ScarGuard & ScarGuard XL

Safety Data Sheet

According to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012 and the Hazardous Products Regulations (HPR) WHMIS 2015

Date of issue: 08/04/2021 Revision date: 08/04/2021 Version: 1.0

SECTION 1: Identification

1.1. Product identifier

Product name : ScarGuard & ScarGuard XL

Product description : Fiberglass cloth impregnated with water activated resin

1.2. Recommended use and restrictions on use

Recommended use : Coating protection

1.3. Supplier

SFL Canusa Canada Ltd.

455 West Airport Road
Huntsville, ON P1H 1Y7 Canada
Telephone: 1-705-789-1787

1.4. Emergency telephone number

Emergency number : 613-996-6666 (Canutec) only for transport emergency
1-800-255-3924 ChemTel (Contract Number MIS9425100)

SECTION 2: Hazard identification

The classification and all precautionary statements apply to product in its uncured state.

2.1. Classification of the substance or mixture

Classification (GHS CA)

Sensation, respiratory	Category 1	H334
Acute toxicity, inhalation	Category 4	H332
Skin corrosion/irritation	Category 2	H315
Serious eye damage/eye irritation	Category 2A	H319
Sensitization, skin	Category 1	H317
Specific target organ toxicity, single exposure	Category 3	H335

2.2. GHS Label elements, including precautionary statements

GHS-CA labelling

Hazard pictograms (GHS-CA) :

Signal word (GHS CA) : Danger

Hazard statements (GHS-CA) : H334 – May cause allergy or asthma symptoms or breathing difficulties if inhaled
H332 – Harmful if inhaled
H315 – Causes skin irritation
H319 – Causes serious eye damage
H317 – May cause an allergic skin reaction
H335 – May cause respiratory irritation

Precautionary statements (GHS-CA) : P280 – Wear protective gloves/protective clothing/eye protection/face protection.
P262 – Do not get in eyes, on skin, or on clothing.
P261 – Avoid breathing dust/fume/gas/mist/vapors/spray.
P304+P340 – IF INHALED: Remove person to fresh air and keep at rest in a position comfortable for breathing.
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.
P312 – Call a POISON CENTER or doctor if you feel unwell.

2.3. Other hazards

National Fire Protection Association Hazard Ratings – NFPA(R)

Health Hazard	2
Flammability	1
Reactivity	0

2.4. Unknown acute toxicity (GHS CA)

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%
Fibrous glass (E-type, continuous filament)	(CAS-No.) 65997-17-3	40 – 65
Diphenylmethane diisocyanate (homopolymer)	(CAS-No.) 39310-05-9	3 – 8
Diphenylmethane diisocyanate (MDI), containing Methylene Bisphenyl isocyanate, CAS101-68-8	(CAS-No.) 26447-40-5	10 – 25

***Chemical name, CAS number and/or exact concentration have been withheld as a trade secret**

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures after inhalation : Move to an area free from risk of further exposure. Administer oxygen as needed. Obtain medical attention. Asthmatic–type symptoms may develop and may be immediate or delayed up to several hours. Consult physician should this development occur.

First-aid measures after skin contact : Remove contaminated clothing. Wash affected skin thoroughly with soap and water. Wash contaminated clothing thoroughly before reuse. Get under safety shower after removing clothing. Seek medical attention if irritation develops after area is washed.

First-aid measures after eye contact : Flush with copious amount of water. Preferably lukewarm, for at least 15 minutes, holding eyelids open at all times. Refer individual to a physician or ophthalmologist for immediate follow up.

First-aid measures after ingestion : Do not induce vomiting. Give one to two cups of milk or water to drink. Do not give anything by mouth to an unconscious person, consult a physician.

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

Symptoms/effects after inhalation : MDI/ vapors or mist at concentrations above the TLV can irritate (burning sensation) the mucous membranes in the respiratory tract (nose, throat, and lungs) causing runny nose, sore throat, coughing, chest discomfort, shortness of breath and reduced lung function (breathing obstruction). Persons with a pre-existing, nonspecific bronchial hyperactivity can respond to concentrations below the TLV with similar symptoms as well as asthma attack. Exposure well above the TLV may lead to bronchitis, bronchial spasm, and pulmonary edema (fluid in lungs). These effects are usually reversible. Chemical or hypersensitive pneumonitis, with flu-like symptoms (e.g., fever, and chills) has also been reported. These symptoms can be delayed up to several hours after exposure.

