

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations
Date of issue: 03/07/2017

Version: 10

SECTION 1: Identification

1.1. Identification

Product form : Mixture
Product name : Ultra BandLok

1.2. Recommended use and restrictions on use

Use of the substance/mixture : For Rx Only

1.3. Supplier

Manufacturer:

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

800-323-4348 / 630-773-4009, during normal business hours

www.relianceorthodontics.com

1.4. Emergency telephone number

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

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

May cause allergy or asthma symptoms or breathing difficulties if inhaled

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS-US classification

Skin corrosion/irritation H315 Causes skin irritation

Category 2 Serious eye damage/eye H319

H319 Causes serious eye irritation

irritation Category 2

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Respiratory sensitisation

May cause an allergic skin reaction

Category 1 Skin sensitization Category

Full text of H statements : see section 16

2.2. GHS Label elements, including precautionary statements

H334

H317

GHS-US labeling

Hazard pictograms (GHS-US)



GHS08

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

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, eye protection

P284 - wear a mask

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

P304+P341 - If inhaled: If breathing is difficult, 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

P321 - Specific treatment (see First aid measures on this label)
P332+P313 - If skin irritation occurs: Get medical advice/attention
P337+P313 - If eye irritation persists: Get medical advice/attention

P342+P311 - If experiencing respiratory symptoms: Call a POISON CENTER, Take medical

advice

P362+P364 - Take off contaminated clothing and wash it before reuse

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P363 - Wash contaminated clothing before reuse

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

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	GHS-US classification
Glass Filler	(CAS No) 65997-18-4	50 - 75	Skin Irrit. 2, H315 Eye Irrit. 2B, H320 Resp. Sens. 1, H334
Bisphenol A Diglycidylmethacrylate	(CAS No) 1565-94-2	10 - 30	Skin Irrit. 2, H315 Eye Irrit. 2A, H319
Triethylene Glycol Dimethacrylate	(CAS No) 109-16-0	5 - 10	Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Resp. Sens. 1, H334 Skin Sens. 1, H317
Monomer 1	(CAS No) Propiretary	1 - 5	Skin Irrit. 2, H315 Eye Irrit. 2B, H320 Resp. Sens. 1, H334
Monomer 2	(CAS No) Propiretary	1 - 5	Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Skin Sens. 1, H317
Amorphous Silica	(CAS No) 112945-52-5	1 - 5	Eye Irrit. 2A, H319 Resp. Sens. 1, H334

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

SECTION 4: First-aid measures

4.1.	Description	of first aid	measures
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First-aid measures general

: Call a poison center or a doctor if you feel unwell.

First-aid measures after inhalation

: Remove person to fresh air and keep comfortable for breathing. If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician. If experiencing respiratory symptoms: Call a poison center or a doctor.

First-aid measures after skin contact

Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/attention. Specific treatment (see First aid measures on this label). If skin irritation or rash occurs: 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

: If eye irritation persists: Get medical advice/attention. 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 or a doctor if you feel unwell.

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

Symptoms/injuries after inhalation

 May cause an allergic skin reaction. May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Symptoms/injuries after skin contact

: Causes skin irritation. Irritation. May cause an allergic skin reaction.

Symptoms/injuries after eye contact : Causes serious eye irritation. Irritation to eyes.

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.

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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 : Recover mechanically the product.

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

6.4. Reference to other sections

For further information refer to section 8 : Exposure-controls/personal protection"".

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 hands thoroughly after handling. 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

Bisphenol A Diglycidylmethacrylate (1565-94-2)

Not applicable

Triethylene Glycol Dimethacrylate (109-16-0)

Not applicable

Glass Filler (65997-18-4)

Not applicable

Amorphous Silica (112945-52-5)

Not applicable

Monomer 1 (Propiretary)

Not applicable

Monomer 2 (Propiretary)

Not applicable

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:

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Protective gloves

Eye protection:

Safety glasses

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

In case of inadequate ventilation wear respiratory protection. Wear respiratory protection

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Solid

Color : Tooth colored / Blue

Odor : Acrylic

Odor threshold No data available рΗ : No data available Melting point : No data available Freezing point Not applicable No data available Boiling point : Not applicable Flash point 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 Relative density : Not applicable Solubility : No data available Log Pow : No data available Auto-ignition temperature Not applicable Decomposition temperature : No data available Viscosity, kinematic Not applicable Viscosity, dynamic No data available **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

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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

