

SECTION 1: Identification**1.1. Identification**

Product form : Substance
Trade name : METALINK B
Chemical name : 3-Glycidyoxypropyl trimethoxy silane
Product code : FAD0011

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

No additional information available

1.3. Details of the supplier of the safety data sheet

Endura Manufacturing Company Ltd.
12425 149 Street NW
Edmonton, T5L 2J6 - Canada
T 1-780-451-4242 - F 1-780-452-5079
info@endura.ca - www.endurapaint.com

1.4. Emergency telephone number

Emergency number : In the event of an emergency involving dangerous goods:
in Canada call CHEMTREC at 1-800-424-9300 24 hours / 7 days (Account Name for Canada
Endura Manufacturing Co. Ltd.)
in the US call CHEMTREC at 1-800-424-9300 24 hours / 7 days (Account Name for US is
Polyglass Coatings)

SECTION 2: Hazard(s) identification**2.1. Classification of the substance or mixture****GHS US classification**

Not classified

2.2. Label elements**GHS US labeling**

No labeling applicable

2.3. Other hazards

Other hazards not contributing to the classification : This product can hydrolyze in water or moist air, releasing methanol and organosilicons. Do not discharge product unmonitored into the environment.

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients**3.1. Substances**

Name : 3-Glycidyoxypropyl trimethoxy silane

Name	Product identifier	wt%	GHS US classification
3-glycidyoxypropyltrimethoxysilane	(CAS-No.) 2530-83-8	100	Not classified

Full text of H-phrases: see section 16

3.2. Mixtures

Not applicable

SECTION 4: First aid measures**4.1. Description of first aid measures**

First-aid measures general : If you feel unwell, seek medical advice. Take a copy of this safety data sheet when going for medical treatment.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Respiratory problems: consult a doctor/medical service. If experiencing respiratory symptoms: use artificial respiration.

First-aid measures after skin contact : Wash contaminated clothing before reuse. Wash with water and soap. If skin irritation or rash occurs: Get medical advice/attention. Wash skin with plenty of water.

First-aid measures after eye contact : Take victim to an ophthalmologist. Rinse immediately with plenty of water for 15 minutes. continue rinsing eye until arrival at ophthalmologist/hospital. Rinse eyes with water as a precaution.

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First-aid measures after ingestion : Drink plenty of water. Do not induce vomiting. Immediately consult a doctor/medical service. Call a poison center/doctor/physician if you feel unwell.

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

Symptoms/effects after inhalation : May cause respiratory irritation. Cough. Shortness of breath. Risk of lung oedema.
Symptoms/effects after skin contact : No effects known.
Symptoms/effects after eye contact : Causes serious eye irritation.
Symptoms/effects after ingestion : Irritation of the gastric/intestinal mucosa.
Chronic symptoms : This product can hydrolyze to form a material posing additional health effects of Methanol. Inhalation of vapors may cause cyanosis, lethargy, loss of consciousness and death. The effects of inhalation may be delayed. Ingestion may cause malaise, discomfort and death if not treated promptly.

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

Product may hydrolyze upon contact with body fluids in the gastrointestinal tract to produce methanol; therefore, consider the signs/symptoms of methanol poisoning and also observe the known latency period of several days.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Alcohol-resistant foam. Dry chemical powder. Water spray. Dry powder. Foam. Carbon dioxide.

5.2. Special hazards arising from the substance or mixture

Reactivity : The epoxysilane esters are not monomers in the usual sense, but polymeric materials may be produced by polymerization of the silyl ester group in the presence of controlled amounts of water and alkali or acid catalyst at ambient temperatures. At slightly higher temperature (50C), polyglycols or polyglycol ethers are produced via epoxy functional group under the same conditions of water concentration and alkali or acid catalyst. In as much as both of these reactions are exothermic and may occur simultaneously, the heat evolved may be cumulative and greatly accelerate the rate of reactions. It is imperative, therefore, that unintentional contamination of the epoxysilane esters with water be avoided, and that intentional hydrolysis be properly controlled to avoid hazardous consequences.

5.3. Advice for firefighters

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

General measures : Remove ignition sources.

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area.

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. Prevent entry to sewers and public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Take up liquid spill into absorbent material.
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. Wear personal protective equipment. Do not breathe vapors. Keep away from ignition sources/sparks. Ground/bond container and receiving equipment.
Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

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7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep container tightly closed. Protect from moisture. Store in a well-ventilated place. Keep cool.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Exposure controls

Appropriate engineering controls : Ensure good ventilation of the work station.
Hand protection : Protective gloves.
Eye protection : Chemical goggles or safety glasses. Safety glasses.
Skin and body protection : Wear suitable protective clothing.
Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment.
Environmental exposure controls : Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid
Color : No data available
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:
Ester smell
Odor threshold : No data available
pH : No data available
Melting point : Not applicable
Freezing point : No data available
Boiling point : 290 °C
554 °F
Flash point : 110 °C
230 °F
Relative evaporation rate (butyl acetate=1) : No data available
Flammability (solid, gas) : No data available
Explosion limits : No data available
Explosive properties : No data available
Oxidizing properties : No data available
Vapor pressure : No data available
Relative density : No data available
Relative vapor density at 20 °C : No data available
Specific gravity / density : 1.07 g/cm³
Solubility : No data available
Partition coefficient n-octanol/water (Log Pow) : No data available
Auto-ignition temperature : 400 °C
752 °F
Decomposition temperature : No data available
Viscosity : No data available
Viscosity, kinematic : No data available
Viscosity, dynamic : No data available

