

Light Bond Filled Sealant with Fluoride

Safety Data Sheet

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

Date of issue: 5/20/2015

Version: 5

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

1.1. Product identifier

Product form : Mixture
Product name : Light Bond Sealant with Fluoride

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)

Resp. Sens. 1 H334

Full text of H-phrases: see section 16

2.2. Label elements

GHS-US labeling

Hazard pictograms (GHS-US) :



GHS08

Signal word (GHS-US) : Warning
Hazard statements (GHS-US) : H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled
Precautionary statements (GHS-US) : P333+P313 - If skin irritation or rash occurs: Get medical advice/attention
P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P403+P235 - Store in a well-ventilated place. Keep cool
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

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

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3.2. Mixture

Name	Product identifier	%	Classification (GHS-US)
Triethylene glycol dimethacrylate	(CAS No) 109-16-0	10 - 30	Skin Irrit. 2, H315 Resp. Sens. 1, H334
Urethane Dimethacrylate	(CAS No) 72869-86-4	10 - 30	Skin Irrit. 2, H315 Resp. Sens. 1, H334
2-N-Morpholinoethyl Methacrylate	(CAS No) 2997-88-8	1 - 5	Skin Irrit. 2, H315 Eye Irrit. 2B, H320 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 : 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.
- 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 after inhalation : May cause allergy or asthma symptoms or breathing difficulties if inhaled.

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 : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

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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.
Avoid breathing mist, vapors.

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.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Light Bond Filled Sealant with Fluoride	
ACGIH	Not applicable
OSHA	Not applicable
Triethylene glycol dimethacrylate (109-16-0)	
ACGIH	Not applicable
OSHA	Not applicable
Urethane Dimethacrylate (72869-86-4)	
ACGIH	Not applicable
OSHA	Not applicable
2-N-Morpholinoethyl Methacryla (2997-88-8)	
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 : In case of inadequate ventilation wear respiratory protection.

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 : Liquid

Appearance : Light yellow, translucent

Color : Colorless.

Odor : Methacrylate

Odor threshold : No data available

pH : No data available

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

Melting point : No data available

Freezing point : No data available

Boiling point : No data available

Flash point : > 75°C / 167°F

Auto-ignition temperature : No data available

Decomposition temperature : No data available

Flammability (solid, gas) : No data available

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Vapor pressure	: No data available
Relative vapor density at 20 °C	: No data available
Relative density	: > 1
Solubility	: Insoluble
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

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
Urethane Dimethacrylate (72869-86-4)	
LD50 oral rat	N/A
LD50 dermal rat	N/A
LD50 dermal rabbit	N/A
LC50 inhalation rat (ppm)	N/A
2-N-Morpholinoethyl Methacryla (2997-88-8)	
LD50 oral rat	N/A
LD50 dermal rat	N/A
LD50 dermal rabbit	N/A
LC50 inhalation rat (ppm)	N/A

Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitization	: May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Germ cell mutagenicity	: Not classified

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Carcinogenicity : Not classified

Triethylene glycol dimethacrylate (109-16-0)	
IARC group	4 - Probably Not Carcinogenic

Urethane Dimethacrylate (72869-86-4)	
IARC group	4 - Probably Not Carcinogenic

2-N-Morpholinoethyl Methacryla (2997-88-8)	
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

Urethane Dimethacrylate (72869-86-4)	
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

2-N-Morpholinoethyl Methacryla (2997-88-8)	
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 exposure) : Not classified

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

Urethane Dimethacrylate (72869-86-4)	
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

2-N-Morpholinoethyl Methacryla (2997-88-8)	
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 symptoms : Based on available data, the classification criteria are not met.

Symptoms/injuries after inhalation : May cause allergy or asthma symptoms or breathing difficulties if inhaled.

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SECTION 12: Ecological information

12.1. Toxicity

No additional information available

12.2. Persistence and degradability

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Persistence and degradability	Not established.
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12.3. Bioaccumulative potential

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Bioaccumulative potential	Not established.
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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. 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]

Not classified

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

15.2.2. National regulations

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15.3. US State regulations

SECTION 16: Other information

Other information : None.

Full text of H-phrases:

Eye Irrit. 2B	Serious eye damage/eye irritation Category 2B
Resp. Sens. 1	Respiratory sensitisation Category 1
Skin Irrit. 2	Skin corrosion/irritation Category 2
H315	Causes skin 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