orm No. A607		Date Prepared:	//2//2018
SECTION 1 : Identification	on of the substance/preparation and of the compa	ny / undertaking	
(a) GHS product identifie Ves	er (e) Er st-It Custom Peg Material	mergency phone number CHEMTREC 1-800-424- CCN9105	·9300
(b) Other means of ident N/A	ification		
(c) Recommended use o For professional der	of the chemical and restrictions on use ntal applications.		
(d) Supplier's details Garreco, LLC. 430 Hiram Road Heber Springs, AR 7 Phone: 1-800-334-1	72543 443		
SECTION 2: Hazards ide	ntification		
(a) GHS classification of Substance Name	the substance/mixture		
	N/A		
(b) Label Elements			
	Hazard Statements		
	None		
	Precautionary statements		
	None		
Response			
Storage			
	NA		
Disposal			
	NA		
Hazard Symbol(s)	Signal Word(s)		
Nono	Nono		
(c) Other hazards which IF ON SKIN: E	do not result in classification xposure to dried product may cause temporary, mild r result in inflammation, rash or itcl	mechanical irritation. Expos hing.	ure may also

IF INHALED: If dried, airborne product is inhaled in sufficient quantity, may cause temporary, mild mechanical irritation to respiratory tract. Symptoms may include scratchiness of the nose or throat, cough or chest discomfort.

IF SWALLOWED: Unlikely route of exposure. Small amounts swallowed incidental to normal handling operations are not likely to cause injury.

IF IN EYES: May cause temporary, mild mechanical irritation. Fibers may be abrasive; prolonged contact may cause damage to the outer surface of the eye.

SECTION 3: Composition/information on ingredients			
(a) Chemical(s) Identity:	Mixture:		
(b) Common Name:	(c) CAS No.	Concentration (Percentage)	
1. Refractories, Fibers, Aluminosilicate	142844-00-6	20 - 25	
2. Silica (amorphous)	7631-86-9	5 - 10	
3. Hydroxyethyl cellulose	9004-62-0	1 - 3	
NOTE: These chemicals are bound in a semi-liquid state and are not expected to be hazardous under normal use.			

SECTION 4: First-aid measures

NOTE: Below are for instances when the material is dried and after the unlikely physical manipulation to convert it to a

Date Prepared:

7/27/2018

powder form with particles of respirable size.

(a) Description of first aid measures:

IF ON SKIN (or hair): Handling of this material may generate mild mechanical temporary skin irritation. If this occurs, rinse affected areas with water and wash gently. Do not rub or scratch exposed skin.

IF INHALED: If these become irritated move to a dust free area, drink water and blow nose. If symptoms persist, seek medical advice.

IF SWALLOWED: If these become irritated move to a dust free area, drink water and blow nose. If symptoms persist, seek medical advice.

IF IN EYES: In case of eye contact flush abundantly with water; have eye bath available. Do not rub eyes.

(b) Most important symptoms and effects, both acute and delayed:

IF INHALED:

Mild mechanical irritation to upper respiratory system may result from exposure.

IN EYES:

Mild mechanical irritation to eyes may result from exposure.

(c) Indication of any immediate medical attention and special treatment needed:

ND

SECTION 5: Fire-fighting measures

(a) Suitable extinguishing media:

Use extinguishing agent suitable for surrounding combustible materials.

(b) Special hazards arising from the chemical or mixture:

Packaging and surrounding materials may be combustible. Thermal decomposition of binder from fires or from heat may release smoke, carbon monoxide, carbon dioxide, aldehydes, and carboxylic acids. Exposure to thermal decomposition fumes may cause respiratory tract irritation, bronchial hyper-reactivity or an asthmatic-type response.

(c) Special protective equipment and precautions for fire-fighters:

NFPA Codes: Flammability: 0 Health: 1 Reactivity: 0 Special: 0

SECTION 6: Accidental release measures

NOTE: Below are for instances when the material is dried and after the unlikely physical manipulation to convert it to a powder form with particles of respirable size.

(a) Personal precautions, protective equipment and emergency procedures:

Minimize airborne dust. Compressed air or dry sweeping should not be used for cleaning. See Section 8 "Exposure Controls / Personal Protection" for exposure guidelines.

(b) Environmental precautions:

N/D

(c) Methods and material for containment and cleaning up:

Frequently clean the work area with vacuum or wet sweeping to minimize the accumulation of debris. Do not use compressed air for cleanup. Product packaging may contain residue. Do not reuse.

