

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 3/5/2018 Version: 8

SECTION 1: Identification

Identification

Product form : Mixture

Product name : Crown-Lok Part B

Recommended use and restrictions on use

Use of the substance/mixture : For RX only

Supplier

Manufacturer:

Reliance Orthodontic Products, Inc. 1540 West Thorndale Ave.

Itasca, IL 60143 USA

630-773-4009, during normal business hours

www.RelianceOrthodontics.com

Emergency telephone number

: CHEMTREC - 24-Hour Hazmat Emergency Communications Center Emergency number

Domestic: 1-800-424-9300 Outside the U.S.: 1-703-527-3887, collect calls accepted

SECTION 2: Hazard(s) identification

Classification of the substance or mixture

GHS-US classification

Skin corrosion/irritation H315 Causes skin irritation

Category 2

Serious eye damage/eye H319 Causes serious eye irritation

irritation Category 2

Skin sensitization, Category May cause an allergic skin reaction H317

Full text of H statements : see section 16

GHS Label elements, including precautionary statements

GHS-US labeling

Hazard pictograms (GHS-US)



Hazard statements (GHS-US) : H315 - Causes skin irritation

> H317 - May cause an allergic skin reaction H319 - Causes serious eye irritation

Precautionary statements (GHS-US) : P261 - Avoid breathing vapors

P264 - Wash hands thoroughly after handling

P272 - Contaminated work clothing must not be allowed out of the workplace

P280 - Wear protective gloves, face protection, eye protection

P302+P352 - If on skin: Wash with plenty of Wash skin with soap and water

P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing

P321 - Specific treatment (see First aid measures on this label) P332+P313 - If skin irritation occurs: Get medical advice/attention P337+P313 - If eve irritation persists: Get medical advice/attention P362+P364 - Take off contaminated clothing and wash it before reuse

P363 - Wash contaminated clothing before reuse

P501 - Dispose in a safe manner in accordance with local/national regulations

Other hazards which do not result in classification 2.3.

No additional information available

Unknown acute toxicity (GHS US)

Not applicable

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SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	GHS-US classification
Fused Silica	(CAS-No.) 60675-86-0	10 - 30	Skin Irrit. 2, H315
BisGMA	(CAS-No.) 1565-94-2	1 - 10	Skin Irrit. 2, H315 Eye Irrit. 2B, H320 Skin Sens. 1, H317
2-Hydroxyethyl Methacrylate	(CAS-No.) 868-77-9	1 - 10	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317
Proprietary	(CAS-No.) Proprietary	1 - 5	Skin Sens. 1B, H317
Dibenzoyl Peroxide, technically pure	(CAS-No.) 94-36-0	<1	Org. Perox. B, H241 Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Acute 2, H401

Full text of hazard classes and H-statements: see section 16

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.

First-aid measures after skin contact : Wash skin with plenty of water. Take off contaminated clothing. If skin irritation or rash occurs:

Get medical advice/attention.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to

do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

First-aid measures after ingestion : Call a poison center/doctor/physician if you feel unwell.

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects after skin contact : Irritation. May cause an allergic skin reaction.

Symptoms/effects after eye contact : Eye irritation.

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam.

5.2. Specific hazards arising from the chemical

Reactivity : The product is non-reactive under normal conditions of use, storage and transport.

5.3. Special protective equipment and precautions for fire-fighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. Avoid contact with skin and eyes. Avoid breathing mist, vapors.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Mechanically recover the product.

Other information : Dispose of materials or solid residues at an authorized site.

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6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling

: Ensure good ventilation of the work station. Avoid contact with skin and eyes. Wear personal

protective equipment. Avoid breathing mist, vapors.