Symptoms/effects after skin contact : Isocyanates react with skin protein and moisture and can cause irritation which may include the following symptoms: reddening, swelling, rash, scaling, or blistering. Cured material is difficult to remove.

Symptoms/effects after eye contact : Liquid, aerosols or vapor are irritating and can cause tearing, reddening, and swelling. If left untreated, corneal damage can occur and injury is slow to heal. Damage, however, is usually reversible.

Symptoms/effects after ingestion : Irritation and corrosive action can occur in the mouth, stomach tissue and digestive tract. Symptoms can include sore throat, abdominal pain, nausea, vomiting and diarrhea.

Chronic symptoms : Overexposure to isocyanates has also been reported to cause lung damage, (including decrease in lung function) which may be permanent. Sensitization can either be temporary or permanent. Asthma, other respiratory disorders (bronchitis, emphysema, bronchial hyperactivity), skin allergies, eczema.

Notes to Physician : Stain for evidence of corneal injury. If cornea is burned, instill antibiotic steroid preparation frequently. Workplace vapors have produced reversible corneal epithelial edema impairing vision. This compound is a known skin and pulmonary sensitizer. Treat symptomatically for contact dermatitis or thermal burns, if burned treat as a thermal burn.

Other medical advice or treatment : Symptoms may be delayed. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

SECTION 5: Fire-fighting measures

5.1. Extinguishing media

Use cold water spray to cool fire-exposed containers to minimize the risk rupture. Carbon dioxide, foam, dry chemical. Water spray for large fires. During a fire, smoke may contain the original material in addition to unidentified toxic and/or irritating compounds. Product reacts with water. Reaction may produce heat and/or gases. Reaction may be violent. Container may rupture from gas generation in a fire situation. Violent steam generation or eruption may occur upon application of direct water stream to hot liquids. Dense smoke is produced when product burns.

5.2. Special fire fighting procedures

Use self-contained breathing apparatus, and full protective equipment. Use cold water to cool fire-exposed containers.

5.3. Special protective equipment for fire-fighters

Full emergency equipment with self-contained breathing apparatus and full protective clothing should be worn by firefighters. Wear positive pressure self-contained breathing apparatus (SCBA) and protective firefighting clothing (includes helmet, coat, pants, boots, and gloves). Avoid contact with this material during firefighting operations. If contact is likely, change to full chemical resistant clothing with SCBA. This will not provide sufficient fire protection, consider fighting fire from a remote location.

5.4. Unusual fire and explosion hazards

During a fire, smoke may contain the original material in addition to unidentified toxic and/or irritating compounds. Product reacts with water. Reaction may produce heat and/or gases. Reaction may be violent. Container may rupture from gas generation in a fire situation. Violent steam generation or eruption may occur upon application of direct water stream to hot liquids. Dense smoke is produced when product burns.

5.5. Hazardous decomposition materials (under fire conditions)

Combustion produces carbon monoxide, oxides of nitrogen, and traces of HCN, MDI vapors or aerosols.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment, and emergency procedures

No action shall be taken involving any personal risk or without suitable training. Keep people at a distance and stay upwind. Evacuate surrounding areas. Do not touch or walk-through spilled material. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

6.2. Cleanup and disposal of spill

Decontaminate floor with decontamination solution letting stand for at least 15 minutes. Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Dispose contaminated material as waste according to Section 13. Ensure adequate ventilation.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Store in tightly closed containers to prevent moisture contamination. Do not reseal if contamination is suspected. Avoid contact with skin and eyes. Do not breathe aerosols or vapours. Workers should wash hands and face before eating, drinking, and smoking. Remove contaminated clothing and protective equipment before entering eating areas. Ensure good ventilation/exhaustion at the workplace.