Triethylene Glycol Dimethacrylate (109-16	-0)
LD50 oral rat	10837 mg/kg
LD50 dermal rat	N/A
LD50 dermal rabbit	N/A
LC50 inhalation rat (ppm)	N/A
ATE US (oral)	10837.000 mg/kg body weight
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
Amorphous Silica (112945-52-5)	
LD50 oral rat	3160 mg/kg (Rat)
LD50 dermal rabbit	> 5000 mg/kg (Rabbit)
ATE US (oral)	3160.000 mg/kg body weight
Monomer 2 (Propiretary)	
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)	5564.000 mg/kg body weight
Monomer 1 (Propiretary)	
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LD50 oral rat	N/A
, , ,	N/A N/A
LD50 oral rat	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
LD50 oral rat LD50 dermal rat	N/A
LD50 oral rat LD50 dermal rat LD50 dermal rabbit	N/A N/A
LD50 oral rat LD50 dermal rat LD50 dermal rabbit LC50 inhalation rat (ppm) Skin corrosion/irritation	N/A N/A N/A
LD50 oral rat LD50 dermal rat LD50 dermal rabbit LC50 inhalation rat (ppm) Skin corrosion/irritation Serious eye damage/irritation	N/A N/A N/A Causes skin irritation.
LD50 oral rat LD50 dermal rat LD50 dermal rabbit LC50 inhalation rat (ppm)	N/A N/A N/A N/A Causes skin irritation. Causes serious eye irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an

Amorphous Silica (112945-52-5)	
IARC group	3 - Not Classifiable
Monomer (Propiretary)	
IARC group	4 - Probably Not Carcinogenic

Reproductive toxicity : Not classified Specific target organ toxicity (single exposure) : Not classified

Triethylene Glycol Dimethacrylate (109-16-0)		
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	
Glass Filler (65997-18-4)		
LOAEL (oral,rat)	N/A mg/kg body weight	
LOAEL (dermal,rat/rabbit)	N/A mg/kg body weight	

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Glass Filler (65997-18-4)	
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

Monomer 1 (Propiretary)	
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)

Triethylene Glycol Dimethacrylate (109-16-0)		
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	
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	

Monomer 1 (Propiretary)	
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

Symptoms/injuries after inhalation : May cause an allergic skin reaction. May cause allergy or asthma symptoms or breathing

difficulties if inhaled.

Symptoms/injuries after skin contact : Causes skin irritation. Irritation. May cause an allergic skin reaction.

N/A mg/l/6h/day

Symptoms/injuries after eye contact : Causes serious eye irritation. Irritation to eyes.

SECTION 12: Ecological information

LOAEL (inhalation,rat,dust/mist/fume,90 days)

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.

Monomer 2 (Propiretary)	
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)
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)

12.2. Persistence and degradability

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Bisphenol A Diglycidylmethacrylate (1565-94-2)		
Persistence and degradability	Biodegradability in water: no data available.	
Amorphous Silica (1129/5-52-5)		

Amorphous Silica (112945-52-5)		
Persistence and degradability	Biodegradability: not applicable.	
Biochemical oxygen demand (BOD)	Not applicable	
Chemical oxygen demand (COD)	Not applicable	
ThOD	Not applicable	
Monomer 2 (Propiretary)		
Persistence and degradability	Readily biodegradable in water. Biodegradability in soil: no data available. Adsorbs into the soil.	

12.3. Bioaccumulative potential

Bisphenol A Diglycidylmethacrylate (1565-94-2)	
Log Pow	4.94 (Estimated value)
Bioaccumulative potential	No bioaccumulation data available.

Amorphous Silica (112945-52-5)		
Bioaccumulative potential	Not bioaccumulative.	
Monomer 2 (Propiretary)		
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).	

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.

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

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Other information : No supplementary information available.

TDG

Transport by sea

Air transport

SECTION 15: Regulatory information

15.1. US Federal regulations

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Bisphenol A Diglycidylmethacrylate (1565-94-2)

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

Triethylene Glycol Dimethacrylate (109-16-0)

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

Glass Filler (65997-18-4)

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

Monomer 2 (Propiretary)

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

15.2. International regulations

CANADA

Bisphenol A Diglycidylmethacrylate (1565-94-2)

Listed on the Canadian DSL (Domestic Substances List) inventory.

EU-Regulations

No additional information available

National regulations

No additional information available

15.3. US State regulations

No additional information available

SECTION 16: Other information

Revision date: 03/07/2017

Full text of H-phrases:

H315	Causes skin irritation
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H320	Causes eye irritation
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled

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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