



Safety Data Sheet

Issue Date: 18-Jun-2013

Revision Date: 21-Nov-2014

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

General Advice	If exposed or concerned: Get medical advice/attention.
Eye Contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.
Skin Contact	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.
Inhalation	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Seek medical attention if irritation persists.
Ingestion	Get medical attention.

Most important symptoms and effects

Symptoms	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 (CO₂). 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 ³ 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 ³ inhalable fraction	-	-
Dibutyl phthalate 84-74-2	TWA: 5 mg/m ³	TWA: 5 mg/m ³ (vacated) TWA: 5 mg/m ³	IDLH: 4000 mg/m ³ TWA: 5 mg/m ³
Benzoyl peroxide 94-36-0	TWA: 5 mg/m ³	TWA: 5 mg/m ³ (vacated) TWA: 5 mg/m ³	IDLH: 1500 mg/m ³ TWA: 5 mg/m ³

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

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

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

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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