9.2. Other information

VOC content (Regulatory - Less water and exempt solvents) : 0 g/l
0 lb/gal
VOC content (Material - Actual) : 0 g/l
0 lb/gal

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Percent Solids (Weight)	: 100 %
Percent Solids (Volume)	: 100 %
Percent Volatile (Weight)	: 0 %
Percent Volatile (Volume)	: 0 %

SECTION 10: Stability and reactivity

10.1. Reactivity

The epoxysilane esters are not monomers in the usual sense, but polymeric materials may be produced by polymerization of the silyl ester group in the presence of controlled amounts of water and alkali or acid catalyst at ambient temperatures. At slightly higher temperature (50C), polyglycols or polyglycol ethers are produced via epoxy functional group under the same conditions of water concentration and alkali or acid catalyst. In as much as both of these reactions are exothermic and may occur simultaneously, the heat evolved may be cumulative and greatly accelerate the rate of reactions. It is imperative, therefore, that unintentional contamination of the epoxysilane esters with water be avoided, and that intentional hydrolysis be properly controlled to avoid hazardous consequences.

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

No flames, no sparks. Eliminate all sources of ignition.

10.5. Incompatible materials

Reacts with water or moisture to form: methanol.

10.6. Hazardous decomposition products

Carbon dioxide. Carbon monoxide. oxides of silicon.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Likely routes of exposure : Dermal; Inhalation; Skin and eye contact

Acute toxicity : Not classified

METALINK B	
LC50 inhalation rat (mg/l)	> 5.3 mg/l/4h

3-glycidyoxypropyltrimethoxysilane (2530-83-8)	
LD50 oral rat	8025 mg/kg body weight (Rat; Equivalent or similar to OECD 401; Experimental value)
LD50 dermal rabbit	4250 mg/kg body weight (Rabbit; Experimental value; Equivalent or similar to OECD 402)
ATE US (oral)	8025 mg/kg body weight
ATE US (dermal)	4250 mg/kg body weight

Skin corrosion/irritation : Not classified

Serious eye damage/irritation : Not classified

Respiratory or skin sensitization : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

Specific target organ toxicity – single exposure : Not classified

Specific target organ toxicity – repeated exposure : Not classified

Aspiration hazard : Not classified

Symptoms/effects after inhalation : May cause respiratory irritation. Cough. Shortness of breath. Risk of lung oedema.

Symptoms/effects after skin contact : No effects known.

Symptoms/effects after eye contact : Causes serious eye irritation.

Symptoms/effects after ingestion : Irritation of the gastric/intestinal mucosa.

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Chronic symptoms : This product can hydrolyze to form a material posing additional health effects of Methanol. Inhalation of vapors may cause cyanosis, lethargy, loss of consciousness and death. The effects of inhalation may be delayed. Ingestion may cause malaise, discomfort and death if not treated promptly.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Do not discharge product unmonitored into the environment.

3-glycidyloxypropyltrimethoxysilane (2530-83-8)	
LC50 fish 1	55 mg/l (LC50; EU Method C.1; 96 h; Cyprinus carpio; Semi-static system; Fresh water; Experimental value)
EC50 Daphnia 1	< 250 mg/l (NOEC; US EPA; 48 h; Simocephalus vetulus; Static system; Fresh water; Experimental value)
LC50 fish 2	237 mg/l (LC50; 96 h; Salmo gairdneri; Static system)
EC50 Daphnia 2	324 mg/l (LC50; US EPA; 48 h; Simocephalus vetulus; Static system; Fresh water; Experimental value)
Threshold limit algae 1	119 mg/l (EC50; US EPA; 7 days; Anabaena flosaquae; Static system; Fresh water; Experimental value)
Threshold limit algae 2	250 mg/l (EbC50; 72 h; Selenastrum capricornutum)

12.2. Persistence and degradability

3-glycidyloxypropyltrimethoxysilane (2530-83-8)	
Persistence and degradability	Not readily biodegradable in water. Hydrolysis in water. No (test)data on mobility of the substance available.

12.3. Bioaccumulative potential

3-glycidyloxypropyltrimethoxysilane (2530-83-8)	
Partition coefficient n-octanol/water (Log Pow)	-0.92 (Estimated value)
Bioaccumulative potential	Not bioaccumulative.

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.
Product/Packaging disposal recommendations : Incorrect disposal or reuse of this container is illegal and can be dangerous.
Additional information : Do not reuse empty containers.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT
Not regulated for transport

Transportation of Dangerous Goods

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

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All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

3-glycidyloxypropyltrimethoxysilane (2530-83-8)

EPA TSCA Regulatory Flag

T - T - indicates a substance that is the subject of a Section 4 test rule under TSCA.

15.2. International regulations

CANADA

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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

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer and/or reproductive harm

SECTION 16: Other information

Revision date : 05/25/2021

SDS US Endura

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