



ALL-BOND SE LINER

Safety Data Sheet

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

Date of issue: 08/28/2017

Version: 1.0

SECTION 1: Identification

1.1. Identification

Product form : Mixture
Product name : ALL-BOND SE LINER

1.2. Recommended use and restrictions on use

Use of the substance/mixture : For Rx Only

1.3. Supplier

Manufacturer

Bisco, Inc.
1100 W. Irving Park Rd.
Schaumburg, IL 60193
T 847.534.6000 - F 847.891.5049
sales@bisco.com - www.bisco.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

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS-US classification

| | | |
|---|------|---|
| Skin corrosion/irritation Category 2 | H315 | Causes skin irritation |
| Serious eye damage/eye irritation Category 2A | H319 | Causes serious eye irritation |
| Respiratory sensitization, Category 1 | H334 | May cause allergy or asthma symptoms or breathing difficulties if inhaled |
| Skin sensitization, Category 1 | H317 | May cause an allergic skin reaction |
| Specific target organ toxicity (single exposure) Category 3 | H335 | May cause respiratory irritation |

Full text of H statements : see section 16

2.2. GHS Label elements, including precautionary statements

GHS-US labeling

Hazard pictograms (GHS-US) :



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) :

P261 - Avoid breathing vapors
P264 - Wash hands thoroughly after handling
P271 - Use only outdoors or in a well-ventilated area
P272 - Contaminated work clothing must not be allowed out of the workplace
P280 - Wear eye protection, face protection, protective gloves
P284 - Wear appropriate mask
P302+P352 - If on skin: Wash with plenty of Wash skin with soap and water
P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing
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
P312 - Call a POISON CENTER, Call a doctor if you feel unwell

ALL-BOND SE LINER

Safety Data Sheet

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

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, Call a doctor
P362+P364 - Take off contaminated clothing and wash it before reuse
P363 - Wash contaminated clothing before reuse
P403+P233 - Store in a well-ventilated place. Keep container tightly closed
P405 - Store locked up
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. Substances

Not applicable

3.2. Mixtures

| Name | Product identifier | % | GHS-US classification |
|------------------------------------|----------------------|---------|---|
| Ytterbium Fluoride | (CAS-No.) 13760-80-0 | 10 - 30 | Skin Irrit. 2, H315 Eye Irrit. 2B, H320 Resp. Sens. 1, H334 STOT SE 3, H335 |
| Bisphenol A Diglycidylmethacrylate | (CAS-No.) 1565-94-2 | 10 - 30 | Skin Irrit. 2, H315 Eye Irrit. 2A, H319 |
| 2-Hydroxyethyl Methacrylate | (CAS-No.) 868-77-9 | 10 - 30 | Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Skin Sens. 1, H317 |
| Urethane Dimethacrylate | (CAS-No.) 72869-86-4 | 10 - 30 | Skin Irrit. 2, H315 Resp. Sens. 1, H334 |
| Triethylene Glycol Dimethacrylate | (CAS-No.) 109-16-0 | 1 - 5 | Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Resp. Sens. 1, H334 Skin Sens. 1, H317 |

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 general : Call a poison center/doctor/physician if you feel unwell. 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 : 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. Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell. Call a poison center/doctor/physician if you feel unwell.
- First-aid measures after skin contact : Wash with water and soap. 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 : Rinse immediately with plenty of water for 15 minutes. Immediately call a poison center or doctor/physician. 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 : Give milk to drink. Drink plenty of water. Call a poison center/doctor/physician if you feel unwell. Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

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

- Potential Adverse human health effects and symptoms : Based on available data, the classification criteria are not met.
- Symptoms/effects after inhalation : May cause an allergic skin reaction. May cause respiratory irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled.
- Symptoms/effects after skin contact : Causes skin irritation. Irritation. May cause an allergic skin reaction.
- Symptoms/effects after eye contact : Causes serious eye damage. Causes serious eye irritation. Eye irritation.

ALL-BOND SE LINER

Safety Data Sheet

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

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 : Dry chemical powder. Carbon dioxide. Water spray. Dry powder. Foam. Carbon dioxide. Sand.
Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Specific hazards arising from the chemical

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

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.
Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing. 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 : Ventilate spillage area. Avoid breathing mist, vapors. Avoid contact with skin and eyes. Evacuate unnecessary personnel.

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". Equip cleanup crew with proper protection.
Emergency procedures : Ventilate area.

6.2. Environmental precautions

Avoid release to the environment. 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 : Take up liquid spill into absorbent material. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.
Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13. See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Use only outdoors or in a well-ventilated area. Avoid breathing mist, vapors. Avoid contact with skin and eyes. Wear personal protective equipment. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor.
Handling temperature : 20 - 25 °C
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 dry place. Store locked up. Store in a well-ventilated place. Keep container tightly closed. Keep cool. Keep only in the original container in a cool, well ventilated place away from :
Incompatible products : Strong bases. Strong acids.
Incompatible materials : Sources of ignition. Direct sunlight.
Storage temperature : 20 - 25 °C
Storage area : Store in a well-ventilated place. Store in a dry area. Store in a cool area.

