

BD Loop Shield "BD-LS"

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations
Issue date: 5/5/2023 Version: 1.0

SECTION 1: Identification

1.1. Identification

Product form : Mixture
Product name/Trade Name : BD Loop Shield "BD-LS"

1.2. Recommended use and restrictions on use

Recommended use : Adhesives, sealants, joint filling, loop sealant

1.3. Supplier

American Sealants, Inc.
9190 Yeager Lane
Fort Wayne, IN 46809
Phone: 260-489-0728
Fax: 260-489-0519

1.4. Emergency telephone number

Emergency number : 1-800-353-5053
InfoTrac

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

Serious eye damage/eye irritation Category 2	H319	Causes serious eye irritation
Skin sensitization, Category 1	H317	May cause an allergic skin reaction
Reproductive toxicity Category 2	H361	Suspected of damaging fertility or the unborn child
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)

: Warning

Hazard statements (GHS US)

: H317 - May cause an allergic skin reaction
H319 - Causes serious eye irritation
H361 - Suspected of damaging fertility or the unborn child

Precautionary statements (GHS US)

: P201 - Obtain special instructions before use.
P202 - Do not handle until all safety precautions have been read and understood.
P261 - Avoid breathing dust/fume/gas/mist/vapors/spray.
P272 - Contaminated work clothing must not be allowed out of the workplace.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352 - If on skin: Wash with plenty of 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.
P308+P313 - If exposed or concerned: Get medical advice/attention.
P321 - Specific treatment (see supplemental first aid instruction on this label).

BD Loops Shield “BD-LS”

Safety Data Sheet

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

P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.

P337+P313 - If eye irritation persists: Get medical advice/attention.

P363 - Wash contaminated clothing before reuse.

P405 - Store locked up.

P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

No additional information available

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%
trimethoxyvinylsilane	CAS-No.: 2768-02-7	1 – 5
N-(2-aminoethyl)3-aminopropyltrimethoxysilane	CAS-No.: 1760-24-3	0.1 – 5
bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate	CAS-No.: 52829-07-9	≤ 1

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	: IF exposed or concerned: Get medical advice/attention.
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	: 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. Carbon dioxide.
------------------------------	--

BD Loops Shield “BD-LS”

Safety Data Sheet

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

5.2. Specific hazards arising from the chemical

Hazardous decomposition products in case of fire : Toxic fumes may be released.

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 dust/fume/gas/mist/vapors/spray.

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 : Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.
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.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear personal protective equipment. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapors/spray.
Hygiene measures : Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. 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 locked up. Store in a well-ventilated place. Keep cool.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

ASI 57

No additional information available

BD Loops Shield “BD-LS”

Safety Data Sheet

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

bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate (52829-07-9)

No additional information available

trimethoxyvinylsilane (2768-02-7)

No additional information available

N-(2-aminoethyl)3-aminopropyltrimethoxysilane (1760-24-3)

No additional information available

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:

Safety glasses

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

[In case of inadequate ventilation] wear respiratory protection.

Personal protective equipment symbol(s):



SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Color	: In accordance to product description
Odor	: There may be no odour warning properties, odour is subjective and inadequate to warn of overexposure. Mixture contains one or more component(s) which have the following odour: Almost odourless Characteristic odour Odourless Mild odour Tallow odour Fruity odour Amine-like odour
Odor threshold	: No data available
pH	: No data available
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: Not applicable.
Vapor pressure	: No data available

BD Loops Shield “BD-LS”

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	: 12.2-12.4 lb/gal
Solubility	: No data available
Partition coefficient n-octanol/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.

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 (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified

bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate (52829-07-9)

LD50 oral rat	3700 mg/kg body weight (Equivalent or similar to OECD 423, Rat, Male / female, Experimental value, Oral, 14 day(s))
LD50 dermal rat	> 3170 mg/kg body weight (Equivalent or similar to OECD 402, 24 h, Rat, Male / female, Experimental value, Dermal, 14 day(s))
LC50 Inhalation - Rat	0.5 mg/l air (Equivalent or similar to OECD 403, 4 weeks (daily, 5 days / week), Rat, Male / female, Experimental value, Inhalation (aerosol), 7 day(s))

BD Loops Shield “BD-LS”