Hygiene measures : Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace. Do not eat, drink or smoke when using this product. Always wash hands

after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a well-ventilated place. Keep cool.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Proprietary (Proprietary)

Not applicable

Fused Silica (60675-86-0)

Not applicable

2-Hydroxyethyl Methacrylate (868-77-9)

Not applicable

BisGMA (1565-94-2)

Not applicable

Dibenzoyl Peroxide, technically pure (94-36-0)

ACGIH ACGIH TWA (m

ACGIH TWA (mg/m³)

5 mg/m³ ((Dibenzoyl Peroxide; France; Time-weighted average exposure limit 8 h); USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value)

8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.

Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Hand protection:

Protective gloves

Eye protection:

Protective goggles

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Solid
Appearance : Paste
Color : White
Odor : Acrylic

Odor threshold : No data available pH : No data available

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Melting point : No data available Freezing point : Not applicable Boiling point No data available Flash point : Not applicable Relative evaporation rate (butyl acetate=1) : No data available Flammability (solid, gas) : Non flammable. Vapor pressure : No data available Relative vapor density at 20 °C : No data available : Not applicable Relative density Solubility : No data available Log Pow : No data available Auto-ignition temperature : Not applicable Decomposition temperature : No data available Viscosity, kinematic : Not applicable : No data available Viscosity, dynamic **Explosion limits** : Not applicable Explosive properties : No data available : No data available Oxidizing properties

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

Proprietary (Proprietary)			
LD50 oral rat	> 2000 mg/kg body weight (Rat; Literature study)		
LD50 dermal rat	> 2000 mg/kg body weight (Rat; Literature study)		
Fused Silica (60675-86-0)	Fused Silica (60675-86-0)		
LD50 oral rat	N/A		
LD50 dermal rat	N/A		
LD50 dermal rabbit	N/A		
LC50 inhalation rat (ppm)	N/A		
2-Hydroxyethyl Methacrylate (868-77-9)			
LD50 oral rat	5564 mg/kg body weight (Rat; Experimental value)		
LD50 dermal rabbit	> 5000 mg/kg body weight (Rabbit; Experimental value)		
ATE US (oral)	5564 ma/ka body weight		

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Dibenzoyl Peroxide, technically pure (94-36-0)	
LD50 oral rat	> 5000 mg/kg (Rat)
Skin corrosion/irritation	: Causes skin irritation.
Serious eye damage/irritation	: Causes serious eye irritation.
Respiratory or skin sensitization	: May cause an allergic skin reaction.
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified

Fused Silica	(60675-86-0)	
IARC group		4 - Probably not carcinogenic to humans

Dibenzoyl Peroxide, technically pure (94-36-0)

IARC group 3 - Not classifiable

Reproductive toxicity : Not classified Specific target organ toxicity – single exposure : Not classified

Fused Silica (60675-86-0)	
LOAEL (oral,rat)	N/A mg/kg body weight
LOAEL (dermal,rat/rabbit)	N/A mg/kg body weight
LOAEC (inhalation,rat,gas)	N/A ppmV/4h
LOAEC (inhalation,rat,vapour)	N/A mg/l/4h
LOAEC (inhalation,rat,dust/mist/fume)	N/A mg/l/4h

Specific target organ toxicity – repeated : Not classified

exposure

Fused Silica (60675-86-0)	
LOAEL (oral,rat,90 days)	N/A mg/kg bodyweight/day
LOAEL (dermal,rat/rabbit,90 days)	N/A mg/kg bodyweight/day
LOAEC (inhalation,rat,gas,90 days)	N/A ppmV/6h/day
LOAEC (inhalation,rat,vapour,90 days)	N/A mg/l/6h/day
LOAEC (inhalation,rat,dust/mist/fume,90 days)	N/A mg/l/6h/day

Aspiration hazard : Not classified

Symptoms/effects after skin contact : Irritation. May cause an allergic skin reaction.

Symptoms/effects after eye contact : Eye irritation.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms or to cause long-term adverse

effects in the environment.

