1. IDENTIFICATION OF THE PRODUCT & MANUFACTURER	 1.1. Product Identifier Product Name: ECORE E-GRIP III 1.2. Relevant identified uses of the substance or mixture and uses advised against Recommended use: Adhesives Restrictions on use: No information available 1.3. Details of the supplier of the safety data sheet Responsible Party Ecore International 715 Fountain Avenue Lancaster, PA 17601 USA Phone: 1 (800) 322-1923 (Domestic Toll Free) Phone: 1 (717) 295-3400 (8:00 a.m. to 5:00 p.m. EST) Fax: 1 (717) 295-34141.4. 1.4. Emergency telephone number Emergency Telephone Telephone: 1-800-227-0332 (Outside U.S.) 1-703-527-3887 				
2. HAZARD(S) IDENTIFICATION	2.1. Classification of the substance	e or mixture			
	Respitory sensitization Skin sensitization Reproductive toxicity	Category 1 Catetory 1 Category 1B			
	Hazards not otherwise classified (HNOC) Not applicable				
	2.2. Label elements				
	Emergency Overview Danger Hazard statements May cause allergy or asthma symptoms or breathing difficulties if inhaled May cause an allergic skin reaction May damage fertility or the unborn child				
	Appearance: Paste Physical State: Solid Odor: No information available				
	Precautionary Statements - Prevention Obtain special instructions before use Do not handle until all safety precautions have been read and understood Use personal protective equipment as required Avoid breathing dust/fume/gas/mist/vapors/spray In case of inadequate ventilation wear respiratory protection Contaminated work clothing should not be allowed out of the workplace Wear protective gloves				
	Precautionary Statements - Response IF exposed or concerned: Get medical advice/attention IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical				

2. HAZARD(S) IDENTIFICATION (CONTINUED)	advice/attention. Wash contaminated clothing before reuse. IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.					
	Precautionary Statements - Storage Store locked up					
	Precautionary Statements - Disposal Dispose of contents/ container to an appro	Precautionary Statements - Disposal Dispose of contents/ container to an approved waste disposal plant				
	Hazards not otherwise classified (HNOC) Not applicable					
	Unknown acute toxicity 35 % of the mixture consists of ingredient(s) of unknown toxicity					
	2.3. Other Information Small amounts of methanol (CAS 67-56-1) are formed by hy	drolysis and released upon curing.			
3. COMPOSITION/INFORMATION ON INGREDIENTS	<u>3.1. Substances</u> Not applicable.					
	3.2. Mixtures					
	Chemical Name	CAS No	Weight -%			
	Limestone	1317-65-3	40 - 70			
	Benzene, 1,1'-methylenebis[isocyanato-	1317-65-3	0.1 - 1			
	Quartz	14808-60-7	0.1 - 1			
	Dibutyltin dilaurate	77-58-7	0.1 - 1			

*The exact percentage (concentration) of composition has been withheld as a trade secret

4083-64-1

0.1 - 1

4. FIRST AID MEASURES

4.1. Description of first aid measures

Benzenesulfonyl isocyanate, 4-methyl-

General advice: Do not breathe dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing. If symptoms persist, call a physician.

Inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Administer oxygen if breathing is difficult. If breathing is irregular or stopped, administer artificial respiration. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. If symptoms persist, call a physician.

Eye contact: Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. If eye irritation persists: Get medical advice/attention.

Skin contact: Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Wash contaminated clothing before reuse. May cause

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4. FIRST AID MEASURES (CONTINUED)	sensitization by skin contact. In the case of skin irritation or allergic reactions see a physician.				
	Ingestion: Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.				
	Self-protection of the first aider: Use personal protective equipment as required. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.				
	4.2. Most important symptoms and effects, both acute and delayed Symptoms: No information available.				
	4.3. Indication of any immediate medical attention and special treatment needed Note to physicians: May cause sensitization of susceptible persons. May cause sensitization by inhalation and skin contact. Treat symptomatically. Small amounts of methanol (CAS 67-56-1) are formed by hydrolysis and released upon curing.				
	4.4. Reference to other sections Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION Section 11: TOXICOLOGY INFORMATION				
5. FIRE FIGHTING MEASURES	5.1. Extinguishing media				
	Suitable Extinguishing Media: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.				
	Unsuitable extinguishing media: CAUTION: Use of water spray when fighting fire may be inefficient.				
	5.2. Special hazards arising from the substance or mixture				
	Specific hazards arising from the chemical: Thermal decomposition can lead to release of irritating and toxic gases and vapors. In the event of fire and/or explosion do not breathe fumes. May cause sensitization by inhalation and skin contact.				
	Explosion data: Carbon dioxide (CO2). Sensitivity to mechanical impact: None. Sensitivity to static discharge: None.				
	5.3. Advice for firefighters				
	Special protective equipment for fire-fighters: As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.				
6. ACCIDENTAL RELEASE MEASURES	6.1. Personal precautions, protective equipment and emergency procedures				
	Personal precautions: Use personal protective equipment as required. Keep people away from and upwind of spill/leak. Ensure adequate ventilation, especially in confined areas. Avoid contact with skin, eyes or clothing. Wash thoroughly after handling.				