Safety Data Sheet

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

trimethoxyvinylsilane (2768-02-7)	
LD50 oral rat	7120 – 7236 mg/kg body weight (Equivalent or similar to OECD 401, Rat, Male / female, Experimental value, Oral, 14 day(s))
LD50 dermal rabbit	3259 – 3880 mg/kg body weight (Equivalent or similar to OECD 402, 24 h, Rabbit, Female, Converted value, Dermal, 14 day(s))
LC50 Inhalation - Rat	16.8 mg/l (Equivalent or similar to OECD 403, 4 h, Rat, Male / female, Experimental value, Inhalation (vapours), 14 day(s))
ATE US (gases)	4500 ppmV/4h
ATE US (vapors)	11 mg/l/4h
ATE US (dust, mist)	1.5 mg/l/4h
N-(2-aminoethyl)3-aminopropyltrimethoxysilane (1760-24-3)	
LD50 oral rat	2295 mg/kg body weight (EPA OPPTS 870.1100: Acute Oral Toxicity, Rat, Male / female, Experimental value, Oral, 14 day(s))
LD50 dermal rabbit	> 2000 mg/kg body weight (EPA OPPTS 870.1200: Acute Dermal Toxicity, 24 h, Rabbit, Male / female, Experimental value, Dermal)
LC50 Inhalation - Rat	1.49 – 2.44 mg/l air (EPA OPPTS 870.1300: Acute Inhalation Toxicity, 4 h, Rat, Male / female, Experimental value, Inhalation (aerosol), 14 day(s))
Skin corrosion/irritation	: Not classified
bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate (52829-07-9)	
pH	9.7 (1 %)
N-(2-aminoethyl)3-aminopropyltrimethoxysilane (1760-24-3)	
pH	10.2 (1 %)
Serious eye damage/irritation	: Causes serious eye irritation.
bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate (52829-07-9)	
pH	9.7 (1 %)
N-(2-aminoethyl)3-aminopropyltrimethoxysilane (1760-24-3)	
pH	10.2 (1 %)
Respiratory or skin sensitization	: May cause an allergic skin reaction.
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified.
Reproductive toxicity	: Suspected of damaging fertility or the unborn child.
STOT-single exposure	: Not classified
N-(2-aminoethyl)3-aminopropyltrimethoxysilane (1760-24-3)	
STOT-single exposure	May cause respiratory irritation.
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified
Viscosity, kinematic	: No data available
bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate (52829-07-9)	
Viscosity, kinematic	Not applicable (solid)
trimethoxyvinylsilane (2768-02-7)	
Viscosity, kinematic	0.619 mm²/s

BD Loops Shield “BD-LS”

Safety Data Sheet

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

N-(2-aminoethyl)3-aminopropyltrimethoxysilane (1760-24-3)

Viscosity, kinematic	3.1 mm ² /s (20 °C, Calculated)
Symptoms/effects after skin contact	: 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.

bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate (52829-07-9)

LC50 - Fish [1]	4.4 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, <i>Lepomis macrochirus</i> , Flow-through system, Fresh water, Experimental value)
ErC50 algae	0.705 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, <i>Pseudokirchneriella subcapitata</i> , Static system, Fresh water, Experimental value, GLP)

trimethoxyvinylsilane (2768-02-7)

LC50 - Fish [1]	191 mg/l (96 h, <i>Oncorhynchus mykiss</i> , Fresh water, Experimental value, Nominal concentration)
EC50 - Crustacea [1]	168.7 mg/l (EU Method C.2, 48 h, <i>Daphnia magna</i> , Static system, Fresh water, Experimental value, GLP)
ErC50 algae	> 89 mg/l (72 h, <i>Pseudokirchneriella subcapitata</i> , Static system, Fresh water, Experimental value, GLP)

N-(2-aminoethyl)3-aminopropyltrimethoxysilane (1760-24-3)

LC50 - Fish [1]	597 mg/l (EU Method C.1, 96 h, <i>Danio rerio</i> , Semi-static system, Fresh water, Experimental value, GLP)
EC50 - Crustacea [1]	81 mg/l (EU Method C.2, 48 h, <i>Daphnia magna</i> , Static system, Fresh water, Experimental value, Locomotor effect)
ErC50 algae	8.8 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, <i>Selenastrum capricornutum</i> , Static system, Fresh water, Experimental value, GLP)

12.2. Persistence and degradability

bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate (52829-07-9)

Persistence and degradability	Not readily biodegradable in water. No straightforward conclusion can be drawn based upon the available numerical values. Not established.
-------------------------------	--

trimethoxyvinylsilane (2768-02-7)