ALL-BOND SE LINER

Safety Data Sheet

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

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Bisphenol A Diglycidylmethacrylate (1565-94-2)

Not applicable

2-Hydroxyethyl Methacrylate (868-77-9)

Not applicable

Urethane Dimethacrylate (72869-86-4)

Not applicable

Ytterbium Fluoride (13760-80-0)

Not applicable

Triethylene Glycol Dimethacrylate (109-16-0)

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

Personal protective equipment:

Avoid all unnecessary exposure.

Hand protection:

Protective gloves. Wear protective gloves

Eye protection:

Safety glasses. Chemical goggles or safety glasses

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

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

Other information:

Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid
Appearance : Flowable Paste.
Color : Yellow
Odor : Acrylic
Odor threshold : No data available
pH : No data available
Melting point : Not applicable
Freezing point : No data available
Boiling point : > 150 °C
Flash point : > 75 °C
Relative evaporation rate (butyl acetate=1) : No data available
Flammability (solid, gas) : Not applicable. Non flammable.
Vapor pressure : No data available

ALL-BOND SE LINER

Safety Data Sheet

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

| | |
|---------------------------------|-----------------------|
| Relative vapor density at 20 °C | : No data available |
| Relative density | : > 1 |
| Solubility | : Insoluble in water. |
| Log Pow | : No data available |
| Auto-ignition temperature | : No data available |
| Decomposition temperature | : No data available |
| Viscosity, kinematic | : No data available |
| Viscosity, dynamic | : No data available |
| Explosion limits | : No data available |
| Explosive properties | : No data available |
| Oxidizing properties | : No data available |

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. Not established.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use. Not established.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7). Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

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

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

| 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 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 |
| Ytterbium Fluoride (13760-80-0) | |
| LD50 oral rat | N/A |
| LD50 dermal rat | N/A |
| LD50 dermal rabbit | N/A |
| LC50 inhalation rat (ppm) | N/A |
| 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 mg/kg body weight |

ALL-BOND SE LINER

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 |

| | |
|---|---|
| Urethane Dimethacrylate (72869-86-4) | |
| IARC group | 4 - Probably not carcinogenic to humans |

| | |
|--|---|
| Ytterbium Fluoride (13760-80-0) | |
| IARC group | 4 - Probably not carcinogenic to humans |

| | |
|--|-------------------------------------|
| Reproductive toxicity | : Not classified |
| Specific target organ toxicity – single exposure | : May cause respiratory irritation. |

| | |
|---|-----------------------|
| Urethane Dimethacrylate (72869-86-4) | |
| 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 |

| | |
|--|-----------------------|
| Ytterbium Fluoride (13760-80-0) | |
| 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 |

| | |
|---|-----------------------|
| 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 |
| 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 exposure | : Not classified |
|--|------------------|

| | |
|---|--------------------------|
| 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 |
| 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 |

| | |
|---|--------------------------|
| Ytterbium Fluoride (13760-80-0) | |
| 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 |

| | |
|---|--------------------------|
| 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 |
| 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 |
|-------------------|------------------|

ALL-BOND SE LINER

Safety Data Sheet

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

| | |
|---|---|
| Potential Adverse human health effects and symptoms | : Based on available data, the classification criteria are not met. |
| Symptoms/effects after inhalation | : May cause an allergic skin reaction. May cause respiratory irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled. |
| Symptoms/effects after skin contact | : Causes skin irritation. Irritation. May cause an allergic skin reaction. |
| Symptoms/effects after eye contact | : Causes serious eye damage. Causes serious eye irritation. 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. |
|-------------------|--|

| 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) |
| 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

| ALL-BOND SE LINER | |
|---|---|
| Persistence and degradability | Not established. |
| Bisphenol A Diglycidylmethacrylate (1565-94-2) | |
| Persistence and degradability | Biodegradability in water: no data available. |
| 2-Hydroxyethyl Methacrylate (868-77-9) | |
| Persistence and degradability | Readily biodegradable in water. Biodegradability in soil: no data available. Adsorbs into the soil. |

12.3. Bioaccumulative potential

| ALL-BOND SE LINER | |
|---|---|
| Bioaccumulative potential | Not established. |
| Bisphenol A Diglycidylmethacrylate (1565-94-2) | |
| Log Pow | 4.94 (Estimated value) |
| Bioaccumulative potential | No bioaccumulation data available. |
| 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). |

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. |

Other information : Avoid release to the environment.

ALL-BOND SE LINER

Safety Data Sheet

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

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. Dispose in a safe manner in accordance with local/national regulations.
- Ecology - waste materials : Avoid release to the environment.

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

Bisphenol A Diglycidylmethacrylate (1565-94-2)

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

2-Hydroxyethyl Methacrylate (868-77-9)

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

15.2. International regulations

CANADA

Bisphenol A Diglycidylmethacrylate (1565-94-2)

Listed on the Canadian DSL (Domestic Substances List)

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 : 11/17/2016

Other information : None.

ALL-BOND SE LINER

Safety Data Sheet

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

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 |
| 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