

Section 1: PRODUCT AND COMPANY IDENTIFICATION

SDS Identification: HexForceTM F3 and F16 Finish **SDS Number:** 439-3227-4055-316G-21 **Date:** December 1, 2012 **Page:** 1 of 7 **Supersedes SDS:** 439-3227-3160-0000-20

Manufacturer: Hexcel[®] 1913 N. King Street Seguin, TX. 78155 **Emergency Telephone Number:** 800-433-5072 (24-Hour) Hexcel[®]

Information Telephone Number: 830-379-1580 (Normal Business Hours-CT)

Product Identification: HexForceTM F3 and F16 Finish: Fiberglass

Chemical Family: Woven Fiberglass Fabric using E-Glass or S2 Glass Fibers with a Chromium (Cr³⁺) Methacrylate Finish applied.

Section 2: COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS [®] Number	% by Weight	OSHA (PEL)	ACGIH [®] (TLV [®])
Fiberglass fiber, synthetic, vitreous, continuous filament	65997-17-3	98.8-99.9	15 mg/m ³ (Total) 5 mg/m ³ (Respirable)	5 mg/m ³ (Inhalable) 1 f/cc (Respirable)

This product is not classified as a Hazardous Chemical as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200

Where specific exposure limits for component dusts are not established, the levels provided for (Total/Inhalable) dust and (Respirable) fraction reflect the classification of Particulate Not Otherwise Regulated (PNOR) by OSHA or Classified (PNOC) by ACGIH[®].

Section 3: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:

Appearance and Odor:

White fibers, with a greenish tint, woven into fabrics of varying weight, width and thickness, depending on the style, with a finish applied, with no distinctive odor. There may be a sealant applied to the edges of slit fabrics (less-than-full-width) to prevent fibers unwinding during use.

Statement of Hazard:

Warning! This may cause temporary mechanical irritation of the eyes, skin or upper respiratory tract.

Dust or particulate from machining, grinding or sawing the cured product may cause skin, eye and upper respiratory irritation and possible dermatitis.

Section 3: HAZARDS IDENTIFICATION (Continued)

Primary Routes of	Exposure:		
EyesYes	SkinYes	InhalationYes	IngestionNo
HMIS [®] Rating:			-
Health1	Flammability0	Reactivity0	SpecialNone

Potential Health Effects:

Eye: Contact may cause mechanical irritation to the eyes. Dust or particulate from machining, grinding or sawing the cured product may cause mechanical irritation.

Skin: Contact may cause mechanical irritation to the skin and possible dermatitis at clothing contact pressure points such as cuffs or collars. Dust or particulate from machining, grinding or sawing the cured product may cause mechanical irritation and possible dermatitis.

Inhalation: May cause mechanical irritation to the upper respiratory tract. Dust or particulate from machining, grinding or sawing the cured product may cause mechanical irritation to the upper respiratory tract.

Ingestion: Very unlikely. If a large amount of the product or the dust or particulate from the machining, grinding or sawing the cured is swallowed, seek medical attention immediately.

Medical Conditions Aggravated By Exposure: Preexisting conditions such as respiratory or skin disorders may be aggravated by exposure to the product or to the dust or particulate from machining, grinding or sawing the cured product.

Carcinogenic Information: None of the finish components present in this material at concentrations equal to or greater than 0.1 % are listed or regulated by NTP, OSHA or ACGIH[®] as a carcinogen. Glass filament is listed by IARC as Group 3 (not classifiable as to a human carcinogen).

Other:	OSHA (PEL)	ACGIH [®] (TLV [®])
Exposure limits for cured product dust as [Particulate Not Otherwise Regulated (PNOR) by OSHA or Classified (PNOC) by ACGIH [®]]:	15 mg/m ³ (Total) 5 mg/m ³ (Respirable)	10 mg/m ³ (Inhalable) 3 mg/m ³ (Respirable)

Section 4: FIRST AID MEASURES

Eye: In case of contact with the product or the cured product dust or particulate, immediately flush eyes with large amounts of water for at least 15 minutes, keeping the eyelids open. Get medical attention immediately.

