

Safety Data Sheet

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

Date of issue: 5/21/2015 Version: 7

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Mixture

Product name : Crown Lok Part B

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : For professional use only.

1.3. Details of the supplier of the safety data sheet

Manufacturer:

Reliance Orthodontic Products Inc. 1540 West Thorndale Ave. Itasca, IL 60143 USA

630-773-4009, during normal business hours

EC Representative:

Emergo Europe, Molenstraat 15, 2513 BH, The Hague, The Netherlands

1.4. Emergency telephone number

Emergency number : 1-703-527-3887

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (GHS-US)

Skin Irrit. 2 H315 Eye Irrit. 2A H319 Resp. Sens. 1 H334 Skin Sens. 1 H317 STOT SE 3 H335

Full text of H-phrases: see section 16

2.2. Label elements

GHS-US labeling

Hazard pictograms (GHS-US)



GHS07



Signal word (GHS-US) : Danger

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

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

H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled

H335 - May cause respiratory irritation

Precautionary statements (GHS-US) : P264 - Wash hands thoroughly after handling

P280 - Wear protective gloves, eye protection P302+P352 - If on skin: Wash with plenty of water

P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing

P332+P313 - If skin irritation occurs: Get medical advice/attention
P337+P313 - If eye irritation persists: Get medical advice/attention
P403+P233 - Store in a well-ventilated place. Keep container tightly closed
P501 - Dispose in a safe manner in accordance with local/national regulations.

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS-US)

Not applicable

EN (English US) Page 1

Safety Data Sheet

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

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

| Name | Product identifier | % | Classification (GHS-US) |
|----------------------------------|---------------------|---------|--|
| Glass filler | (CAS No) 65997-18-4 | 30 - 50 | Skin Irrit. 2, H315 Eye Irrit. 2B, H320 Resp. Sens. 1, H334 |
| Fused Silica | (CAS No) 60675-86-0 | 10 - 30 | Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Resp. Sens. 1, H334 STOT SE 3, H335 |
| bisphenol A glycidylmethacrylate | (CAS No) 1565-94-2 | 10 - 30 | Eye Dam. 1, H318 Skin Sens. 1, H317 |
| Aluminum Oxide | (CAS No) 1344-28-1 | 1 - 5 | Skin Corr. 1A, H314 Eye Irrit. 2A, H319 Resp. Sens. 1, H334 |

Full text of H-phrases: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical

advice (show the label where possible).

First-aid measures after inhalation : Assure fresh air breathing. Allow the victim to rest.

First-aid measures after skin contact : Remove affected clothing and wash all exposed skin area with mild soap and water, followed

by warm water rinse.

First-aid measures after eye contact : Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness

persist.

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries : Not expected to present a significant hazard under anticipated conditions of normal use.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.

Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

No additional information available

5.3. Advice for firefighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any

chemical fire. Avoid (reject) fire-fighting water to enter environment.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.

Emergency procedures : Ventilate area

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : On land, sweep or shovel into suitable containers. Minimize generation of dust. Store away

from other materials.

EN (English US) 2/7

Safety Data Sheet

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

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eat, drink or smoke and

when leaving work. Provide good ventilation in process area to prevent formation of vapor.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep container closed when not in use.

Incompatible products : Strong bases. strong acids.
Incompatible materials : Sources of ignition. Direct sunlight.

Not applicable

Not applicable

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

OSHA

OSHA

| Crown Lok Catalyst | | |
|---------------------------|----------------|--|
| ACGIH | Not applicable | |
| OSHA | Not applicable | |
| Glass filler (65997-18-4) | | |
| ACGIH | Not applicable | |

| 001111 | Teet applicable |
|----------------------|-----------------|
| | |
| Fused Silica (60675- | 86-0) |
| ACGIH | Not applicable |

| Aluminum Oxide | (1344- | -28-1) | |
|----------------|--------|------------------------|----------|
| ACGIH | | ACGIH TWA (mg/m³) | 1 mg/m³ |
| ACGIH | | Not applicable | |
| OSHA | | OSHA PEL (TWA) (mg/m³) | 10 mg/m³ |
| OSHA | | Not applicable | |

| bisphenol A glycidylmethacrylate (1565-94-2) | | |
|--|----------------|--|
| ACGIH | Not applicable | |
| OSHA | Not applicable | |

8.2. Exposure controls

Personal protective equipment : Avoid all unnecessary exposure.

Hand protection : Wear protective gloves.

Eye protection : Chemical goggles or safety glasses.

Respiratory protection : Wear approved mask.

Other information : When using, do not eat, drink or smoke.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Solid

Color : Tooth colored.

Odor : No data available

Odor threshold : No data available

pH : No data available

Relative evaporation rate (butyl acetate=1) : No data available

EN (English US) 3/7

Safety Data Sheet

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

Melting point : No data available Freezing point : No data available Boiling point : No data available Flash point : No data available : No data available Auto-ignition temperature Decomposition temperature : No data available Flammability (solid, gas) : No data available Vapor pressure : No data available Relative vapor density at 20 °C : No data available Relative density : No data available

Solubility : Water: Solubility in water of component(s) of the mixture :

•: 0.0003 g/100ml

Log Pow : No data available
Log Kow : No data available
Viscosity, kinematic : No data available
Viscosity, dynamic : No data available
Explosive properties : No data available
Oxidizing properties : No data available
Explosive limits : No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Not established.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

strong acids. Strong bases.