7.2. Conditions for safe storage, including any incompatibilities

Store in original container protected from direct sunlight in a dry, cool, and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Storage at temperature between 18˚C (64˚F) and 30˚C (86˚F). Keep away from humidity and water. Keep container tightly closed and sealed until ready for use.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

4,4'-methylenediphenyl diisocyanate (101-68-8)	
Exposure Limits	
ACGIH	0.005 ppm (TWA)
NIOSH	ND
OSHA-PELs	0.2 ppm Ceiling (STEL) 0.2 mg/m^3 Ceiling (STEL)
Fibrous glass	
Exposure Limits	
ACGIH	5 mg/m^3 TWA (inhalable) 1 fiber/cm^3 (respirable fraction)
NIOSH	ND
OSHA-PELs	5 mg/m^2 TWA (respirable dust)

8.2. Appropriate engineering controls

Appropriate engineering controls : Local exhaust should be used to maintain levels below the TLV whenever MDI is processed, heated or spray applied. Standard reference sources regarding industrial ventilation (i.e., ACGIH Industrial Ventilation) should be consulted for guidance about adequate ventilation.

8.3. Individual protection measures/Personal protective equipment

Respiratory protection : In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

Eye / face protection : Wear appropriate safety glasses with side shields or chemical goggles as described by OSHA's eye and face protection regulations in 29CFR 1910.133 or European Standard EN166.

Skin protection : The glove material must be impermeable and resistant to the product. Cover as much of the exposed area as possible, with protective clothing.

SECTION 9: Physical and chemical properties

Physical appearance	:	Fiberglass cloth coated with gray viscous resin.
Odor	:	Pungent
Odor threshold	:	ND
pH	:	ND
Melting point range	:	N/A
Boiling point	:	ND
Flash point	:	188˚C (370˚F)
Evaporation rate	:	ND
Method used	:	Pensky-martens closed cup
Flammability limits (vol/vol%)	:	Lower: N/A Upper: N/A
Vapor pressure	:	ND
Vapor density	:	ND
Relative density	:	ND
Specific gravity	:	2.6-2.7 (bare glass) 1.23 (resin)
Water solubility	:	Not soluble. Reacts with water to liberate CO2 gases. Dangerous reactions can occur in large masses producing toxic gases, hazardous runaway polymerization, and excessive heat caused by exothermic reaction.
Partition coefficient (n-octanol/water)	:	ND
Auto-ignition temperature	:	ND
Decomposition temperature	:	ND
Viscosity	:	ND

SECTION 10: Stability and reactivity

Reactivity	:	No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	:	Stable under standard use and storage conditions.
Possibility of hazardous reactions	:	No dangerous reactions known. Hazardous polymerization can occur. Polymerization can be catalyzed by water and strong bases.
Conditions to avoid	:	Contamination with water.
Incompatible materials / chemicals	:	Avoid contact with acids, water, alcohols, amines, ammonia, bases, moist air, and strong oxidizers. Avoid contact with metals such as aluminum, brass, copper, galvanized metals, tin, zinc. Avoid contact with moist organic absorbents. Reaction with water will generate carbon dioxide and heat. Avoid contact with polyols and other Isocyanates.
Hazardous decomposition products	:	Hazardous combustion products may include but are not limited to: nitrogen oxides, isocyanates, hydrogen cyanide, carbon monoxide, and carbon dioxide.

SECTION 11: Toxicological information

Diphenylmethane diisocyanate (MDI) (CAS #: 26447-40-5) containing Methylene bisphenyl isocyanate (CAS #: 10168-8):	
LD50 oral rat	>1000 mg/kg
LD50 dermal rabbit	>2000 mg/kg

Primary irritant effect

On the skin	:	Irritant to skin and mucous membranes.
On the eye	:	Irritating effect.
Sensitization	:	Sensitization possible through inhalation. Sensitization possible through skin contact.

