

KERR

Material Safety Data Sheet

in accordance with Community Regulation 2006/1907/EC (R.E.A.Ch.)

Revision Date: 28th May 2009

SECTION 1

Product & Company identification

1.1 Product name

FILL-IN BASE

1.2 Uses/Application:

Crown & Bridge self curing dental material.

1.3 Company (Name, address and info phone number)

KERR CORPORATION (DMC)

1717 West Collins Avenue

92867 Orange – CALIFORNIA (U.S.A.)

00-800-41-050-505

1.4 Emergency phone (according to communitarian directive 99/45/EC, article 17)

+39.081.8508.325 (08.00-17.00, European time, GMT+1)

E-mail address: safety@kerrhawe.com

SECTION 2

Hazard identification

2.1 Hazard classification (according to communitarian directives 67/548/EEC & 99/45/EC)

Toxic for reproduction; Sensitizing.

2.2 Other hazard

Uncured material may be harmful if swallowed in large amounts.

SECTION 3

Composition/Information on Ingredients

(according to communitarian directives 67/548/EEC, 99/45/EC & 2001/58/EC)

3.1 Hazardous ingredients

HAZARDOUS INGREDIENTS	%	HAZARD SYMBOLS	RISK PHRASES	CAS N.	EINECS N.
Dibutyl Phtalate (DBP)	3-7	T; N	61-62-50	84-74-2	201-557-4
Methyl Methacrylate monomer (MMA)	2-4	F, Xi	11-36/37/38-43	80-62-6	201-297-1

3.2 Other non-hazardous ingredients

None.

SECTION 4**First aid measures**

- 4.1 Treatment for eye contact: Flush with water for 15 minutes including under eyelids. If irritation persists, seek medical attention.
- 4.2 Treatment for skin contact: Wash thoroughly with soap and water. If irritation persists, consult a physician.
- 4.3 Treatment for inhalation (breathing): Remove to fresh air. If irritation persists, seek medical attention.
- 4.4 Treatment for ingestion (swallowing): Rinse mouth out with water. Do not induce vomiting. Contact a physician.

SECTION 5**Fire-fighting Measures**

- 5.1 Suitable extinguishing media: Chemical foam, CO₂, dry chemical.
- 5.2 Forbidden extinguishing media: Direct stream of water.
- 5.3 Special fire fighting measures: None. Wear a self contained breathing apparatus.
- 5.4 Unusual fire and explosion hazards: Heat can cause polymerization with rapid release of energy.
- 5.5 Special protection equipment: Sealed overall against liquids and gases.

SECTION 6**Accidental Release Measures**

- 6.1 Personal Precautions: Follow recommended precautions listed in section 8.
- 6.2 Environmental Precautions: Material should not be allowed to drain into sewers.
- 6.3 Reclaiming Methods: Absorb spills with inert material. Prevent spilled material to reach sewers.

SECTION 7**Handling and Storage** (according to article 5 of communitarian directive 98/24/EC)

- 7.1 Handling Precautions: Avoid exposure to excessive heat.
- 7.2 Precautions in case of Fire and Explosion: Evacuate area and wear respiratory and protective clothing.
- 7.3 Storage Conditions: Store in a cool, dry place away from heat, light and ignition sources.
- 7.4 Suggested container(s): Original sealed containers provided by manufacturer.
- 7.5 Indication for Combined Storage: Avoid contact with reducing and oxidizing agents, peroxides and amines.
- 7.6 Environmental precautions: Do not allow product to reach sewers and rivers.
- 7.7 Other Precautions: Use according to directions.