Skin: In case of contact with the product or the cured product dust or particulate, immediately wash skin with mild soap and room temperature to cool running water. Use a washcloth to help remove the fibers. To avoid further irritation, do not rub or scratch irritated areas. Rubbing or scratching may force fibers into the skin. Get medical attention immediately if the irritation persists.

Section 4: FIRST AID MEASURES (Continued)

Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. If breathing is difficult, qualified personnel may administer oxygen. Get medical attention immediately.

Ingestion: Ingestion of the product or the dust or particulate from it is unlikely. If swallowed, get medical attention immediately.

Section 5: FIRE FIGHTING MEASURES

Flash Point Method of Determination: Not determined

Means of Extinction: Use water spray, dry chemical or CO₂ to extinguish fires.

Special Fire Hazards: Avoid exposure through use of a self-contained, positive-pressure breathing apparatus.

Section 6: ACCIDENTAL RELEASE MEASURES

Procedures in case of Accidental Release or Leakage: Avoid contact with skin, eyes or clothing (See Section 8). Clean up material, put into a suitable container and dispose of properly (See Section 13).

Section 7: HANDLING AND STORAGE

Precautions to be taken in Handling and Storage: Store in a cool, dry place. Maintain sealed against contamination from dirt and moisture.

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Eye/Face Protection: Avoid eye contact. Wear coverall goggles, as necessary, to prevent irritation, if airborne dust, fibers or particulate are present. Wear safety glasses with side shields, as necessary, if airborne dust, fibers or particulate are present when machining, grinding or sawing the cured product.

Skin Protection: Wear protective clothing such as a loose fitting, long sleeved shirt that covers to the base of the neck, long pants and gloves, as necessary, to prevent irritation. Skin irritation is known to occur primarily at pressure points such as around the neck, wrist, waist and between the fingers.

Respiratory Protection: Not ordinarily required. If sufficient dust, fibers or particulate are generated during use of the product or when machining, grinding or sawing the cured product, use a NIOSH approved dust respirator.

Ventilation: Use local exhaust sufficient to control dust, fibers or particulate generated. If an exhaust ventilation is not available or is inadequate, use a NIOSH approved dust respirator.

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (Continued)

General Hygiene Recommendations: Before eating, drinking, smoking or using toilet facilities, wash face and hands thoroughly with soap and water. Remove any contaminated clothing and launder before reuse. Use vacuum equipment to remove fibers, dust or particulate from clothing and work areas. Compressed air is not recommended.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

weig appli to the	dor White fibers, with a greenish tint, woven into fabrics of varying weight, width and thickness, depending on the style, with a finish applied, with no distinctive odor. There may be a sealant applied to the edges of slit (less-than-full-width) fabrics to prevent fibers unwinding during use.			
Melting Point (°F/°C)	>1292°F/>700°C			
Specific Gravity (Water=1)				
pH of Undiluted Product	Not determined			
Volatile [Percent (%) by Weig	ht] 0			
Percent (%) VOC	Same as the % Volatile Content			
Solubility in Water	Insoluble			

Section 10: STABILITY AND REACTIVITY

Stability: Stable under proper handling and storage conditions

Incompatible Materials: None

Products evolved from Heat of Combustion or Decomposition: The products of combustion and decomposition depend on other materials present in the fire and the actual conditions of the fire. Burning will decompose the finish and release carbon, nitrogen and silicon oxides, water, ammonia, hydrogen chloride, traces of incompletely burned carbon products and other unidentified gases and vapors that may be toxic. Avoid inhalation.

Hazardous Polymerization: Will not occur under proper conditions of use. Rapid heating of the product in bulk may produce an uncontrolled exothermic reaction that may char and decompose the finish, generating unidentified gases and vapors that may be toxic. Avoid inhalation.

Section 11: TOXICOLOGICAL INFORMATION

Component Toxicity Data:

Median Lethal Dose (Species):

Oral (LD_{50}) ...Not determined Inhalation (LC_{50}) ...Not determined Dermal (LD_{50}) ...Not determined

Irritation Index, Estimation of Irritation (Species): Skin...Not determined

Eye...Not determined Inhalation...Not determined

Section 12: ECOLOGICAL INFORMATION

No ecological data has been determined.

