

Structure Guard®-FM

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name	• Quadex® Structure Guard®-FM (Fiber Reinforced Epoxy Mastic Catalyst) - Part B	
Trade Name	• RE211	
Company	• Quadex LLC, 564 W. 9320 S., Sandy, UT 84070	
Company Contact	Matthew Peterson	
Company Phone	• 844-782-4832	
Emergency	Domestic Shipments and to Canada: 1-800-633-8253	
	International Shipments: 1-801-629-0667	

2. HAZARDS IDENTIFICATION

GHS Ratings			
	Acute Toxicity - Oral	• 4	• Oral>300+<=2000mg/kg
	Skin corrosion/ irritation	• 2	 Reversible adverse effects in dermal tissue, Draize score: >= 2.3 < 4.0 or persistent inflammation
	Serious eye damage/ eye irritation	• 1	 Serious eye damage: Irreversible damage 21 days after exposure, Draize score: Corneal opacity >= 3, Iritis > 1.5
	Skin sensitization	• 1	Skin sensitizer
	Reproductive toxicity	• 2	 Human or animal evidence possibly with other information

Hazard Statement(s)		
	H302	Harmful 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



2. HAZARDS IDENTIFICATION (CONTINUED)

Precautionary Statement(s)

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
• Danger	

Signal Word

Pictogram









3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	Cas #	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	• 5.00% - 10.00%
Inert	• Inert	• 5.00% - 10.00%
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 (CO2) 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 adn 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 incompatable 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.	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/m³ Ceiling
Other Exposure Limits	• NIOSH: 0.1 mg/m³ 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.	• Inert INERT
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 exposure limits. Good general ventilation should be sufficiant to control airborne levels. Where such systems are not effective wear suitable personal protective equipment, which preforms satisfactory and meets OSHA or other recgonized standards. Consult with local procedures for selection, training, and maintenance of the personal protective equipment. Always use adaquate 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 reulation, or the Europena 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 presure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known or any other circumstance where air purifyig respirator may not provide adequate protection.



9. PHYSICAL & CHEMICAL PROPERTIES

Boiling Point	• 247 °C
Specific Gravity (SG)	• 1.002
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 polymeraization will not occur. Will react with Epoxy Resins especially at elevated temperatures. STABLE. Epoxy Resins under uncontrolled conditions. Mineral acids. Organic acid, oxidixers, Reacts with metals until reacted with epoxy. None known. Hazardous polymerization will not occur.

11. TOXICOLOGICAL INFORMATION

Mixture Toxicity	
Oral Toxicity LD50	• 1,957mg/kg
Dermal Toxicity LD50	• 3,216mg/kg
Inhalation Toxicity LC50	• 2,901mg/L
Component Toxicity	 Paratertiarybutylphenol — 98-54-4 Oral LD50: 3,250 µL/kg (Rat) Dermal LD50: 2,318 mg/kg (Rabbit) Amine — 1477-55-0 Oral LD50: 660 mg/kg (Rat) Dermal LD50: 2 g/kg (Rabbit) Inhalation LC50: 700 ppm (Rat) nonyl phenol — 84852-15-3 Oral LD50: 1,300 mg/kg (Rat) Dermal LD50: 2,031 mg/kg (Rabbit)
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.
Avoid breathing vapors	
Effects of Overexposure	
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

UN proper shipping name: Amines, liquid, corrosive, n.o.s.

Transportation Hazardous Shipping Class: 8

UN number: UN2735 Packing Group: II

Hazardous label: 8 Corrosive Substance Environmental hazards-marine pollutant: Yes

15. REGULATORY INFORMATION

OSHA:29 CFR 1910.1200 (40 CFR 372.65)	Haxardous Chemical "Irritant", Sensitizer
TSCA	Ingredients listed
SARA III	Sec311 & 312 Immediate Health Haxard; Sec313 Chemicals above de minimus level: None
CA PROP. 65 NOTICE WARNING: CANADIAN REGULATORY INFO	 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).



16. OTHER INFORMATION

Further Information	HMIS® is a registered trade and service mark of the NPCA.	
HMIS® Ratings		
	Health	• 2
	Flammability	• 0
	Physical hazard	• 0
	Personal Protection	• H
NFPA Ratings		
	Health	• 2
	Flammability	• 0
	Instability	• 0
Disclaimer	• 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.	
Issue Date	Not available.	
This Data Sheet Contains	Product and Company Identification: Synonyms changes from the previous Physical & Chemical Properties: Multiple Properties version in section(s): Transport Information: Material Transportation Information Regulatory Information: United States.	