Proprietary (Proprietary)	
LC50 fish 1	175 mg/l (LC50; 96 h)
EC50 Daphnia 1	> 100 mg/l (EC50; EU Method C.2; 48 h; Daphnia magna; Static system; Fresh water; Experimental value)
LC50 fish 2	> 100 mg/l (LC50; EU Method C.1; 96 h; Brachydanio rerio; Semi-static system; Fresh water; Experimental value)
EC50 Daphnia 2	>= 100 mg/l (NOEC; EU Method C.2; 48 h; Daphnia magna; Static system; Fresh water; Experimental value)
Threshold limit algae 1	> 100 mg/l (EC50; EU Method C.3; 72 h; Scenedesmus subspicatus; Static system; Fresh water; Experimental value)
Threshold limit algae 2	> 100 mg/l (EC50; EU Method C.3; 72 h; Scenedesmus subspicatus; Static system; Fresh water; Experimental value)

2-Hydroxyethyl Methacrylate (868-77-9)	
LC50 fish 1	227 mg/l (LC50; 96 h)
EC50 Daphnia 1	171 mg/l (NOEC; OECD 202: Daphnia sp. Acute Immobilisation Test; 48 h; Daphnia magna; Static system; Fresh water; Experimental value)

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2-Hydroxyethyl Methacrylate (868-77-9)	
EC50 Daphnia 2	380 mg/l (EC50; OECD 202: Daphnia sp. Acute Immobilisation Test; 48 h; Daphnia magna; Static system; Fresh water; Experimental value)
Threshold limit algae 1	836 mg/l (ErC50; OECD 201: Alga, Growth Inhibition Test; 72 h; Pseudokirchneriella subcapitata; Static system; Fresh water; Experimental value)
Threshold limit algae 2	345 mg/l (EbC50; OECD 201: Alga, Growth Inhibition Test; 72 h; Pseudokirchneriella subcapitata; Static system; Fresh water; Experimental value)

Dibenzoyl Peroxide, technically pure (94-36-0	
LC50 fish 1	2 mg/l (LC50; 96 h; Poecilia reticulata)

12.2. Persistence and degradability

Proprietary (Proprietary)		
Persistence and degradability	Readily biodegradable in water.	
2-Hydroxyethyl Methacrylate (868-77-9)		
Persistence and degradability	Readily biodegradable in water. Biodegradability in soil: no data available. Adsorbs into the soil.	
Dibenzoyl Peroxide, technically pure (94-36-0)		
Persistence and degradability	Readily biodegradable in water. No (test)data on mobility of the substance available.	

12.3. Bioaccumulative potential

Proprietary (Proprietary)		
Log Pow	0.75 (Calculated)	
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).	
2-Hydroxyethyl Methacrylate (868-77-	9)	
BCF fish 1	1.3 - 1.5 (BCF)	
Log Pow	-0.55 - 0.49 (0.42; Experimental value; OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method; 25 °C)	
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).	
Dibenzoyl Peroxide, technically pure (94-36-0)		

Dibenzoyl Peroxide, technically pure (94-36-0)	
Log Pow	3.71 (QSAR; 3.2; Experimental value; OECD 117: Partition Coefficient (n-octanol/water), HPLC method; 22 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Effect on the global warming : No known effects from this product.

GWPmix comment : No known effects from this product.

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Other information : No supplementary information available.

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TDG

Transport by sea

Air transport

SECTION 15: Regulatory information

15.1. US Federal regulations

2-Hydroxyethyl Methacrylate (868-77-9)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Dibenzoyl Peroxide, technically pure (94-36-0)

Listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313

15.2. International regulations

CANADA

No additional information available

EU-Regulations

No additional information available

National regulations

No additional information available

15.3. US State regulations

Dibenzoyl Peroxide, technically pure (94-36-0)

U.S. - New Jersey - Right to Know Hazardous Substance List

SECTION 16: Other information

:

Full text of H-phrases:

H241	Heating may cause a fire or explosion
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H320	Causes eye irritation
H401	Toxic to aquatic life

SDS US (GHS HazCom 2012)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product

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