



SECTION 1: Identification

Product identifier used on the label:

Product Name: SANCTUARY Defense

Other means of identification:

Synonyms: None known

Product Code Number: INSSANCDEF

Recommended use of the chemical and restrictions on use:

Recommended use: Cellulose based insulation.

Recommended restrictions: Uses other than those described above.

Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party (product may be produced in all Greenfiber facilities):

Company Name: Applegate Greenfiber Acquisition, LLC

Company Address: 5500 77 Center Drive Ste 100

Charlotte, NC. 28217, USA

Company Telephone: 800.228.0024 (8am – 4pm)

Company Contact: Jerry Kaputa

Company Email: jerry.kaputa@greenfiber.com

Emergency Phone Number: 800.228.0024

SECTION 2: Hazard(s) Identification

Classification of the chemical in accordance with paragraph (d) of §1910.1200:

Not classified as hazardous under OSHA HSC 2012

GHS Signal word: None Required

GHS Hazard statement(s): None required.

GHS Hazard symbol(s): None required.

GHS Precautionary statement(s): None required.

Hazard(s) not otherwise Classified (HNOC):

None known.

Note: This product contains cellulose fiber which may be classified as a combustible dust. However, this product is treated with a fire retardant, and therefore this classification is not applicable.

Percentage of ingredient(s) of unknown acute toxicity: Not applicable

SECTION 3: Composition/Information on Ingredients

Chemical name	CAS#	Concentration (weight %)
Cellulose Fiber	65996-61-4	Up to 85%
Boric Acid	10043-35-3	Up to 15%

Note: The balance of the ingredients is not classified as hazardous or are below the concentration limit to be classified as hazardous, under the criteria of the Federal OSHA Hazard Communication Standard 29CFR 1910.1200.

SECTION 4: First-aid Measures

Description of necessary measures, subdivided according to the different routes of exposure, i.e., inhalation, skin and eye contact, and ingestion:

Inhalation: Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Oxygen should only be administered by qualified personnel. Seek medical advice.

Skin contact: Wash with water and soap and rinse thoroughly. Seek medical advice if irritation or pain develops.

Eye contact: In case of contact with eyes, flush with water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

Ingestion: Do NOT induce vomiting. If swallowed, wash mouth out with water provided the person is conscious. NEVER GIVE LIQUIDS TO AN UNCONSCIOUS PERSON. Call a physician.

Most important symptoms/effects, acute and delayed:

Handling and / or processing this material may generate a dust which can cause irritation of the skin.

Indication of immediate medical attention and special treatment needed:

If any symptoms are observed, contact a physician and give them this SDS sheet. Treat symptomatically.

SECTION 5: Fire-fighting Measures

Suitable (and unsuitable) extinguishing media:

Suitable extinguishing media: Dry chemical, foam, water spray, carbon dioxide.

Unsuitable extinguishing media: None known.

Specific hazards arising from the chemical (e.g., nature of any hazardous combustion products):

None expected.

Hazardous combustion products may include the following substances: Carbon monoxide, carbon dioxide, sulfur products, boron and calcium oxides.

Special protective equipment and precautions for fire-fighters:

Use water spray or fog for cooling exposed containers. As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

Evacuate all non-emergency personnel from area. In addition, wear other appropriate protective equipment as conditions warrant (see Section 8).

SECTION 6: Accidental Release Measures

Personal precautions, protective equipment and emergency procedures:

No action shall be taken involving any personal risk or without suitable training. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through the spilled material. Avoid breathing vapors. Minimize contact with skin or eyes. Provide adequate ventilation. Wear appropriate protective equipment, as conditions warrant (see Section 8).

See Sections 2 and 7 for additional information on hazards and precautionary measures.

Environmental precautions:

Stop spill/release if it can be done safely. Prevent spilled material from entering sewers, storm drains, other unauthorized drainage systems, and natural waterways.

Methods and material for containment and cleaning up:

Vacuum or sweep up material and place into a suitable disposal container. Clean up spills immediately, observing precautions in the Protective Equipment section. Avoid generating dusty conditions. Provide ventilation. Dispose of via a licensed waste disposal contractor. See Section 1 for emergency contact information and Section 13 for waste disposal.

SECTION 7: Handling and Storage

Precautions for safe handling:

Use local and general ventilation. Wear recommended personal protective equipment (See Section 8). Avoid breathing dusts. Avoid contact with eyes, skin and clothing. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

Conditions for safe storage, including any incompatibles:

Keep only in original container. Store in a dry, well-ventilated place. Keep container closed when not in use. Make sure containers are properly labeled. Store away from incompatible materials.