10.6. Hazardous decomposition products

fume. Carbon monoxide. Carbon dioxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

| Glass filler (65997-18-4) | |
|---------------------------|-----|
| LD50 oral rat | N/A |
| LD50 dermal rat | N/A |
| LD50 dermal rabbit | N/A |
| LC50 inhalation rat (ppm) | N/A |

| 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 |

| Aluminum Oxide | (1344-28-1) | |
|----------------|-------------|--------------|
| LD50 oral rat | | > 5000 mg/kg |

EN (English US) 4/7

Safety Data Sheet

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

Skin corrosion/irritation : Causes skin irritation.

Serious eye damage/irritation : Causes serious eye irritation.

Respiratory or skin sensitization : May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an

allergic skin reaction.

Germ cell mutagenicity : Not classified Carcinogenicity : Not classified

Glass filler (65997-18-4)

IARC group 4 - Probably Not Carcinogenic

Fused Silica (60675-86-0)

IARC group 4 - Probably Not Carcinogenic

Aluminum Oxide (1344-28-1)

IARC group 4 - Probably Not Carcinogenic

Reproductive toxicity : Not classified

Specific target organ toxicity (single exposure) : May cause respiratory irritation.

| Glass filler (65997-18-4) | |
|---------------------------------------|-----------------------|
| LOAEL (oral,rat) | N/A mg/kg body weight |
| LOAEL (dermal,rat/rabbit) | N/A mg/kg body weight |
| LOAEL (inhalation,rat,gas) | N/A ppmV/4h |
| LOAEL (inhalation,rat,vapour) | N/A mg/l/4h |
| LOAEL (inhalation,rat,dust/mist/fume) | N/A mg/l/4h |

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

Specific target organ toxicity (repeated : Not classified

exposure)

| Glass filler (65997-18-4) | |
|---|--------------------------|
| LOAEL (oral,rat,90 days) | N/A mg/kg bodyweight/day |
| LOAEL (dermal,rat/rabbit,90 days) | N/A mg/kg bodyweight/day |
| LOAEL (inhalation,rat,gas,90 days) | N/A ppmV/6h/day |
| LOAEL (inhalation,rat,vapour,90 days) | N/A mg/l/6h/day |
| LOAEL (inhalation,rat,dust/mist/fume,90 days) | N/A mg/l/6h/day |

| 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 |
| LOAEL (inhalation,rat,gas,90 days) | N/A ppmV/6h/day |
| LOAEL (inhalation,rat,vapour,90 days) | N/A mg/l/6h/day |
| LOAEL (inhalation,rat,dust/mist/fume,90 days) | N/A mg/l/6h/day |

Aspiration hazard : Not classified

Potential Adverse human health effects and : Based on available data, the classification criteria are not met.

symptoms

SECTION 12: Ecological information

12.1. Toxicity

| Aluminum Oxide | (1344-28-1) | |
|----------------|-------------|------------|
| LC50 fish 1 | | > 100 mg/l |
| EC50 Daphnia 1 | | > 100 mg/l |
| ErC50 (algae) | | > 100 mg/l |

EN (English US) 5/7

Safety Data Sheet

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

12.2. Persistence and degradability

| Crown | Lok Part B |
|--------|------------|
| CIOWII | LUK FAIL D |

Persistence and degradability Not established.

bisphenol A glycidylmethacrylate (1565-94-2)

Persistence and degradability Biodegradability in water: no data available.

12.3. Bioaccumulative potential

Crown Lok Part B

Bioaccumulative potential Not established.

bisphenol A glycidylmethacrylate (1565-94-2)

| Log Pow | 4.94 (Estimated value) | |
|---------------------------|------------------------------------|--|
| Bioaccumulative potential | No bioaccumulation data available. | |

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Effect on ozone layer :

Effect on the global warming : No known ecological damage caused by this product.

Other information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.

Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

In accordance with DOT

Not regulated for transport

Additional information

Other information : No supplementary information available.

ADR

No additional information available

Transport by sea

No additional information available

Air transport

No additional information available

SECTION 15: Regulatory information

15.1. US Federal regulations

No additional information available

15.2. International regulations

CANADA

No additional information available

EU-Regulations

No additional information available

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Skin Irrit. 2 H315 Eye Dam. 1 H318

EN (English US) 6/7

Safety Data Sheet

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

Resp. Sens. 1 H334 Skin Sens. 1 H317 STOT SE 3 H335

Full text of H-phrases: see section 16

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

15.2.2. National regulations

15.3. US State regulations

SECTION 16: Other information

Other information : None.

Full text of H-phrases:

| kt of Fr-prinases. | |
|--------------------|---|
| Eye Dam. 1 | Serious eye damage/eye irritation Category 1 |
| Eye Irrit. 2A | Serious eye damage/eye irritation Category 2A |
| Eye Irrit. 2B | Serious eye damage/eye irritation Category 2B |
| Resp. Sens. 1 | Respiratory sensitisation Category 1 |
| Skin Corr. 1A | Skin corrosion/irritation Category 1A |
| Skin Irrit. 2 | Skin corrosion/irritation Category 2 |
| Skin Sens. 1 | Skin sensitization Category 1 |
| STOT SE 3 | Specific target organ toxicity (single exposure) Category 3 |
| H314 | Causes severe skin burns and eye damage |
| H315 | Causes skin irritation |
| H317 | May cause an allergic skin reaction |
| H318 | Causes serious eye damage |
| H319 | Causes serious eye irritation |
| H320 | Causes eye irritation |
| H334 | May cause allergy or asthma symptoms or breathing difficulties if inhaled |
| H335 | May cause respiratory irritation |
| | |

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

EN (English US) 7/7