SECTION 7: Handling and storage

NOTE: Below are for instances when the material is dried and after the unlikely physical manipulation to convert it to a powder form with particles of respirable size.

(a) Precautions for safe handling:

Handle fiber carefully to minimize airborne dust. Limit use of power tools unless in conjunction with local exhaust ventilation. Use hand tools whenever possible.

(b) Conditions for safe storage, including any incompatibilities:

Store in a manner to minimize airborne dust.

decomposition fumes may cause respiratory tract irritation, bronchial hyper-reactivity or an asthmatic-type response.

3.10.20-FM Safety Data Sheet Form No. A607

SECTION 8: Exposure controls/Personal protection

NOTE: Below are for instances when the material is dried and after the unlikely physical manipulation to convert it to a powder form with particles of respirable size.

(a) Control parameters:

Chemical

1. Refractory Ceramic Fiber (RCF)

- 2. Silica (amorphous)
- 3. Hydroxyethyl cellulose

ACGIH TLV 0.2 f/cc TLV, 8-hr. TWA 10 mg/m³ None established

OSHA PEL None established 20 mppcf or 80 mg/m3 / % SiO2 None established

(b) Appropriate Engineering Controls:

Use engineering controls such as local exhaust ventilation, point of generation dust collection, down draft work stations, emission controlling tool designs, and materials handling equipment designed to minimize airborne fiber emissions.

(c) Individual protection measures:

RESPIRATORY: When engineering and/or administrative controls are insufficient to maintain workplace concentrations, the use of appropriate respiratory protection, pursuant to the requirements of OSHA Standards 29 CFR 1910.134 and 29 CFR 1926.103, is recommended.

OTHER PROTECTIVE EQUIPMENT:

Skin Protection: Wear personal protective equipment, as necessary to prevent skin irritation. Washable or disposable clothing may be used.

Eye Protection: As necessary, wear goggles or safety glasses with side shields.

SECTION 9: Physical and chemical properties	
(a) Appearance:	White, fibrous wool
(b) Odor:	Odorless
(c) Odor threshold:	Not applicable
(d) pH:	Not applicable
(e) Melting point / freezing point:	1760° C (3200°F)
(f) Initial boiling point and boiling range:	Not applicable
(g) Flash point	Not applicable
(h) Evaporation rate (BuAc=1):	Not applicable
(i) Flammability:	Not applicable
(j) Upper/lower flammability or explosive limits:	Not applicable
(k) Vapor Pressure:	Not applicable
(I) Vapor density:	Not applicable
(m) Relative density:	2.50 - 2.75
(n) Solubility:	Insoluble
(o) Partition coefficient: n-octanol/water:	Not applicable
(p) Auto-ignition temperature:	Not applicable
(q) Decomposition temperature:	Not applicable
(r) Viscosity:	Not applicable

SECTION 10: Stability and reactivity

(a) Reactivity:	RCF is non-reactive		
(b) Chemical stability:	As supplied RCF is stable and inert.		
(c) Possibility of hazardous reactions:	None		
(d) Conditions to avoid:	Please refer to handling and storage advice in Section 7		
(f) Hazardous decomposition products:	Thermal decomposition of binder may release smoke, carbon monoxide, carbon dioxide, aldehydes, and carboxylic acids. Exposure to thermal		

(f) Hazardous decomposition products:

