

# Safety Data Sheet

Issue Date: 18-Jun-2013	Revision Date:	17-Oct-2017		Version 1	
1. IDENTIFICATION					
Product Identifier Product Name	SmarTemp® Dual Cure	(All Shades)			
Other means of identification SDS #	S338, VAR.				
Recommended use of the chemic Recommended Use	al and restrictions on use Composite Resin-Based,		Bridge Material.		
Details of the supplier of the safet Supplier Address Parkell, Inc. 300 Executive Drive Edgewood, NY 11717	Parkell, Inc. 300 Executive Drive				
Emergency Telephone Number Company Phone Number Emergency Telephone (24 hr)	(631) 249-1134 INFOTRAC 1-352-323-33 1-800-535-5053 (North A				
	2. HAZARDS I	DENTIFICATION			
Appearance Colored paste	Physical S	State Liquid	Odor	Mild fruity ester-like odor	
Skin sensitization			Category 1		
Reproductive toxicity			Category 1B		
Specific target organ toxicity (single	exposure)		Category 3		
Hazards Not Otherwise Classified May be harmful if swallowed May be harmful in contact with skin	(HNOC)				
<u>Signal Word</u> Danger					
Hazard Statements May cause an allergic skin reaction May damage fertility or the unborn c May cause respiratory irritation	hild				

# 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.
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# 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.

## 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/cm3 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	TWA: 5 mg/m <sup>3</sup>	TWA: 5 mg/m <sup>3</sup>	IDLH: 4000 mg/m <sup>3</sup>
84-74-2		(vacated) TWA: 5 mg/m <sup>3</sup>	TWA: 5 mg/m <sup>3</sup>
Benzoyl peroxide	TWA: 5 mg/m <sup>3</sup>	TWA: 5 mg/m <sup>3</sup>	IDLH: 1500 mg/m <sup>3</sup>
94-36-0		(vacated) TWA: 5 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.
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# 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		
Appearance	Colored paste	Odor	Mild fruity ester-like odor
Color	Not determined	Odor Threshold	Not determined
Dranaty	Values	Demostre - Mathad	
Property	Values	Remarks • Method	_
рН	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
Silinated 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	Crustacea
	0 1 1		microorganisms	
Silanated glass and silica	440: 72 h	5000: 96 h Brachydanio rerio		7600: 48 h Ceriodaphnia
fillers	Pseudokirchneriella	mg/L LC50 static		dubia mg/L EC50
	subcapitata mg/L EC50			
Dibutyl phthalate	1.2: 72 h Desmodesmus	0.71 - 1.2: 96 h Pimephales	EC50 = 10.9 mg/L 30 min	2.99: 48 h Daphnia magna
84-74-2	subspicatus mg/L EC50 0.4:		EC50 = 10.9 mg/L 5 min	mg/L EC50 Static 3.4: 48 h
	96 h Pseudokirchneriella	flow-through 0.31 - 5.45: 96	EC50 = 11.1 mg/L 15 min	Daphnia magna mg/L EC50
	subcapitata mg/L EC50	h Pimephales promelas mg/L	EC50 = 2.2 mg/L 24 h	
	static	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		

## 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	<b>RCRA - U Series Wastes</b>
Dibutyl phthalate	U069	Included in waste stream:		U069
84-74-2		F039		

# California Hazardous Waste Status

Chemical Name	California Hazardous Waste Status
Benzoyl peroxide	Toxic
94-36-0	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	Х		Present		Present	Х	Present	Х	Х
Silinated glass and silica fillers	Present	Х		Present		Present	Х	Present	Х	Х
Dibutyl phthalate	Present	Х		Present		Present	Х	Present	Х	Х
Benzoyl peroxide	Present	Х		Present		Present	Х	Present	Х	Х

#### 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	10 lb		RQ 10 lb final RQ
84-74-2			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	Х	Х	Х

# 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	Х	X	Х
Dibutyl phthalate 84-74-2	Х	X	Х
Benzoyl peroxide 94-36-0	Х	X	Х

# **16. OTHER INFORMATION**

<u>NFPA</u>	Health Hazards Not determined	Flammability Not determined	Instability Not determined
<u>HMIS</u>	Health Hazards	Flammability 1	Physical Hazards 2
Issue Date: Revision Date:	18-Jun-2013 21-Nov-2014		
Revision Note:	New format		

**Special Hazards** Not determined **Personal Protection** Not determined

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**