SECTION 8	
Exposure controls/personal protection	
<i>8.1 Exposure Limits:</i>	(MMA): <u>TWA</u> : 50 ppm (205 mg/m ³); <u>TLV</u> : 100 ppm (410 mg/m ³);
<i>8.2 Exposure control measures</i>	
<i>8.2.1 Precautionary Measures:</i> (according to communitarian directives 89/686/EEC & article 4 of 98/24/EC)	
Ventilation:	<u>Local Exhaust Ventilation</u> : Good general ventilation should be sufficient to control airborne levels of vapours released by uncured material. <u>Special Ventilation</u> : None required. <u>Mechanical (General) Ventilation</u> : Good general ventilation recommended. <u>Other Ventilation</u> : None required.
Respiratory Protection:	Use in a well ventilated area. Avoid breathing vapours of uncured material.
Hands Protection:	Wear impervious gloves to avoid contact with uncured material.
Eyes Protection:	Safety glasses or goggles.
Skin Protection:	Handle in accordance with good personal hygiene and safety practices. These practices include avoiding unnecessary exposure to uncured material.
Other Protective Equipments:	It would be better to use a lab coat.
<i>Measures listed in this paragraph are to be considered as indications and NOT prescriptions (89/656/EEC)</i>	
<i>8.2.2 Environment exposure control measures</i> Not Applicable.	

SECTION 9	
Physical and Chemical Properties	
<i>9.1 General information</i>	
<u>Appearance</u> : Tooth-pigmented paste	<u>Odour</u> : Fruity ester-like odour.
<i>9.2 Information related to health, safety and environment</i>	
<u>pH</u> : Not available	<u>Relative density</u> : Not determined
<u>Boiling point</u> : Not determined (N/D)	<u>Specific gravity</u> : 2,0 g/ml
<u>Flash point</u> : Not determined	<u>Solubility</u> : Insoluble
<u>Flammability</u> : Not flammable.	<u>Partition coefficient n-octanol/water</u> : N/D
<u>Lower Explosivity Limit (L.E.L.)</u> : N/A	<u>Viscosity</u> : Not determined
<u>Upper Explosivity Limit (U.E.L.)</u> : N/A	<u>Vapour density (air = 1)</u> : Not determined
<u>Oxidizing properties</u> : None	<u>Evaporation rate (n-butane = 1)</u> : Not determined
<u>Vapour pressure</u> : Not determined	<u>Melting point</u> : Not determined
<i>9.3 Other information (according to communitarian directive 94/9/EC):</i>	
<u>Miscibility</u> : Not determined	<u>Conducibility</u> : Not determined
<u>Solubility in Lipids</u> : Not determined	<u>Gases Group</u> : N/A

SECTION 10**Stability and Reactivity**

Stability: Stable if stored as directed.

10.1 Conditions to avoid: Heat, light, aging and contamination.

10.2 Materials to avoid (incompatibility): Reducing and oxidizing agents, peroxides and amines.

10.3 Hazardous decomposition products: Carbon oxides.

Other precautions:

Hazardous Polymerization Products: Will not occur when using clinical amounts of this material.

Safety significance in case of change in physical appearance: None

Stabilizers: The product is stabilized with non-hazardous polymerization inhibitors.

SECTION 11**Toxicological Information**

CMR effects (Carcinogenicity, Mutagenicity and toxicity for reproduction):

None

Effects and hazards of eye contact: May cause irritation and damage if not removed promptly.

Effects and hazards of skin contact: Prolonged or repeated exposure to uncured material may cause irritation or skin rash especially in sensitive individuals.

Effects and hazards of Inhalation (Breathing): Prolonged or excessive inhalation may cause respiratory tract irritation.

Effects and hazards of Ingestion (Swallowing): Uncured material may be harmful if swallowed in large amounts.

Effects for prolonged Exposure: May cause sensitization by skin contact.

Toxic-kinetic effects: Unknown.

Effects on metabolism: Unknown.

Toxicological data for ingredients:

DBP	LD ₅₀ (oral rat)	8000 mg/Kg
	LD ₅₀ (skin rabbit)	20000 mg/Kg
Methyl Methacrylate monomer	LD ₅₀ (oral rat)	> 5000 mg/Kg (OCSE 401)
	LD ₅₀ (skin rabbit)	> 5000 mg/Kg
	LC ₅₀ (inhalation rat/4hrs)	> 29,8 mg/l

SECTION 12**Ecological Information**

This product has not known ecological hazardous effects.