Section 13: DISPOSAL CONSIDERATIONS

Waste Disposal Methods: Material for disposal should be placed in appropriate sealed containers to avoid potential human and environmental exposure. It is the responsibility of the generator to comply with all federal, state, provincial and local laws and regulations. We recommend that you contact an appropriate waste disposal contractor and environmental agency for relevant laws and regulations. Under the U.S., Resource Conservation and Recovery Act (RCRA), it is the responsibility of the user of the product to determine at the time of disposal, whether the product meets relevant waste classification.

Section 14: TRANSPORT INFORMATION

DOT:

Proper Shipping Name	Not regulated
Hazard Class	Not regulated
Identification Number	Not regulated
Packing Group	Not regulated
Label Required	None

Section 15: REGULATORY INFORMATION

SARA Title III:

Section 302/304 Extremely Hazardous Substance: None

Section 311 Hazardous Categorization: None

Section 313 Toxic Chemicals: None

CERCLA Section 102(A) and Hazardous Substance: None

RCRA Information: Currently, this product is not listed in federal hazardous waste regulations 40 CFR, Part 261.33, paragraphs (e) or (f), i.e. chemical products that are considered hazardous if they become wastes. State or local hazardous waste regulations may also apply if they are different from the federal regulation. It is the responsibility of the user of the product to determine at the time of disposal, whether the product meets relevant waste classification and to assure proper disposal.

WHMIS (Canada):

Classification: None

Section 15: REGULATORY INFORMATION (Continued)

WHMIS (Canada) (continued):

"This product has been classified in accordance with hazard criteria of the "Controlled Products Regulations" and this SDS contains all the information required by the "Controlled Products Regulations."

Ingredient Disclosure List: None

U.S., EPA and TSCA Information: This product is an article as defined by TSCA and is not required to be listed in the TSCA Inventory.

Ozone Depletion Information: This product does not contain or is not manufactured with ozone depleting substances as identified in Title VI, Clean Air Act "Stratospheric Ozone

Section 16: OTHER INFORMATION

Special Precautions: None

Explanation and Disclaimer: Wherever such words or phrases as "hazardous," "toxic," "carcinogen," etc. appear herein, they are used as defined or described under state employee right-to-know laws, Federal OSHA laws or the direct sources for these laws such as the International Agency for Research on Cancer (IARC), the National Toxicology Program (NTP), etc. The use of such words or phrases should not be taken to mean that we deem or imply any substance or exposure to be toxic, hazardous or otherwise harmful. Any exposure can only be understood within the entire context of its occurrence, which includes such factors as the substance's characteristics as defined in the SDS, amount and duration of exposures, other chemicals present and preexisting individual differences in response to the exposure.

The data provided in this SDS is based on the information received from our raw material suppliers and other sources believed to be reliable. We are supplying you this data solely in compliance with the Federal OSHA Hazard Communication Standard, 29 CFR 1910.1200 and other Federal and state laws as described in Section 15: Regulatory Information.

The information contained in this SDS is proprietary and confidential to Hexcel Corporation. This SDS and the information in it are not to be used for purposes other than compliance with the Federal OSHA Hazard Communication Standard. If you have received this SDS from any other source than Hexcel Corporation or its authorized agent, the information contained in it may have been modified from the original document and it may not be the most current revision.

Liability, if any, for use of this product is limited to the terms contained in our sale terms and conditions. We do not in any way warrant (expressed or implied, including any implied warranty for merchantability or fitness for a particular purpose) the data contained or the product described in this SDS. Additionally, we do not warrant that the product will not infringe any patent or other proprietary or property rights of others.

Section 16: OTHER INFORMATION (Continued)

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Revision History:

12/10/12 update address, change date per Canadian 3 year law
12/18/09 update description
01/28/09 deleted "CS" nomenclature
10/01/07 changed information telephone number and updated contacts
03/19/07 deleted Prop 65, product is not manufactured in Calif.