

Section 1 – Product Name & Company Identification

Product name: Natur-Tec® BF703B
Chemical name: compostable resin for Film Extrusion
Product use: Plastic
Company name: Northern Technologies Intl. Corp.
 4201 Woodland Rd., PO Box 69
 Circle Pines, MN 55014
MSDS Date Created: December 26, 2007

Emergency Response Information:
(24 hours/day 7 days/week)
CHEMTREC
Emergency Phone: +1 (800) 424-9300 or +1 (703) 527-3887
NTIC Technical Phone: +1 (763) 225-6600

Revision date: 2012/03/22 Version: 4-4.3-12-1-281-Rev D

Section 2 – Composition/Constituent Details

Chemical name:
 Compounded Biopolymer CAS #
 >70% compostable polyester(s) 55231-08-8
 < 30% inorganic filler and additive package

Section 3 – Possible Hazards

THIS® Hazard Rating: Health -1, Flammability -1, Chemical Reactivity -0

CAUTION: CAN CAUSE THERMAL BURNS. MAY CAUSE EYE, SKIN AND RESPIRATORY TRACT IRRITATION

Potential health effects -

Primary routes of exposure: Routes of entry for solids and liquids include eye and skin contact, ingestion and inhalation. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquefied gases.
Acute toxicity: Contact with molten product may cause thermal burns. The resin in pellet form poses a low hazard.
Irritation: Frequent and prolonged contact may lead to skin irritation.
Sensitization: No data available concerning sensitizing effects.
Repeated dose toxicity: No data available concerning repeated dose toxicity.
Medical conditions aggravated by overexposure: Data available does not indicate any medical conditions that are generally recognized as being aggravated by exposure to this substance/product.

Section 4 – First Aid Procedures

Inhalation: Remove affected individual into fresh air and keep the person calm. If difficulties occur, seek medical attention.
Skin: Areas affected by molten material should be quickly placed under cold running water. Burns caused by molten material require hospital treatment. Seek medical assistance for removal of adhering material.
Eyes: In case of contact with the eyes, rinse immediately for at least 15 minutes with plenty of water. If irritation develops, seek medical attention.
Ingestion: No hazards anticipated. Rinse mouth and drink plenty of water. If difficulties occur, seek medical attention.
Note to physician: Treat according to the symptoms under clinical conditions.

Section 5 – Firefighting Procedures

Flash point: > 550°F (287°C) (ASTM D1929)
Autoignition: > 752°F (400°C) (ASTM D1929)
Suitable extinguishing media: Water, foam, dry extinguishing media
Protective equipment for firefighting: Firefighters should be equipped with a self-contained breathing apparatus and turn-out gear.
Further information: When large quantities of solid substance/product are involved, melting may occur, in which condition, application of water may cause extensive scattering of molten material.

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Section 6 – Procedures in the Event of Accidental Release

Personal precautions:	Avoid inhalation. Avoid contact with skin, eyes and clothing. Sources of ignition should be kept well clear.
Clean-up:	Avoid raising dust. Ensure adequate ventilation. After decontamination, spill area can be washed with water. For small amounts: Sweep or shovel up. For large amounts: Sweep or shovel up. Vacuum up spilled product.
Further information:	High risk of slipping due to leakage/spillage of product.

Section 7 – Handling & Storage

Handling-

Protection against fire & explosion: Avoid dust formation. Provide exhaust ventilation. Dust can form an explosive mixture with air.

Storage-

General advice: Keep container tightly closed and dry; store in a cool place. Avoid extreme heat. Avoid direct sunlight. Avoid all sources of ignition (e.g. heat, sparks and open flame).

Storage incompatibility: Segregate from strong oxidizing agents.

Storage stability: Avoid prolonged storage at high temperatures.

Section 8 – Exposure Limited & Individual Protective Equipment

Advice on system design: Provide exhaust ventilation at sources when processing molten product. Provide local exhaust ventilation to control dusts/vapors.

Individual Protective Equipment-

Respiratory protection: Respiratory protection is not required under normal operating conditions if adequate ventilation is provided. Wear respiratory protection if ventilation is inadequate.

Hand protection: Chemical resistant, protective gloves should be worn. Use additional heat protection gloves (e.g. textile or leather) when handling hot molten masses.

Eye protection: Wear safety glasses with side-shields. Splash goggles should be worn to protect from hot molten substance/product.

Body protection: Body protection must be chosen based on level of activity and exposure.

General safety & hygiene measures: Avoid contact of molten material with skin. Avoid contact with the skin, eyes and clothing. Avoid inhalation of dusts/mists/vapors. Eye wash fountains and safety showers must be easily accessible. Handle in accordance with good industrial hygiene and safety practice.

Section 9 – Physical & Chemical Properties

Appearance & odor:	Off-white, beige pellet with faint odor
Boiling point:	N/A
Specific gravity:	1.3 – 1.4
Water solubility:	Insoluble
Reactivity in water:	None
Melting point:	230 - 248°F (110-120°C)
Thermal decomposition temperature	536°F (280°C)

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Section 10 – Stability & Reactivity

Material is:	Stable
Hazardous polymerization:	Will not occur
Conditions to avoid:	Flames, oxidizers, strong reducing agents, acids
Substances to avoid	Chlorinated hydrocarbons, aromatic solvents
Possible thermal decomposition products:	Gases/vapor, monomers, oxides, hydrocarbons
Corrosion to metals:	No corrosive effect on metal

Section 11 – Toxicology Information

Based on our experience and the information available, no adverse health effects are expected if handled as recommended with suitable precautions for designated uses.

Section 12 – Ecological Information

At the present state of knowledge, no negative ecological effects are expected. Material undergoes complete biodegradation under aerobic composting environment per ISO 14855 and ASTM D5338.

Section 13 – Instructions on Disposal

Waste disposal of substance:	This product is not regulated by RCRA This product is not regulated by CERCLA ("Superfund") Dispose of in accordance with federal, state and local regulations Do not discharge into waterways or sewer systems without proper authorization
Contaminated packaging:	Dispose of in accordance with federal, state and local regulation. Uncontaminated packaging can be recycled.

Section 14 – Transport Details

Proper shipping name:	Not regulated by DOT/IATA/IMDG
DOT Shipping class:	N/A
DOT Hazard classification:	N/A
DOT Labels:	N/A
DOT Placard:	N/A
Identification number:	N/A
DOT Markings:	N/A
Hazardous Substance/RQ:	N/A

Section 15 – Regulatory Information

SARA Information:	To the best of our knowledge, this product contains no chemical subject to SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65) or CERCLA (40 CFR 302.4).
Toxic Substances Control Act (TSCA):	All ingredients are on the TSCA inventory or are not required to be listed on the TSCA inventory.
OSHA Hazard Communication Standard:	This product is not a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard 29 CFR 1910, 1200.

Section 16 – Additional Information

The information contained herein is based on the present state of our knowledge. All data given are in good faith but no warranty, expressed or implied, is made.

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