

Natur-Tec®

SAFETY DATA SHEET

Film Extrusion Masterbatch (BF 700Z-X)

According to Appendix D, OSHA Hazard Communication Standard 29 CFR §1910.1200

1. Identification

Product identifier

Product name Film Extrusion Masterbatch (BF 700Z-X)

Synonyms; trade names Natur-Tec® BF 700Z-X (BF703B-X)

Recommended use of the chemical and restrictions on use

Application Additive

Uses advised against No specific uses advised against are identified.

Details of the supplier of the safety data sheet

Manufacturer Northern Technologies International Corporation
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Circle Pines, MN 55014 - United States
+1 763-225-6600
+1 763-225-6645
sds@ntic.com

Emergency telephone number

Emergency telephone Carechem +1 202 464 2554; Outside US/Canada +44 1865 407333 (24 hours; 7 days/week)

2. Hazard(s) identification

Classification of the substance or mixture

OSHA Regulatory Status This Product is Not Hazardous under the OSHA Hazard Communication Standard.

Physical hazards Not Classified

Health hazards Not Classified

Environmental hazards Not Classified

Label elements

Hazard statements NC Not Classified

Other hazards

This product does not contain any substances classified as PBT or vPvB.

3. Composition/information on ingredients

Mixtures

Composition comments None of the ingredients are required to be listed.

4. First-aid measures

Description of first aid measures

General information No special treatment required.

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Inhalation	No special treatment required.
Ingestion	Get medical attention.
Skin Contact	No special treatment required.
Eye contact	No special treatment required.
Protection of first aiders	No specific requirements are anticipated under normal conditions of use.

Most important symptoms and effects, both acute and delayed

General information	The product is considered to be a low hazard under normal conditions of use.
Inhalation	Temporary irritation.
Ingestion	May cause discomfort if swallowed.
Skin contact	May cause discomfort.
Eye contact	May be slightly irritating to eyes.

Indication of immediate medical attention and special treatment needed

Notes for the doctor	Treat symptomatically.
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5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media	Extinguish with foam, carbon dioxide, dry powder or water fog.
Unsuitable extinguishing media	None known.

Special hazards arising from the substance or mixture

Specific hazards	None known.
Hazardous combustion products	Carbon dioxide (CO ₂). Carbon monoxide (CO).

Advice for firefighters

Protective actions during firefighting	Avoid breathing fire gases or vapors.
Special protective equipment for firefighters	Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. Standard Firefighter's clothing including helmets, protective boots and gloves will provide a basic level of protection for chemical incidents.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions	No specific recommendations. For personal protection, see Section 8.
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Environmental precautions

Environmental precautions	Avoid discharge into drains or watercourses or onto the ground.
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Methods and material for containment and cleaning up

Methods for cleaning up	Reuse or recycle products wherever possible. Collect spillage with a shovel and broom, or similar and reuse, if possible.
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Reference to other sections	For personal protection, see Section 8. For waste disposal, see Section 13.
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7. Handling and storage

Precautions for safe handling

Usage precautions Read and follow manufacturer's recommendations. Wear protective clothing as described in Section 8 of this safety data sheet. Keep away from food, drink and animal feeding stuffs. Keep container tightly sealed when not in use.

Advice on general occupational hygiene Wash promptly if skin becomes contaminated. Take off contaminated clothing and wash before reuse. Wash contaminated clothing before reuse.

Conditions for safe storage, including any incompatibilities

Storage precautions Store away from incompatible materials (see Section 10). No specific recommendations.

Storage class Unspecified storage.

Specific end uses(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.

8. Exposure controls/Personal protection

Control parameters

Occupational exposure limits

No exposure limits known for ingredient(s).

Exposure controls

Appropriate engineering controls Provide adequate ventilation. Personal protective equipment should only be used if worker exposure cannot be controlled adequately by the engineering control measures.

Personal protection As supplied, the material does not present a health hazard.

Eye/face protection Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible.

Hand protection Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible.

Other skin and body protection Appropriate footwear and additional protective clothing complying with an approved standard should be worn if a risk assessment indicates skin contamination is possible.

Hygiene measures Wash at the end of each work shift and before eating, smoking and using the toilet. When using do not eat, drink or smoke.

Respiratory protection Respiratory protection complying with an approved standard should be worn if a risk assessment indicates inhalation of contaminants is possible.

Environmental exposure controls Keep container tightly sealed when not in use.

9. Physical and chemical properties

Information on basic physical and chemical properties

Appearance Pellets.

Color Natural

Odor Characteristic.

Odor threshold No data available.

pH No data available.

Melting point 120-180°C

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Initial boiling point and range	No data available.
Flash point	Not applicable.
Evaporation rate	No data available.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	Not applicable.
Vapor pressure	No data available.
Vapor density	No data available.
Relative density	1.2-1.4 g/cm ³
Solubility(ies)	No data available.
Partition coefficient	No data available.
Auto-ignition temperature	No data available.
Decomposition Temperature	250°C
Viscosity	No data available.
Explosive properties	Not applicable.
Oxidizing properties	Not applicable.
Other information	None.

10. Stability and reactivity

Reactivity	Not applicable.
Stability	Stable under the prescribed storage conditions.
Possibility of hazardous reactions	No potentially hazardous reactions known.
Conditions to avoid	There are no known conditions that are likely to result in a hazardous situation.
Materials to avoid	No specific material or group of materials is likely to react with the product to produce a hazardous situation.
Hazardous decomposition products	Thermal decomposition or combustion products may include the following substances: Harmful gases or vapors.

11. Toxicological information

Information on toxicological effects

Acute toxicity - oral

Summary Based on available data the classification criteria are not met.