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6. ACCIDENTAL RELEASE MEASURES (CONTINUED)	6.2. Environmental precautions				
MEASURES (CONTINUED)	Environmental precautions: Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Do not flush into surface water or sanitary sewer system. Prevent entry into waterways, sewers, basements or confined areas. See Section 12 for additional Ecological Information.				
	6.3. Methods and material for containment and cleaning up				
	Methods for containment: Prevent further leakage or spillage if safe to do so. Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see Section 13).				
	Methods for cleaning up: Use personal protective equipment as required. Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers. Clean contaminated surface thoroughly.				
	6.4. Reference to other sections:				
	Section 7: HANDLING AND STORAGE Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION Section 13: DISPOSAL CONSIDERATIONS				
7. HANDLING AND STORAGE	7.1. Precautions for safe handling				
	Advice on safe handling: Use personal protective equipment as required. Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product. Do not breathe dust/fume/gas/mist/vapors/spray. Use with local exhaust ventilation. Avoid contact with skin, eyes or clothing. After contact with skin, wash immediately with plenty of water and soap. Wash contaminated clothing before reuse.				
	7.2. Conditions for safe storage, including any incompatibilities				
	Storage conditions: Keep out of the reach of children. Keep in properly labeled containers. Keep containers tightly closed in a dry, cool and well-ventilated place. Protect from direct contac with water or excessive moisture.				
	Incompatible materials: Water. Alcohols. Strong bases. Strong oxidizing agents. Finely powdered metals.				
	7.3. Specific end use(s)				
	Specific uses: Intermediate Other information: No information available				
	7.4. References to other sections				
	Section 13: DISPOSAL CONSIDERATIONS Section 10: STABILITY AND REACTIVITY				
8. EXPOSURE CONTROLS/	8.1. Control parameters				
PERSONAL PROTECTION	Exposure guidelines: This product contains substances which in their raw state are powder form, however in this product they are in a non-respirable form. Inhalation of powder/dust particles is unlikely to occur from exposure to this product. Small amounts of PAGE 4 mothanel (CAS 67 56 1) are formed by bydrelyis and released upon guring				

methanol (CAS 67-56-1) are formed by hydrolysis and released upon curing.

See next page for chart.

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Chemical Name	ACGIH TLV	OSH/	A PEL		NIOSH	Mexico
Limestone 1317-65-3	-		TWA: 15 mg/m ³ total dust TWA: 5 mg/m ³ respirable fraction (vacated) TWA: 15 mg/m ³ total dust (vacated) TWA: 5 mg/m ³ respirable fraction		TWA: 10 mg/m ³ total dust TWA: 5 mg/m ³ respirable dust	TWA: 10 mg/m3 STEL: 20 mg/m3
Benzene, 1,1'-methylenebis[isocyanato- 26447-40-5	-	Ceiling: 0.02 ppm Ceiling: 0.2 mg/m ³		-	TWA: 0.02 ppm TWA: 0.2 mg/m3 TWA: 0.005 ppm TWA: 0.051 mg/m3	
Quartz 14808-60-7	TWA: 0.025 mg/m ³ respirable particulate matter	TWA: 50 µg/m ³ TWA: 50 µg/m ³ excludes construction work, agricultural operations, and exposures that result from the processing of sorptive clays (vacated) TWA: 0.1 mg/m ³ respirable dust : (250)/(%SiO2 + 5) mppcf TWA respirable fraction : (10)/(%SiO2 + 2) mg/m ³ TWA respirable fraction		IDLH: 50 mg/m ³ respirable dust TWA: 0.05 mg/m ³ respirable dust	TWA: 0.1 mg/m3	
Dibutyltin dilaurate 77-58-7	STEL: 0.2 mg/m ³ Sn TWA: 0.1 mg/m ³ Sn S*			IDLH: 25 mg/m ³ Sn TWA: 0.1 mg/m ³ except Cyhexatin Sn	TWA: 0.1 mg/m3 STEL: 0.2 mg/m3	
Chemical Name	Argentina		Brazil	Chile)	Venezuela
Limestone 1317-65-3	TWA: 10 mg/r	n ³	-	TWA	: 7 mg/m ³	-
Benzene, 1,1'-methylenebis[isocyanat 26447-40-5	TWA: 0.005 p	pm	-		: 0.004 ppm : 0.045 mg/m³	-
Quartz 14808-60-7	TWA: 0.05 mg	g/m³	-	TWA	: 0.08 mg/m ³	TWA: 0.025mg/m ³
Dibutyltin dilaurate 77-58-7	TWA: 0.1 mg/ Skin STEL: 0.2 mg		-	TWA: Skin	: 0.09 mg/m³	STEL: 0.2mg/m ³ TWA: 0.1mg/m ³