3.10.20-FM Safety Data She

Safety Data Sheet Form No. A607 **Date Prepared:** 7/27/2018 **SECTION 11: Toxicological information** ND Acute toxicity Not a chemical irritant according to test method OECD no. 404. Skin corrosion/irritation Not possible to obtain acute toxicity information due to the morphology and Serious Eye Damage / Irritation chemical inertness of the substance No evidence from human epidemiological studies of any respiratory or skin Respiratory or skin sensitization sensitization potential. Method: In vitro micronucleus test - Hamster (CHO) - 135 mg/ml Routes of administration: In suspension Germ cell mutagenicity **Results: Negative** NOTE: Inhalation exposure is not expected under normal use. Method: Inhalation, multidose - Rat - 3 mg/m3, 9 mg/m3 and 16 mg/m3 Routes of administration: Nose only inhalation Results: Fibrosis reached significant levels at 16 and 9 mg/m3 but not 3 mg/m3. Method: Inhalation, single dose - Rat - 30 mg/m3 Routes of administration: Nose only inhalation Results: Rats exposed to a single concentration of 200 WHO fibers/ml specially prepared RCF for 24 months. High incidence of exposure related pulmonary neoplasms observed. A small number of mesotheliomas observed in each of the fiber exposure groups. Method: Inhalation, single dose - Hamster - 30 mg/m3 Routes of administration: Nose only inhalation Results: Hamsters exposed to a single concentration of 260 WHO fibers/ml specially prepared RCF for 18 months and developed lung fibrosis, a significant number of pleural mesotheliomas (42/102) but no primary lung tumors. Carcinogenicity Method: Inhalation, single dose - Rat - RCF1: 130 F/ml and 50 mg/m3 (25% of non fibrous particles), RCF1a: 125 F/ml and 26 mg/m3 (2% of non fibrous particles) Routes of administration: Nose only inhalation Results: Rats exposed to RCF1 and RCF1a for 3 weeks. The main difference of these 2 samples was the nonfibrous particle content of respectively 25% versus 2%. The post treatment observation was 12 months. Alveolar clearance was barely retarded after RCF1A exposure. After RCF1 exposure, however, a severe retardation of clearance was observed. After intraperitoneal injection of ceramic fibers into rats in three experiments, mesotheliomas were found in the abdominal cavity in two studies, while the third report had incomplete histopathology. Only a few mesotheliomas were found in the abdominal

cavity of hamsters after intraperitoneal injection in one experiment. However, the ceramic fibers tested were of relatively large diameter. When rats and hamsters were exposed via intraperitoneal injection, tumor incidence was related to fiber length and dose.

Reproductive toxicity	Method: Gavage - Rat - 250mg/kg/day Routes of administration: Oral Results: No effects were seen in an OECD 421 screening study. There are no reports of any reproductive toxic effects of mineral fibers.
STOT-single exposure	Not applicable
STOT-repeated exposure	Not applicable
Aspiration Hazard	Not applicable

(a) Exposure route:

(b) Symptoms related to the physical, chemical and toxicological characteristics:

If on skin may generate mild mechanical temporary skin irritation. If in eyes may cause temporary irritation.

(c) Delayed and immediate effects and also chronic effects from short and long tem exposure: Possible pulmonary neoplasms, mesotheliomas, or lung fibrosis. See carcinogenicity above.

(d) Numerical measures of toxicity:

See above.

Skin and eyes

orm No.	A607	Date Prepared:	7/27/2018
SECTION	N 12: Ecological information		
(a) Ecoto	oxicity:		
		No known aquatic toxicity.	
(b) Persi	stence and degradability:		
		These products are insoluble materials that remain stable chemically identical to inorganic compounds found in the	over time and are soil and sediment.
(c) Bioad	cumulative potential		
.,		No bioaccumulative potential.	
(d) Mobi	lity in soil:		
()	-	No mobility in soil	
(e) Other	adverse effects:		
. ,		No adverse effects of this material on the environment	are anticipated.

SECTION 13: Disposal considerations

Recommendation

NOTE: Below are for instances when the material is dried and after the unlikely physical manipulation to convert it to a powder form with particles of respirable size.

To prevent waste materials from becoming airborne, a covered container or plastic bagging is recommended. Any processing, use, alteration or chemical additions to the product, as purchased, may alter the disposal requirements. Check local, regional, state or provincial regulations to identify all applicable disposal requirements.

SECTION 14: Transport information (a) UN Number Not Applicable (b) UN Proper shipping name Not Applicable (c) Transport hazard class(es) Not Applicable (d) Packing Group Not Applicable (e) Environmental hazards Not a marine pollutant (f) Transport in bulk Not Applicable (g) Other Information Not Applicable **SECTION 15: Regulatory information** Title III this product does not contain any substances reportable under Sections 302, 304, 313, (40 CFR 372). Sections 311 and 312 (40 CFR 370) apply **SARA Reporting Requirements:** (delayed hazard). N/A SARA Threshold Planning Quantity: RCF is not required to be listed on the TSCA inventory. **TSCA Inventory Status: Other Federal Requirements:** N/A **Other Canadian Regulations:** N/A Pursuant to California Prop 65, this product does not contain any material under **State Regulatory Information:** normal use classified as a respirable particle sized hazard.