Acute toxicity - dermal

Summary Based on available data the classification criteria are not met.

Acute toxicity - inhalation

Summary Based on available data the classification criteria are not met.

Skin corrosion/irritation

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Summary	Based on available data the classification criteria are not met.
<u>Serious eye damage/irritation</u>	
Summary	Based on available data the classification criteria are not met.
<u>Respiratory sensitization</u>	
Summary	Based on available data the classification criteria are not met.
<u>Skin sensitization</u>	
Summary	Based on available data the classification criteria are not met.
<u>Germ cell mutagenicity</u>	
Summary	Based on available data the classification criteria are not met.
<u>Carcinogenicity</u>	
Summary	Based on available data the classification criteria are not met.
IARC carcinogenicity	None of the ingredients are listed or exempt.
NTP carcinogenicity	None of the ingredients are listed or exempt.
OSHA Carcinogenicity	None of the ingredients are listed or exempt.
<u>Reproductive toxicity</u>	
Summary	Based on available data the classification criteria are not met.
<u>Specific target organ toxicity - single exposure</u>	
Summary	Based on available data the classification criteria are not met.
<u>Specific target organ toxicity - repeated exposure</u>	
Summary	Based on available data the classification criteria are not met.
<u>Aspiration hazard</u>	
Summary	Not relevant. Solid.
General information	No specific health hazards known. The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
Inhalation	A single exposure may cause the following adverse effects: Temporary irritation.
Ingestion	May cause discomfort if swallowed.
Skin Contact	Prolonged contact may cause dryness of the skin.
Eye contact	May be slightly irritating to eyes.
Route of exposure	Ingestion Inhalation Skin and/or eye contact
Target Organs	No specific target organs known.

12. Ecological information

<u>Acute aquatic toxicity</u>	
Summary	Based on available data the classification criteria are not met.
<u>Chronic aquatic toxicity</u>	
Summary	Based on available data the classification criteria are not met.
<u>Persistence and degradability</u>	
Persistence and degradability	The product is biodegradable.

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Bioaccumulative potential

Bio-Accumulative Potential Bioaccumulation is unlikely.

Partition coefficient No data available.

Mobility in soil

Mobility No data available.

Other adverse effects

Other adverse effects None known.

13. Disposal considerations

Waste treatment methods

Disposal methods Compostable

14. Transport information

General The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, DOT).

UN Number

UN No. (International) Not applicable.

UN No. (DOT) Not applicable.

UN proper shipping name

Proper shipping name (International) Not applicable.

Proper shipping name (DOT) Not applicable.

Transport hazard class(es)

Transport Labels (International) No transport warning sign required.

DOT transport labels

No transport warning sign required.

Packing group

Packing group (International) Not applicable.

DOT packing group Not applicable.

Environmental hazards

Environmentally Hazardous Substance

No.

Special precautions for user

Not applicable.

DOT reportable quantity Not applicable.

DOT TIH Zone Not applicable.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

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15. Regulatory information

Regulatory References OSHA Hazard Communication Standard 29 CFR §1910.1200

US Federal Regulations

SARA Section 302 Extremely Hazardous Substances Tier II Threshold Planning Quantities

None of the ingredients are listed.

CERCLA/Superfund, Hazardous Substances/Reportable Quantities (EPA)

None of the ingredients are listed.

SARA Extremely Hazardous Substances EPCRA Reportable Quantities

None of the ingredients are listed.

SARA 313 Emission Reporting

None of the ingredients are listed.

CAA Accidental Release Prevention

None of the ingredients are listed.

OSHA Highly Hazardous Chemicals

None of the ingredients are listed.

US State Regulations

California Proposition 65 Carcinogens and Reproductive Toxins

None of the ingredients are listed or exempt.

California Air Toxics "Hot Spots" (A-I)

None of the ingredients are listed.

California Air Toxics "Hot Spots" (A-II)

None of the ingredients are listed.

California Directors List of Hazardous Substances

None of the ingredients are listed.

Massachusetts "Right To Know" List

None of the ingredients are listed.

Rhode Island "Right To Know" List

None of the ingredients are listed.

Minnesota "Right To Know" List

None of the ingredients are listed.

New Jersey "Right To Know" List

None of the ingredients are listed.

Pennsylvania "Right To Know" List

None of the ingredients are listed.

Inventories

EU - EINECS/ELINCS

All the ingredients are listed or exempt.

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Canada - DSL/NDSL

All the ingredients are listed or exempt.

US - TSCA

All the ingredients are listed or exempt.

Australia - AICS

All the ingredients are listed or exempt.

Japan - ENCS

All the ingredients are listed or exempt.

Korea - KECI

All the ingredients are listed or exempt.

China - IECSC

All the ingredients are listed or exempt.

Philippines - PICCS

All the ingredients are listed or exempt.

New Zealand - NZIOC

All the ingredients are listed or exempt.

Taiwan - TCSI

All the ingredients are listed or exempt.

16. Other information

Abbreviations and acronyms used in the safety data sheet

TDG: The transport of dangerous goods act

IATA: International air transport association.

ICAO: Technical instructions for the safe transport of dangerous goods by air.

IMDG: International maritime dangerous goods.

CAS: Chemical abstracts service.

ATE: Acute toxicity estimate.

LC₅₀: Lethal concentration to 50 % of a test population.

LD₅₀: Lethal dose to 50% of a test population (median lethal dose).

EC₅₀: 50% of maximal effective concentration.

PBT: Persistent, bioaccumulative and toxic substance.

vPvB: Very persistent and very bioaccumulative.

Training advice

Read and follow manufacturer's recommendations.

Issued by

HS&E Manager.

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