

STRUCTURE GUARD®-FM



STRUCTURE GUARD®-FM SAFETY DATA SHEET

PART B



QUADEX™
A VORTEX COMPANY

REPAIR
MATERIALS

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name	STRUCTURE GUARD®-FM FIBER REINFORCED EPOXY MASTIC CATALYST
Revision Date	01-2019
Product Code	RE211
Company	Stag Technologies, 564 W. 9320 S., Sandy, UT 84070
Company Contact	Matthew Peterson
Company Phone	844-STAGTEC
Emergency	Domestic Shipments and to Canada: 1-800-633-8253 International Shipments: 1-801-629-0667

2. HAZARDS IDENTIFICATION

GHS Ratings:

Oral Toxicity	Acute Tox. 2	Oral >5+ <=50mg/kg
Skin corrosive	2	Reversible adverse effects in dermal tissue, Draize score: >= 2.3 < 4.0 or persistent inflammation
Eye corrosive	1	Serious eye damage: Irreversible damage 21 days after exposure, Draize score: Corneal opacity >= 3, Iritis > 1.5
Skin sensitizer	1	Skin sensitizer
Reproductive toxin	2	Human or animal evidence possibly with other information

GHS Hazards

H300	Fatal if swallowed
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H318	Causes serious eye damage
H361	Suspected of damaging fertility or the unborn child

GHS Precautions

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/vapours/spray
P264	Wash ... thoroughly after handling
P270	Do not eat, drink or smoke when using this product
P272	Contaminated work clothing should not be allowed out of the workplace
P280	Wear protective gloves/protective clothing/eye protection/face protection
P281	Use personal protective equipment as required
P310	Immediately call a POISON CENTER or doctor/physician
P321	Specific treatment (see ... on this label)
P330	Rinse mouth
P362	Take off contaminated clothing and wash before reuse
P363	Wash contaminated clothing before reuse
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
P302+P352	IF ON SKIN: Wash with soap and water
P305+P351+P338	IF IN EYES: Rinse continuously 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
P332+P313	If skin irritation occurs: Get medical advice/attention
P333+P313	If skin irritation or a rash occurs: Get medical advice/attention
P405	Store locked up
P501	Dispose of contents/container to ...
Signal Word	Danger



3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	CAS number	Weight Concentration %
Paratertiarybutylphenol	98-54-4	30.00% - 40.00%
Amine	1477-55-0	20.00% - 30.00%
1,5-Pentanediamine, 2 methyl	15520-10-2	20.00% - 30.00%
Silica	67762-90-7	10.00% - 20.00%
nonyl phenol	84852-15-3	1.00% - 5.00%

4. FIRST AID MEASURE

If inhaled remove to fresh air. If breathing is difficult, give oxygen. Obtain medical advice if there are persistent symptoms. Rinse immediately with plenty of water for at least 15 minutes. Ensure adequate flushing of the eyes by separating the eyelids with fingers. Remove contacts if present and easy to do. Continue rinsing. Get medical attention, if irritation or symptoms of overexposure persists. Immediately wash skin with soap and plenty of water. If swallowed, call a physician immediately. Only induce vomiting at the instruction of a physician. Never give anything by mouth to an unconscious person.

5. FIRE FIGHTING MEASURES

Flash Point	134°C (273°F)
LEL	N/A
UEL	N/A
Not applicable	
Foam, Carbon dioxide (CO ₂) or dry chemical or water spray (water stream may be ineffective) .	
No information available	
Not available	
Firefighters, and others exposed, wear self-contained breathing apparatus.	

6. ACCIDENTAL RELEASE MEASURES

Stop leak. Dike or contain spill. Pump into slavage tanks and/or absorb with suitable material. Use sparkless shovel to remove material. Evacuate area and keep unnecessary and unprotected personnel from entering the spill area. Use appropriate containment and clean up immediately. Corrosive. Avoid personal contact and breathing vapor or mist. Stop leak, Dike and contain spill. Prevent spilled material from entering the ground, water and/or air by using appropriate containment methods.

7. HANDLING AND STORAGE

Avoid breathing vapor. Avoid contact with eyes, skin and clothing. Keep away from heat and flame. Keep container closed. Use with adequate ventilation. Wash thoroughly after handling. Avoid exposure to heat, light, and air for prolonged periods of time. Store in a cool, dry well ventilated area away from sources of heat and incompatible materials. Eliminate all ignition materials and incompatible materials. Collect spill with non spark tools.