3.10.20-FM				
Safety Data Sheet				
Form No. A607			Date Prepared:	7/27/2018
SECTION 16: Other information				
PREPARED BY: Kristofer Mainar				
GAR QMS SDS REFERENCE:			A309	
HAZARDOUS MATERIAL IDENTIF	ICATION (HMIS) R	ATING:		
		Health	1* (* denotes potential for	chronic effects)
		Flammability	0	
		Reactivity	0	
		Other		
REVISION NUMBER:	180727			
CHANGES FROM PREVIOUS VER	SION: Added Che	mtrec account numbe	r on 4/12/17.	
	Re-classifie	ed on 7/27/18. (see CL	ASSIFICATION NOTES be	low)
Note; on 11/22/19 this SDS wa	as corrected to show	CHEMTREC instead	I of CHEMTRAC	,
CLASSIFICATION NOTES:				
This product contains Refracto cellulose. These materials are humans under normal use.	ories, Fibers, Alumin bound in a semi-liq	osilicate, Silica (amor uid state and poses no	phous) and hydroxyethyl o inhalation exposure risk to	
This determination and realized	dianting in groups and	to "A 0.2 Classificati	n based on weight of	

This determination and reclassification is pursuant to "A.0.3 Classification based on weight of evidence" found in APPENDIX A TO §1910.1200– HEALTH HAZARD CRITERIA.

ABBREVIATIONS

NA Not Applicable ND Not Determined **NE Not Established** ppm parts per million G Gallon mg Milligram L Liter gm Gram mol Mole kg Kilogram µ Micro mm Millimeter p Pico Pa Pascals c cento ACGIH American Conference of Governmental Industrial Hygienist **CPR Controlled Product's Regulation DSL Canadian Domestic Substances List** NDSL Canadian Non-domestic Substance List IARC International Agency for Research for Cancer OSHA Occupational Safety and Health Administration

LD Lethal Dose TC Toxic Concentration **TD** Toxic Dose BOD Biological Oxygen Demand COD Chemical Oxygen Demand Lo Lowest ThOD Theoretical Oxygen Demand TLm Threshold Limit IC Inhibitory Concentration DOC Dissolved Organic Carbon H Hours M Months D Days Y Years W Weeks NOEL No Observed Effect Level NOAEL No Observed Adverse Effect Level LC Lethal Concentration PEL Permissible Exposure Limit TLV Threshold Limit Value

3.10.20-FM Safety Data Sheet Form No. A607

Date Prepared: 7/27/2018

THIS MATERIAL SAFETY DATA SHEET IS PREPARED IN COMPLIANCE WITH FEDERAL REGULATIONS (29 CFR 1910.1200) OFCHEMICALS AND THE GLOBALLY HARMONIZED SYSTEM OF CLASSIFICATION AND LABELLING REVISION 5. ANY APPLICABLE STATE AND LOCAL REGULATIONS SHOULD BE CONSULTED. THE ABOVE INFORMATION MAY BE BASED IN PART ON INFORMATION PROVIDED BY COMPONENT SUPPLIERS AND IS BELIEVED TO BE CORRECT AS OF THE DATE HEREOF. HOWEVER, NO WARRANTY OF MERCHANTABILITY, FITNESS FOR ANY USE, OR ANY OTHER WARRANTY IS EXPRESSED OR IS TO BE IMPLIED REGARDING THE ACCURACY OF THESE DATA, THE RESULTS TO BE OBTAINED FROM THE USE OF THE MATERIAL, OR THE HAZARDS CONNECTED WITH SUCH USE. SINCE THE INFORMATION CONTAINED HEREIN MAY BE APPLIED UNDER CONDITIONS BEYOND OUR CONTROL AND WITH WHICH WE MAY BE UNFAMILIAR, AND SINCE DATA MADE AVAILABLE SUBSEQUENT TO THE DATE HEREOF MAY SUGGEST MODIFICATION OF THE INFORMATION, WE ASSUME NO RESPONSIBILITY FOR THE RESULT OF ITS USE. THIS INFORMATION AND MATERIAL IS FURNISHED ON THE CONDITION THAT THE PERSON RECEIVING IT SHALL MAKE HIS/HER OWN DETERMINATION AS TO THE SUITABILITY OF THE MATERIAL FOR HIS/HER PARTICULAR PURPOSE AND ON THE CONDITION THAT HE/SHE ASSUME THE RISK OF HIS/HER USE THEREOF.