Chemical Name	ACGIH TLV	NIOSH IDLH	OSHA PEL	Mexico
Methyl alcohol 67-56-1	STEL: 250 ppm TWA: 200 ppm S*	IDLH: 6000 ppm TWA: 200 ppm TWA: 260 mg/m ³ STEL: 250 ppm STEL: 325 mg/m ³	TWA: 200 ppm TWA: 260 mg/m ³	TWA: 200 ppm TWA: 260 mg/m ³ STEL: 250 ppm STEL: 310 mg/m ³

Chemical Name	Argentina	Brazil	Chile	Venezuela
Methyl alcohol 67-56-1	TWA: 200 ppm Skin STEL: 250 ppm	TWA: 156 ppm TWA: 200 mg/m ³ Skin	TWA: 175 ppm TWA: 229 mg/m³ Skin	Skin STEL: 250 ppm TWA: 200 ppm



8. EXPOSURE CONTROLS/ 8.2. Exposure controls **PERSONAL PROTECTION** Small amounts of methanol (CAS 67-56-1) are formed by hydrolysis and released upon (CONTINUED) curing. **Engineering controls** Showers Eyewash stations Ventilation systems Personal protective equipment [PPE] Eye/face protection: Wear safety glasses with side shields (or goggles). Skin and body protection: Wear suitable chemical resistant gloves. The selection of suitable gloves does not only depend on the material, but also on further marks of guality and various manufacturers. Respiratory protection: If exposure limits are exceeded or irritation is experienced, NIOSH/ MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations. General hygiene considerations: Use personal protective equipment as required. Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product. Wash face, hands and any exposed skin thoroughly after handling. Wash contaminated clothing before reuse. Regular cleaning of equipment, work area and clothing is recommended.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state Appearance Color Odor Odor threshold Liquid Paste Gray No information available No information available

Property	Values	Remarks/Method
рН	No data available	
Melting point/ freezing point	No data available	
Boiling point	No data available	
Flash point	260 °C / 500 °F	
Evaporation rate	No data available	
Flammability (solid, gas)	No data available	
Flammability Limit in Air Upper flammability or explosive limits Lower flammability or explosive limits	No data available No data available	
Vapor pressure	No data available	None known
Relative vapor density	No data available	None known
Relative density	No data available	None known
Water solubility	No data available	None known

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Property	Values	Remarks/Method
Solubility(ies)	No data available	
Partition coefficient	No data available	
Autoignition temperature	No data available	
Decomposition temperature	No data available	
Kinematic viscosity	No data available	
Dynamic viscosity	1800 - 3200 Pa.s	

9.2. Other information

Property	Values
Explosive properties	No information available
Oxidizing properties	No information available
Solvent content (%)	No information available
Solid content (%)	No information available
Softening Point	No information available
Molecular weight	No information available
VOC Content (%)	< 0.1 g/L
Density	1.648 g/cm ³
Bulk density	No information available

10. STABILITY AND REACTIVITY	10.1. Reactivity	
	Reactivity	None under normal use conditions.
	10.2. Chemical stability	
	Chemical stability	Stable under recommended storage conditions.
	10.3. Possibility of hazardous rea	actions
	Possibility of hazardous reactions	None under normal processing.
	Hazardous polymerization	Hazardous polymerization may occur.
	10.4. Conditions to avoid	
	Conditions to avoid	Extremes of temperature and direct sunlight. Keep from any possible contact with water. Reacts with water.
	10.5. Incompatible materials	
	Incompatible materials	Water. Alcohols. Strong bases. Strong oxidizing agents. Finely powdered metals.
	10.6. Hazardous decomposition	products

Hazardous decomposition products None known based on information supplied

11. TOXICOLOGICAL INFORMATION <u>11.1. Information on toxicological effects</u>

Product Information

Inhalation: May cause sensitization by inhalation.

Eye contact: No data available.

Skin contact: May cause sensitization by skin contact.

Ingestion: No data available.