Incompatible materials: Strong oxidizing agents, strong bases, incompatible with bromine pentafluoride, sodium nitrate, fluorine.

SECTION 8: Exposure Controls/Personal Protection

OSHA permissible exposure limit (PEL), American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Value (TLV), and any other exposure limit used or recommended by the chemical manufacturer, importer, or employer preparing the safety data sheet, where available.

Substance	OSHA PEL	ACGIH TLV	NIOSH IDLH
Cellulose Fiber	TWA: 15 mg/m ³ (total particulate) 5 mg/m ³ (respirable particulate).	TWA: 10 mg/m ³ (total particulate) 3 mg/m ³ (respirable particulate).	TWA: 10 mg/m ³ (total particulate) 5 mg/m ³ (respirable particulate).
Boric Acid	None known	TWA: 2 mg/m ³ STEL: 6 mg/m ³	None known

Appropriate engineering controls:

- Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits.
- Provide eyewash station. Eye wash fountain and emergency showers are recommended.
- Concentrations should be monitored for hazardous substances in the workplace in accordance with recognized test methods. Mode, method, type and frequency of testing and measurement of harmful factors in the working environment should meet the requirements of local/regional/national laws.

Individual protection measures, such as personal protective equipment:

Eye/face protection: Wear appropriate protective eyeglasses or chemical safety goggles. Use equipment for eye protection tested and approved under ANSI standards.

Skin and hand protection: Wear protective gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices.

Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: Chemical resistant apron.

Respiratory protection: No personal respiratory protective equipment is normally required. Where risk assessment shows the need for respiratory protection, use supplied air or a self-contained breathing apparatus containing air, operated in positive pressure mode which has been recommended or approved by an appropriate agency.

General hygiene considerations: Avoid contact with skin, eyes and clothing. When using, do not eat, drink or smoke. Wash hands before breaks and immediately after handling the product.

SECTION 9: Physical and Chemical Properties

Appearance (physical state, color, etc.):

Physical state:	Solid
Color:	Gray/Brown
Odor:	Odorless
Odor threshold:	Not determined
pH:	<8.2
Melting point/freezing point:	Not determined
Initial boiling point and boiling range:	Not determined
Flash point:	Not determined
Evaporation rate:	Not determined
Flammability (solid, gas):	Not applicable
Upper/lower flammability or explosive limits	
Flammability limit – lower (%):	Not applicable
Flammability limit – upper (%):	Not applicable
Vapor pressure:	Negligible @ 20C
Vapor density:	Not determined

Relative density:	9 lb/ft ³ compressed
Solubility (ies):	Not soluble
Partition coefficient (n-octanol/water):	Not determined
Auto-ignition temperature:	Not applicable
Decomposition temperature:	Not determined
Viscosity:	Not determined

SECTION 10: Stability and Reactivity

Reactivity:	Not reactive under recommended storage and handling conditions.
Chemical stability:	Stable under recommended storage and handling conditions.
Possibility of hazardous reactions:	None expected under recommended storage and handling conditions.
Conditions to avoid:	Incompatible products. Excess heat. Avoid dust formation. Exposure to moisture.
Incompatible materials:	Strong oxidizing agents, strong bases, incompatible with bromine pentafluoride, sodium nitrate, fluorine.
Hazardous decomposition products:	Carbon monoxide, carbon dioxide, sulfur products, boron and calcium oxides.

SECTION 11: Toxicological Information

Information on likely routes of exposure:

Inhalation:	Expected to be a route of exposure.
Ingestion:	Expected to be a route of exposure.
Skin:	Expected to be a route of exposure.
Eyes:	Expected to be a route of exposure.

Target organs: Eyes, Skin, Digestion tract, Respiratory system

Symptoms related to the physical, chemical, and toxicological characteristics:

Handling and / or processing this material may generate a dust which can cause irritation of the skin and eyes.

Delayed and immediate effects and chronic effects from short or long-term exposure:

None known

Numerical measures of toxicity (such as acute toxicity estimates):

Acute toxicity: Does not meet the criteria for classification.