8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

Chemical Name / CAS No.	Paratertiarybutylphenol 98-54-4
OSHA Exposure Limits	Not Established.
ACGIH Exposure Limits	Not Established.
Other Exposure Limits	Not Established.
Chemical Name / CAS No.	Amine 1477-55-0
OSHA Exposure Limits	Not Established.
ACGIH Exposure Limits	0.1 mg/m ³ Ceiling
Other Exposure Limits	NIOSH: 0.1 mg/m ³ Ceiling
Chemical Name / CAS No.	1,5-Pentanediamine, 2 methyl 15520-10-2
OSHA Exposure Limits	Not Established.
ACGIH Exposure Limits	Not Established.
Other Exposure Limits	Not Established.
Chemical Name / CAS No.	Silica 67762-90-7
OSHA Exposure Limits	Not Established.
ACGIH Exposure Limits	Not Established.
Other Exposure Limits	Not Established.
Chemical Name / CAS No.	nonyl phenol 84852-15-3
OSHA Exposure Limits	Not Established.
ACGIH Exposure Limits	Not Established.
Other Exposure Limits	Not Established.

Use appropriate engineering control such as process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended Always use adequate ventilation that comply with local regulations.

Eye/face Protection	Wear appropriate protective glasses or splash goggles as described by 29 CFR 1910.133, OSHA eye and face protection regulation, or the European.
Skin Protection	Chemical-resistant gloves and chemical goggles, face-shield and synthetic apron or coveralls should be used to prevent contact with eyes, skin or clothing.
Respiratory Protection	A NIOSH air purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne.

9. PHYSICAL & CHEMICAL PROPERTIES

Boiling Range	247°C
Specific Gravity (SG)	0.970
Lbs VOC/Gallon Less Water	0.00
Lbs VOC/Gallon Less Exempt	0.00
% VOL by Volume	0.00

10. CHEMICAL STABILITY & REACTIVITY INFORMATION

Stable, Hazardous polymerization will not occur. Will react with Epoxy Resins especially at elevated temperatures. STABLE. Epoxy Resins under uncontrolled conditions. Mineral acids. Organic acid, oxidizers, Reacts with metals until reacted with epoxy. None known. Hazardous polymerization will not occur.

11. TOXICOLOGICAL INFORMATION

Mixture Toxicity	
Oral Toxicity LD50	8mg/kg
Dermal Toxicity LD50	3,216mg/kg
Inhalation Toxicity LC50	2,901mg/L
Component Toxicity	
98-54-4	Paratertiarybutylphenol Oral LD50: 3,250 QL/kg (Rat) Dermal LD50: 2,318 mg/kg (Rabbit)
1477-55-0	Amine Oral LD50: 660 mg/kg (Rat) Dermal LD50: 2 g/kg (Rabbit) Inhalation LC50: 700 ppm (Rat)
Eyes	Irritant to the eyes. Corrosive to Eyes
Skin	Irritant to the skin. Corrosive to Skin
Inhalation	Irritant to respiratory tract. Prolonged or excessive inhalation may cause respiratory tract irritation.
Sensitization	Skin sensitization in humans.
Effects of Overexposure	
Avoid breathing vapors	
CAS Number	None
Description	None
% Weight	None
Carcinogen Rating	None
Oral	N.D.A.
Dermal	N.D.A.
Inhalation	N.D.A.

12. ECOLOGICAL INFORMATION

No ecotoxicity data was found for the product.

Component Ecotoxicity

Paratertiarybutylphenol	96 Hr LC50 Pimephales promelas: 4.71 - 5.62 mg/L [flow-through]; 96 Hr LC50 Cyprinus carpio: 6.9 mg/L [static] 48 Hr EC50 Daphnia magna: 3.9 mg/L; 48 Hr EC50 Daphnia magna: 3.4 - 4.5 mg/L [Static] 72 Hr EC50 Desmodesmus subspicatus: 11.2 mg/L
nonyl phenol	96 Hr LC50 Pimephales promelas: 0.135 mg/L [flow-through]; 96 Hr LC50 Lepomis macrochirus: 0.1351 mg/L [flow-through] 48 Hr EC50 Daphnia magna: 0.14 mg/L 96 Hr EC50 Pseudokirchneriella subcapitata: 0.36 - 0.48 mg/L [static]; 72 Hr EC50 Pseudokirchneriella subcapitata: 0.16 - 0.72 mg/L [static]; 72 Hr EC50 Desmodesmus subspicatus: 1.3 mg/L

13. DISPOSAL CONSIDERATIONS

Dispose of in accordance with applicable local/municipal, state/provincial and federal regulations.