12.1 Eco-toxicity: Not available

12.2 Mobility: Not available

12.3 Persistence and degradability: Not available

12.4 Bioaccumulative potential: Not available

12.5 Results of PBT (Persistent Bio-Toxicity) assessment: Not available

12.6 Other adverse effects: Not available

Aquatic toxicity data for ingredients:

DBP	LC ₅₀ (Fishes, acute toxicity)	1,2 mg/l (96 hours)
	LC ₅₀ (Daphnia)	1-10 mg/l (96 hours)
Methyl Methacrylate monomer Easily biodegradable: 94% (OCSE 301 C, 14 days)	LC ₅₀ (Oncorhynchus mykiss, 96h)	> 79 mg/l (OCSE 203, GLP)
	EC ₅₀ (Daphnia magna, 48h)	69 mg/l (OCSE 202, 48 hours)
	NOEC (Daphnia magna, 21 days)	37 mg/l (OCSE 202/2, flow)
	EC ₃ (scenedesmus quadricauda)	37 mg/l (DIN 38412/9, 8days)
	EC ₅₀ (senastrum capricornutum)	170 mg/l (OCSE 201, 96 hours)

SECTION 13**Disposal considerations**

Unpolymerized (uncured) material may be hazardous waste. Dispose of in accordance of local regulations.

SECTION 14**Transport information**14.1 Sea transportation (IMDG)

The product is not regulated.

14.2 Air transportation (ICAO/IATA)

The product is not regulated.

14.3 Transportation by Road/Railway (RID/ADR)

The product is not regulated.

SECTION 15 (Classification according to communitarian directives 67/548/EEC & 99/45/EC)

Regulatory information

Hazard labelling not required.

This product is an exempted medical device (directive 1999/45/EC, article 1, paragraph 5g).

SECTION 16

Other information

16.1 Risk phrases of all ingredients

- 43 May cause sensitization by skin contact
 61 May cause harm to the unborn child.
 62 Possible risk of impaired fertility.
 50 Very toxic to aquatic organisms.
 11 Highly flammable.
 36/37/38 Irritating to eyes, respiratory system and skin

16.1.1 Safety phrases of all ingredients

- 24 Avoid contact with skin.
 46 If swallowed, seek medical advice immediately and show this container or label.

16.2 Sources of key data used to compile the Safety Data Sheet:

European Chemicals Bureau (ECB – www.ecb.jrc.it)

European chemical Substances Information System (ESIS - www.ecb.jrc.it/esis)

A.C.G.I.H. (www.acgih.org)

N.I.O.S.H. (www.cdc.gov/niosh/)

O.S.H.A. (www.osha.gov/)

U.E. (www.europa.eu/index_it.htm)

I.A.R.C. (www.iarc.fr/)

N.T.P. (www.ntp.niehs.nih.gov)

European Community Directives:

67/548/EEC:	Classification, packaging and labelling of dangerous substances.
99/45/EC:	Directive concerning the approximation of the laws, regulations and administrative provisions of the Member States relating to the classification, packaging and labelling of dangerous preparations.
2001/58/EC:	Second amendment of directive 91/155/EEC for the definition of a detailed arrangement of specific information relating to dangerous preparations (art. 14 of 99/45/EC) and substances (art. 27 of 67/548/EEC).
89/656/EEC:	Directive on the minimum health and safety requirements for the use by workers of personal protective equipment at the workplace (third individual directive within the meaning of Article 16 (1) of Directive 89/391/EEC).
89/686/EEC:	Approximation of the laws of the Member States relating to personal protective equipment.
94/9/EC:	Approximation of the laws of the Member States concerning equipment and protective systems intended for use in potentially explosive atmospheres
98/24/EC:	Protection of the health and safety of workers from the risks related to chemical agents at work.

Document modification history: First version in compliance of Community Regulation 2006/1907/EC
(R.E.A.Ch.)

CAUTION: PRODUCT FOR PROFESSIONAL USE

The information on this Safety Sheet is based on presently available data and to our best knowledge for the correct handling of the product under normal conditions. Any use of this product in any way not indicated on this Sheet or the use of this product together with any other process/procedure will be exclusively under the user's responsibility. This document does not constitute explicit or implicit warranty of product quality or fitness for a particular purpose.