Component information:

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Limestone 1317-65-3	>5000 mg/kg (Rattus)	-	-
Benzene, 1,1'-methylenebis[isocyanato- 26447-40-5	>10000 mg/kg (Rattus)	> 10000 mg/kg (Rabbit)	= 490 mg/m³ (Rat) 4 h
Quartz 14808-60-7	= 6450 mg/kg (Rat)	-	-
Dibutyltin dilaurate 77-58-7	= 2071 mg/kg (Rat)	> 2000 mg/kg (Rat)	-
Benzenesulfonyl isocyanate, 4-methyl- 4083-64-1	= 2234 mg/kg (Rat)	-	> 640 ppm (Rat) 1 h

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Symptoms: No information available. Skin corrosion/irritation: No information available. Serious eye damage/eye irritation: No information available. Irritation: No information available. Corrosivity: No information available. Sensitization: May cause sensitization by inhalation and skin contact. Germ cell mutagenicity: No information available. Reproductive toxicity: Product is or contains a chemical which is a known or suspected reproductive hazard. Developmental Toxicity: No information available. Teratogenicity: No information available. STOT - single exposure: No information available. STOT - repeated exposure: No information available. Chronic Toxicity: Repeated contact may cause allergic reactions in very susceptible persons. Avoid repeated exposure. Repeated or prolonged contact causes sensitization, asthma and eczemas. Contains a known or suspected reproductive toxin. Target Organ Effects: Eyes, Skin, Respiratory system, Reproductive System, retina. Aspiration hazard: No information available. Carcinogenicity: The table below indicates whether each agency has listed any ingredient as a carcinogen.As Quartz (14808-60-7) is inextricably bound in the polymer matrix, it is not expected to be available as an airborne hazard (dust, mist, or spray) under normal condition of uses.

Chemical Name	ACGIH	IARC	NTP	OSHA
Benzene, 1,1'-methylenebis[isocya nato- 26447-40-5	-	Group 3	-	-
Quartz 14808-60-7	A2	Group 1	Known	X

ACGIH (American Conference of Governmental Industrial Hygienists) A2 - Suspected Human Carcinogen IARC (International Agency for Research on Cancer) Group 1 - Carcinogenic to Humans Group 3 - Not Classifiable as to Carcinogenicity in Humans NTP (National Toxicology Program) Known - Known Carcinogen OSHA (Occupational Safety and Health Administration of the US Department of Labor) X - Present

12. ECOLOGICAL INFORMATION

12.1. Toxicity

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Limestone 1317-65-3	CE50 (72h) >200mg/L Algae (Desmondesmus subspicatus)	CL50 (96h)>10000mg/L (Oncorhynchus mykiss)	-	CE50 (48h) >1000 mg/L Daphnia Magna
Benzene, 1,1'-methylenebis[isocya nato- 26447-40-5	EC50: =3230mg/L (96h, Skeletonema costatum)	-	-	EC50: >1000mg/L (24h, Daphnia magna)
Dibutyltin dilaurate 77-58-7	-	LC50: =2mg/L (48h, Oryzias latipes)	-	-

12.2. Persistence and degradability

No information available.

12.3. Bioaccumulative potential

No information available.

12.4. Mobility in soil

No information available.

Other adverse effects

No information available

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13. DISPOSAL CONSIDERATIONS	13.1. Waste treatment methods				
	Disposal of Wastes: It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations				
	Contaminated packaging: Dispose of in accordance with federal, state and local regulations				
14. TRANSPORT INFORMATION	DOTNot regulatedIATANot regulatedIMDGNot regulated				
15. REGULATORY INFORMATION	Global Inventories				
	TSCA Listed DSL Listed				
	Legend: TSCA - United States Toxic Substances Control Act Section 8(b) Inventory DSL - Canadian Domestic Substances List Listed - The components of this product are either listed or exempt from listing on inventory. Not Listed - One or more components of this product are not listed on inventory.				
	United States of America				
	SARA 313 Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.				
	SARA 311/312 Hazard CategoriesAcute Health HazardYesChronic Health HazardYesFire hazardNoSudden release of pressure hazardNoReactive HazardNo				
	Europe				
	Restrictions of Use of Hazardous Substances (RoHS) Directive 2011/65/EU This product does not contain Lead (7439-92-1), Cadmium (7440-43-9), Mercury (7439-97- 6), Hexavalent chromium (7440-47-3), Polybrominated biphenyls (PBB), and Polybrominated diphenyl ethers (PBDE) above the regulated limit mentioned in this regulation				
	SVHC: Substances of Very High Concern for Authorization: This product does not contain candidate substances of very high concern at a concentration >=0.1% (Regulation (EC) No.1907/2006 (REACH), Article 59)				



16. OTHER INFORMATION	Key or legend to abbreviations and acronyms used in the safety data sheet No information available
	Key Literature References and Sources for Data No information available
	Prepared By Product Safety & Regulatory Affairs
	Revision Date 03-May-2019
	Revision note SDS sections updated, 1
	Training Advice No information available
	Further information No information available
	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.

** End of Safety Data Sheet **