Safety Data Sheet

Substance	Test Type (species)	Value
Cellulose Fiber	LD ₅₀ Oral (Rat)	> 2000 mg/kg
	LD ₅₀ Dermal (Rabbit)	> 2000 mg/kg
	LC ₅₀ Inhalation (Rat)	> 5800 mg/m ³ 4h
Boric Acid	LD ₅₀ Oral (Rat)	3765 mg/kg
	LD ₅₀ Dermal (Rabbit)	> 2000 mg/kg
	LC ₅₀ Inhalation (Rat)	> 2.03 mg/L air 5h

Skin corrosion/irritation:	Does not meet the criteria for classification.
Serious eye damage/eye irritation:	Does not meet the criteria for classification.
Respiratory sensitization:	Does not meet the criteria for classification.
Skin sensitization:	Does not meet the criteria for classification.
Germ cell mutagenicity:	Does not meet the criteria for classification.
Carcinogenicity:	Does not meet the criteria for classification.
Reproductive toxicity:	Does not meet the criteria for classification.
Specific target organ toxicity- Single exposure:	Does not meet the criteria for classification.
Specific target organ toxicity- Repeat exposure:	Does not meet the criteria for classification.
Aspiration hazard:	Does not meet the criteria for classification.

Whether the hazardous chemical is listed in the National Toxicology Program (NTP) Report on Carcinogens (latest edition) or has been found to be a potential carcinogen in the International Agency for Research on Cancer (IARC) Monographs (latest edition), or by OSHA:

Component	IARC	NTP	ACGIH	OSHA
Cellulose Fiber	Not listed	Not listed	Not listed	Not listed
Boric Acid	Not listed	Not listed	Not listed	Not listed

SECTION 12: Ecological Information

Ecotoxicity (aquatic and terrestrial, where available):

Substance	Test Type	Species	Value
Cellulose Fiber	LC ₅₀	Fish	None known
	EC ₅₀	Aquatic Invertebrates	None known
	EC ₅₀	Algae	None known
Boric acid	LC ₅₀	Fish <i>Pimephales promelas</i>	79.7 mg/L
	EC ₅₀	Aquatic Invertebrates <i>Litopenaeus vannamei</i>	130 mg/L 48h
	EC ₅₀	Algae <i>Pseudokirchneriella subcapitata</i>	52.4 mg/L 72h

Persistence and degradability: No data available for the product

Bioaccumulative potential: No data available for the product

Mobility in soil: No data available for the product

Other adverse effects (such as hazardous to the ozone layer): None known.

SECTION 13: Disposal Considerations

Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging.

Product

Do not allow product to reach the sewage system. Collect and reclaim or dispose of sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.

Contaminated packaging

Since emptied containers retain product residue, follow label warnings even after container is emptied. Dispose of as unused product.

SECTION 14: Transport Information

US Department of Transportation Classification (49CFR): Not classified as dangerous for transport

IMDG (Transport by sea): Not classified as dangerous for transport

IATA (Country variations may apply): Not classified as dangerous for transport

Environmental hazards: Marine pollutant: No

Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code): No further relevant information is available.

Special precautions which a user needs to be aware of, or needs to comply with, in connection with transport or conveyance either within or outside their premises.

Do not transport with food and feedstuffs.

SECTION 15: Regulatory Information

USA:

United States Federal Regulations: This SDS complies with the OSHA, 29 CFR 1910.1200. The product is classified as non-hazardous under OSHA.

Toxic Substances Control Act (TSCA) – Components in this product are either listed or exempted from listing on the TSCA inventory.

CERCLA RQ (lbs) Ingredients (> 0.1%): None of the components are listed.

SARA Superfund and Reauthorization Act of 1986 Title III sections 302, 311, 312 and 313:

Section 302 Extremely Hazardous Substance (40 CFR 355, Appendix A) (> 0.1%):

None of the components are listed.

Section 311/312 (40 CFR 370) (> 0.1%): None known

Section 313 Toxic Release Inventory (40 CFR 372) (> 0.1%): None of the components are listed.

STATE REGULATIONS:

This SDS contains specific health and safety data that is applicable for state requirements. For details on your regulatory requirements, you should contact the appropriate agency in your state.

California Proposition 65 (California Safe Drinking Water and Toxic Enforcement Act of 1986):

None of the components are listed.

Massachusetts Right to Know:

None of the components are listed on the Massachusetts Right to Know list.

New Jersey Right to Know:

None of the components are listed on the New Jersey Right to Know list.

Pennsylvania Right to Know:

None of the components are listed on the Pennsylvania Right to Know list.

SECTION 16: Other Information

Revision Date: January 23, 2025

DISCLAIMER: To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.