



# Safety Data Sheet

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## Section 1: PRODUCT AND COMPANY IDENTIFICATION

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**SDS Identification:** HexForce™ F3 and F16 Finish

**SDS Number:** 439-3227-4055-316G-20    **Date:** December 1, 2009    **Page:** 1 of 7

**Supersedes SDS:** 439-3227-3160-0000-19

**Manufacturer:**

Hexcel®  
11711 Dublin Blvd.  
Dublin, CA 94568

**Emergency Telephone Number:**

800-433-5072 (24-Hour) Hexcel®

**Information Telephone Number:**

830-379-1580 (Normal Business Hours-CT)

**Product Identification:** HexForce™ F3 and F16 Finish: Fiberglass

**Chemical Family:** Woven Fiberglass Fabric using E-Glass or S2 Glass Fibers with a Chromium (Cr<sup>3+</sup>) Methacrylate Finish applied.

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## Section 2: COMPOSITION/INFORMATION ON INGREDIENTS

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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 <sup>3</sup> (Total) 5 mg/m <sup>3</sup> (Respirable)	5 mg/m <sup>3</sup> (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®.**

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## Section 3: HAZARDS IDENTIFICATION

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**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! 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:**

Eyes--Yes                      Skin--Yes                      Inhalation--Yes                      Ingestion--No

**HMIS® Rating:**

Health--1                      Flammability--0                      Reactivity--0                      Special--None

**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).

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

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**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.

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#### Section 5: FIRE FIGHTING MEASURES

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**Flash Point Method of Determination:** Not determined

**Means of Extinction:** Use water spray, dry chemical or CO<sub>2</sub> to extinguish fires.

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

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#### Section 6: ACCIDENTAL RELEASE MEASURES

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**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).

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#### Section 7: HANDLING AND STORAGE

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

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#### Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

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**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)

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**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.

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### Section 9: PHYSICAL AND CHEMICAL PROPERTIES

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**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 (less-than-full-width) fabrics to prevent fibers unwinding during use.

**Melting Point (°F/°C)**..... >1292°F/>700°C

**Specific Gravity (Water=1)**..... 2.60

**pH of Undiluted Product**.....Not determined

**Volatile [Percent (%) by Weight]**..... 0

**Percent (%) VOC**.....Same as the % Volatile Content

**Solubility in Water**..... Insoluble

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### Section 10: STABILITY AND REACTIVITY

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**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.

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### Section 11: TOXICOLOGICAL INFORMATION

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**Component Toxicity Data:**

**Median Lethal Dose (Species):**

Oral (LD<sub>50</sub>)...Not determined

Inhalation (LC<sub>50</sub>)...Not determined

Dermal (LD<sub>50</sub>)...Not determined

**Irritation Index, Estimation of Irritation (Species):**

Skin...Not determined

Eye...Not determined

Inhalation...Not determined

**Section 12: ECOLOGICAL INFORMATION**

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No ecological data has been determined.

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**Section 13: DISPOSAL CONSIDERATIONS**

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**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.

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**Section 14: TRANSPORT INFORMATION**

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**DOT:**

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

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**Section 15: REGULATORY INFORMATION**

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**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)

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### 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"

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## Section 16: OTHER INFORMATION

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**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.

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**Section 16: OTHER INFORMATION (Continued)**

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**Revision History:**

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.