Symptoms

Inhalation	:	MDI/ vapors or mist at concentrations above the TLV can irritate the mucous membranes in the respiratory tract causing runny nose, sore throat, coughing, chest discomfort, shortness of breath and reduced lung function.
Eye contact	:	Liquid, aerosols or vapor are irritating and can cause tearing, reddening, and swelling. If left untreated, corneal damage can occur and injury is slow to heal. Damage, however, is usually reversible.
Skin Contact	:	Isocyanates react with skin protein and moisture and can cause irritation which may include the following symptoms: reddening, swelling, rash, scaling, or blistering. Cured material is difficult to remove.
Ingestion	:	Irritation and corrosive action can occur in the mouth, stomach tissue and digestive tract. Symptoms can include: sore throat, abdominal pain, nausea, vomiting and diarrhea.

Chronic health effects

Mutagenicity (effects on genetic material)	:	Genetic toxicity data on MDI are inconclusive. MDI was weakly positive in some in-vitro studies; other in-vitro studies were negative. Animal genetic toxicity studies were predominantly negative.

Other information

Cancer information	:	Lung tumors have been observed in laboratory animals exposed to aerosol droplets of MDI/Polymeric MDI (6mg/m3) for their lifetime. Tumors occurred concurrently with respiratory irritation and lung injury. Current exposure guidelines are expected to protect against these effects reported for MDI.
Teratology (birth defects)	:	In laboratory animals, MDI/polymeric MDI did not cause birth defects; other fetal effects occurred only at high doses which were toxic to the mother.
Reproductive effects	:	Contains component(s) which have been shown to interfere with reproduction in animal studies. The component(s) is/are triethyl phosphate. The dose required to produce such effects are highly unlikely with the use of this product.
Numerical measures of toxicity	:	No specific data
Delayed and immediate effects and also chronic effects from short- and long-term exposure		
Short term exposure	:	No specific data
Long term exposure	:	No specific data
Carcinogenic Categories		
IARC (International Agency for Research on Cancer)	:	Titanium dioxide (13463-67-7) 2B Benzoyl chloride (98-88-4) 2A
NTP (National Toxicology Program)	:	None of the ingredients is listed.

SECTION 12: Ecological information

Based largely or completely on information for MDI and polymeric MDI

12.1. Toxicity

Ecotoxicity	:	The measured ecotoxicity is that of the hydrolyzed product, generally under conditions maximizing production of soluble species. Material is practically non-toxic to aquatic organisms on an acute basis (LC50 or EC50 >100 mg/l in the most sensitive species tested). The LC50 in earthworm Eisenia foetida is >1000 mg/kg.
Aquatic Toxicity	:	No further relevant information available.

12.2. Persistence and degradability

In the aquatic and terrestrial environment, material reacts with water forming predominantly insoluble polyureas which appear to be stable. In the atmospheric environment, material is expected to have a short tropospheric half-life, based on calculations and by analogy with related diisocyanates.

12.3. Bioaccumulative potential

No further relevant information available.

12.4. Mobility in soil

No further relevant information available.

12.5. Other adverse effects

No further relevant information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

13.2. Uncleaned packaging

Dispose of in accordance with all local, state, and/or national legislation.

SECTION 14: Transport information

Department of Transportation (DOT) and Transportation of Dangerous Goods (TDG)

In accordance with DOT/TDG

UN-No.(DOT/TDG)	:	Not regulated
Proper shipping name (DOT/TDG)	:	N/A.
Class (DOT/TDG)	:	N/A
Packing group (DOT/TDG)	:	N/A
Environmental hazard (DOT/TDG)	:	No

SECTION 15: Regulatory information

SARA Regulations	:	
Section 355	:	None of the ingredients is listed
Proposition 65	:	None of the ingredients is listed
EPA	:	None of the ingredients is listed

TSCA (Toxic substance control act)	:	All components of this product are on US Inventory. Glass fiber does not meet the classification for a “dangerous substance” according to 67/548/EEC. Glass fiber is considered to be an article as defined in section 710.2 (F) of the U.S. TSCA and, as such, is exempt from section 8(a), 710.2 (f) and 704.5 (a).

SECTION 16: Other information

Key legend information

N/A	:	Not Applicable
ND	:	Not Determined
ACGIH	:	American Conference of Governmental Industrial Hygienists
OSHA	:	Occupational Safety and Health Administration
PEL	:	Permissible Exposure Limit
NIOSH	:	National Institute for Occupational Safety and Health
Revision date	:	04/06/2021
Other information	:	None.
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