

Not determined

### 13. DISPOSAL CONSIDERATIONS

#### Waste Treatment Methods

**Disposal of Wastes** Disposal should be in accordance with applicable regional, national and local laws and regulations.

**Contaminated Packaging** Disposal should be in accordance with applicable regional, national and local laws and regulations.

#### US EPA Waste Number

Chemical Name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Dibutyl phthalate 84-74-2	U069	Included in waste stream: F039		U069

#### California Hazardous Waste Status

Chemical Name	California Hazardous Waste Status
Benzoyl peroxide 94-36-0	Toxic Ignitable Reactive

### 14. TRANSPORT INFORMATION

**Note** Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

**DOT** Not regulated

**IATA** Not regulated

**IMDG**  
**Marine Pollutant** This material may meet the definition of a marine pollutant

### 15. REGULATORY INFORMATION

#### International Inventories

Chemical Name	TSCA	DSL	NDSL	EINECS	ELINCS	ENCS	IECSC	KECL	PICCS	AICS
Uncured Methacrylate Ester Monomers	Present	X		Present		Present	X	Present	X	X
Silinated glass and silica fillers	Present	X		Present		Present	X	Present	X	X
Dibutyl phthalate	Present	X		Present		Present	X	Present	X	X
Benzoyl peroxide	Present	X		Present		Present	X	Present	X	X

#### **Legend:**

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List

**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

**ENCS** - Japan Existing and New Chemical Substances

**IECSC** - China Inventory of Existing Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances

**AICS** - Australian Inventory of Chemical Substances

**US Federal Regulations****CERCLA**

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Dibutyl phthalate 84-74-2	10 lb		RQ 10 lb final RQ RQ 4.54 kg final RQ

**SARA 313**

Chemical Name	CAS No	Weight-%	SARA 313 - Threshold Values %
Dibutyl phthalate - 84-74-2	84-74-2	Proprietary	1.0
Benzoyl peroxide - 94-36-0	94-36-0	Proprietary	1.0

**CWA (Clean Water Act)**

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Dibutyl phthalate	10 lb	X	X	X

**US State Regulations****California Proposition 65**

This product contains the following Proposition 65 chemicals.

Chemical Name	California Proposition 65
Dibutyl phthalate - 84-74-2	Developmental Female Reproductive Male Reproductive

**U.S. State Right-to-Know Regulations**

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Silanated glass and silica fillers	X	X	X
Dibutyl phthalate 84-74-2	X	X	X
Benzoyl peroxide 94-36-0	X	X	X

**16. OTHER INFORMATION****NFPA****Health Hazards**

Not determined

**Flammability**

Not determined

**Instability**

Not determined

**Special Hazards**

Not determined

**HMIS****Health Hazards**

2

**Flammability**

1

**Physical Hazards**

2

**Personal Protection**

Not determined

**Issue Date:**

18-Jun-2013

**Revision Date:**

21-Nov-2014

**Revision Note:**

New format

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**End of Safety Data Sheet**