Persistence and degradability	Not readily biodegradable in water. Hydrolysis in water. No (test)data on mobility of the substance available. Photolysis in the air. Not established.
-------------------------------	--

N-(2-aminoethyl)3-aminopropyltrimethoxysilane (1760-24-3)

Persistence and degradability	Readily biodegradable in water. Hydrolysis in water. Biodegradability in soil: no data available. Adsorbs into the soil. Photolysis in the air. Not established.
-------------------------------	--

BD Loops Shield “BD-LS”

Safety Data Sheet

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

12.3. Bioaccumulative potential

bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate (52829-07-9)

Partition coefficient n-octanol/water (Log Pow)	0.35 (Experimental value, OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method, 25 °C)
---	---

Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4). Not established.
---------------------------	---

trimethoxyvinylsilane (2768-02-7)

Partition coefficient n-octanol/water (Log Pow)	1.1 (QSAR, KOWWIN, 20 °C)
---	---------------------------

Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4). Not established.
---------------------------	---

N-(2-aminoethyl)3-aminopropyltrimethoxysilane (1760-24-3)

Partition coefficient n-octanol/water (Log Pow)	-0.3 (QSAR, 20 °C)
---	--------------------

Bioaccumulative potential	Not bioaccumulative. Not established.
---------------------------	---------------------------------------

12.4. Mobility in soil

bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate (52829-07-9)

Surface tension	No data available in the literature
-----------------	-------------------------------------

Ecology - soil	Highly mobile in soil.
----------------	------------------------

trimethoxyvinylsilane (2768-02-7)

Ecology - soil	No (test) data on mobility of the substance available.
----------------	--

N-(2-aminoethyl)3-aminopropyltrimethoxysilane (1760-24-3)

Surface tension	No data available in the literature
-----------------	-------------------------------------

Organic Carbon Normalized Adsorption Coefficient (Log Koc)	3.477 (log Koc, SRC PCKOCWIN v2.0, Calculated value)
--	--

Ecology - soil	Low potential for mobility in soil.
----------------	-------------------------------------

12.5. Other adverse effects

No additional information available

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

In accordance with DOT / TDG / IMDG / IATA

14.1. UN number

Not regulated for transport

14.2. UN proper shipping name

Proper Shipping Name (DOT)	: Not applicable
Proper Shipping Name (TDG)	: Not applicable
Proper Shipping Name (IMDG)	: Not applicable

BD Loops Shield “BD-LS”

Safety Data Sheet

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

Proper Shipping Name (IATA) : Not applicable

14.3. Transport hazard class(es)

DOT

Transport hazard class(es) (DOT) : Not applicable

TDG

Transport hazard class(es) (TDG) : Not applicable

IMDG

Transport hazard class(es) (IMDG) : Not applicable

IATA

Transport hazard class(es) (IATA) : Not applicable

14.4. Packing group

Packing group (DOT) : Not applicable

Packing group (TDG) : Not applicable

Packing group (IMDG) : Not applicable

Packing group (IATA) : Not applicable

14.5. Environmental hazards

Other information : No supplementary information available.

14.6. Special precautions for user

DOT

No data available

TDG

No data available

IMDG

No data available

IATA

No data available

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

Commercial status of components according to the United States Environmental Protection Agency's Toxic Substances Control Act (TSCA):

Name	CAS-No.	Listing	Commercial status	Flags
bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate	52829-07-9	Present	Active	
trimethoxyvinylsilane	2768-02-7	Present	Active	
N-(2-aminoethyl)3-aminopropyltrimethoxysilane	1760-24-3	Present	Active	

BD Loops Shield “BD-LS”

Safety Data Sheet

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

15.2. International regulations

CANADA

bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate (52829-07-9)

Listed on the Canadian DSL (Domestic Substances List)

trimethoxyvinylsilane (2768-02-7)

Listed on the Canadian DSL (Domestic Substances List)

N-(2-aminoethyl)3-aminopropyltrimethoxysilane (1760-24-3)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

No additional information available

National regulations

bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate (52829-07-9)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

15.3. US State regulations

No additional information available

SECTION 16: Other information

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

Full text of H-phrases

H226	Flammable liquid and vapor
H317	May cause an allergic skin reaction
H318	Causes serious eye damage
H319	Causes serious eye irritation
H332	Harmful if inhaled
H335	May cause respiratory irritation
H361	Suspected of damaging fertility or the unborn child
H400	Very toxic to aquatic life
H411	Toxic to aquatic life with long lasting effects

Safety Data Sheet (SDS), USA

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.