14. TRANSPORT INFORMATION

UN1235 Amines, Liquid, corrosive, n.o.s. (Benzene-1,3-Dimethanamine).
Group III: Hazardous Class 3

15. REGULATORY INFORMATION

OSHA:29 CFR 1910.1200 Hazardous Chemical "Irritant", Sensitizer

TSCA	Ingredients listed
SARA III	Sec311 & 312 Immediate Health Hazard; Sec313 Chemicals above de minimus level: None
CA PROP. 65 NOTICE WARNING:	CANADIAN REGULATORY INFORMATION
	WHMIS; Hazard Classification: D2B Skin Sensitizer. Refer to SDS for specific warnings
WHMIS Symbols	Stylized T.
WHMIS Trade Secret Registry Numbers	None
Hazardous Products Act Information	This product SDS contains ingredients which are Controlled and/or on the Ingredient Disclosure List (HPA sections 1

The following chemicals are classified under SARA 313 Toxic Release Inventory (TRI):
84852-15-3 nonyl phenol 1 to 5 %

Country	EU
Safety Phrase	None

Regulation	All Components Listed
REACH (EU) SUBSTANCES OF VERY HIGH CONCERN	No
Toxic Substance Control Act (TSCA)	Yes

16. OTHER INFORMATION

Further information

HMIS® ratings

NFPA ratings

Disclaimer

HMIS® is a registered trade and service mark of the NPCA.

Health: 3

Flammability: 1

Physical hazard: 0

Health: 2

Flammability: 0

Instability: 0

The information provided in this Safety Data Sheet is correct to the best of our knowledge information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

STRUCTURE GUARD®-FM



STRUCTURE GUARD®-FM SAFETY DATA SHEET

PART A



**REPAIR
MATERIALS**

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name	STRUCTURE GUARD®-FM (FIBER REINFORCED MASTIC) PART A
Revision Date	01-2019
Product Code	RE2119A
Company	Stag Technologies, 564 W. 9320 S., Sandy, UT 84070
Company Contact	Matthew Peterson
Company Phone	844-STAGTEC
Emergency	Domestic Shipments and to Canada: 1-800-633-8253 International Shipments: 1-801-629-0667

2. HAZARDS IDENTIFICATION

GHS Ratings:	
Carcinogen	2 Limited evidence of human or animal carcinogenicity
GHS Hazards	
H351	Suspected of causing cancer
GHS Precautions	
P201	Obtain special instructions before use
P202	Do not handle until all safety precautions have been read and understood
P281	Use personal protective equipment as required
P308+P313	IF exposed or concerned: Get medical advice/attention
P405	Store locked up
P501	Dispose of contents/container to ...
Signal Word	Warning



3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	CAS number	Weight Concentration %
Epoxy Resin	25085-99-8	74.70%
Barium Sulfate	7727-43-7	10.00% - 20.00%
Silica	67762-90-7	1.00% - 5.00%
Titanium Dioxide	13463-67-7	1.00% - 5.00%

4. FIRST AID MEASURE

If inhaled remove to fresh air. If breathing is difficult, give oxygen. Obtain medical advice if there are persistent symptoms. Rinse immediately with plenty of water for at least 15 minutes. Ensure adequate flushing of the eyes by separating the eyelids with fingers. Remove contacts if present and easy to do. Continue rinsing. Get medical attention, if irritation or symptoms of overexposure persists. Immediately wash skin with soap and plenty of water. If swallowed, call a physician immediately. Only induce vomiting at the instruction of a physician. Never give anything by mouth to an unconscious person.

5. FIRE FIGHTING MEASURES

Flash Point	N/A
LEL	N/A
UEL	N/A
Not applicable	
Foam, Carbon dioxide (CO ₂) or dry chemical or water spray (water stream may be ineffective) .	
No information available	
Not available	
Firefighters, and others exposed, wear self-contained breathing apparatus.	

6. ACCIDENTAL RELEASE MEASURES

Stop leak. Dike or contain spill. Pump into slavage tanks and/or absorb with suitable material. Use sparkless shovel to remove material. Evacuate area and keep unnecessary and unprotected personnel from entering the spill area. Use appropriate containment and clean up immediately. Corrosive. Avoid personal contact and breathing vapor or mist. Stop leak, Dike and contain spill. Prevent spilled material from entering the ground, water and/or air by using appropriate containment methods.

7. HANDLING AND STORAGE

Avoid breathing vapor. Avoid contact with eyes, skin and clothing. Keep away from heat and flame. Keep container closed. Use with adequate ventilation. Wash thoroughly after handling. Avoid exposure to heat, light, and air for prolonged periods of time. Store in a cool, dry well ventilated area away from sources of heat and incompatible materials. Eliminate all ignition materials and incompatible materials. Collect spill with non spark tools. No information available.

8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

Chemical Name / CAS No.	Epoxy Resin 25085-99-8
OSHA Exposure Limits	Not Established.
ACGIH Exposure Limits	Not Established.
Other Exposure Limits	Not Established.

Chemical Name / CAS No.	Barium Sulfate 7727-43-7
OSHA Exposure Limits	15 mg/m ³ TWA (total dust); 5 mg/m ³ TWA (respirable fraction)
ACGIH Exposure Limits	5 mg/m ³ TWA (inhalable fraction, particulate matter containing no asbestos and <1% crystalline silica)
Other Exposure Limits	NIOSH: 10 mg/m ³ TWA (total dust); 5 mg/m ³ TWA (respirable dust)

Chemical Name / CAS No.	Silica 67762-90-7
OSHA Exposure Limits	Not Established.
ACGIH Exposure Limits	Not Established.
Other Exposure Limits	Not Established.

Chemical Name / CAS No.	Titanium Dioxide 13463-67-7
OSHA Exposure Limits	15 mg/m ³ TWA (total dust)
ACGIH Exposure Limits	10 mg/m ³ TWA
Other Exposure Limits	Not Established.

Use appropriate engineering control such as process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Good general ventilation should be sufficient to control airborne levels. Where such systems are not effective wear suitable personal protective equipment, which performs satisfactory and meets OSHA or other recognized standards. Consult with local procedures for selection, training, and maintenance of the personal protective equipment. Always use adequate ventilation that comply with local regulations.

Eye/face Protection	Wear appropriate protective glasses or splash goggles as described by 29 CFR 1910.133, OSHA eye and face protection regulation, or the European standard EN 166.
Skin Protection	Chemical-resistant gloves and chemical goggles, face-shield and synthetic apron or coveralls should be used to prevent contact with eyes, skin or clothing.
Respiratory Protection	A NIOSH air purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known or any other circumstance where air purifying respirator may not provide adequate protection.

9. PHYSICAL & CHEMICAL PROPERTIES

Boiling Range	2500 to 3000°C
Specific Gravity (SG)	1.398
Lbs VOC/Gallon Less Water	0.00
Lbs VOC/Gallon Less Exempt	0.00
% VOL by Volume	0.00

10. CHEMICAL STABILITY & REACTIVITY INFORMATION

Stable, Hazardous polymerization will not occur. STABLE. Strong acids, caustics, oxidizers, Avoid uncontrolled exposure to Epoxy Resin, Amine, Isocyanates. No Data Found. None known, other than Sec. #2 and Sec #5. Hazardous polymerization will not occur.

11. TOXICOLOGICAL INFORMATION

Mixture Toxicity	No Data Found
Component Toxicity	No Data Found

Effects of Overexposure

Avoid breathing vapors

CAS Number 13463-67-7

Description Titanium Dioxide

% Weight 1 to 5%

Carcinogen Rating Titanium Dioxide: NIOSH: potential occupational carcinogen, IARC: Possible human carcinogen, OSHA: listed

Oral N.D.A.

Dermal N.D.A.

Inhalation N.D.A.

12. ECOLOGICAL INFORMATION

No ecotoxicity data was found for the product.

Component Ecotoxicity

13. DISPOSAL CONSIDERATIONS

Dispose of in accordance with applicable local/municipal, state/provincial and federal regulations.

14. TRANSPORT INFORMATION

UN1263 Paint Related Material;

Packaging Group III: Hazardous Class 3

NMFC 14998002; Flammable Liquid; Class 92.5

15. REGULATORY INFORMATION

OSHA:29 CFR 1910.1200 Hazardous Chemical "Irritant", Sensitizer

TSCA Ingredients listed
SARA III Sec311 & 312 Immediate Health Hazard; Sec313 Chemicals above de minimus level: None

CA PROP. 65 NOTICE WARNING: CANADIAN REGULATORY INFORMATION
WHMIS Hazard Classification: D2B Skin Sensitizer. Refer to SDS for specific warnings

WHMIS Symbols Stylized T.

WHMIS Trade Secret Registry Numbers None

Hazardous Products Act Information This product SDS contains ingredients which are Controlled and/or on the Ingredient Disclosure List (HPA sections 13 and 14). State of California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): WARNING! This product contains the following chemicals which are listed by the State of California as carcinogenic or a reproductive toxin:
13463-67-7 Titanium Dioxide 1 to 5 % Carcinogen

Country EU
Safety Phrase None

Regulation All Components Listed
REACH (EU) SUBSTANCES OF VERY HIGH CONCERN No
Toxic Substance Control Act (TSCA) Yes

16. OTHER INFORMATION

Further information

HMIS® ratings

NFPA ratings

Disclaimer

HMIS® is a registered trade and service mark of the NPCA.

Health: 1

Flammability: 1

Physical hazard: 2

Health: 1

Flammability: 0

Instability: 0

The information provided in this Safety Data Sheet is correct to the best of our knowledge information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.