

Material Safety Data Sheet

BIAXIS Films

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAMES: • BIAxis Film • BIAxis-CT (Chemically Treated) Film
• BIAxis-HS (High Shrink) Film • BIAxis-RT (Retort) Film

OTHER/GENERIC NAMES: Polyamide 6, Nylon 6, Polycaprolactam, Biax-nylon, BOPA

PRODUCT USE: Packaging

MANUFACTURER: American Biaxis Inc.
100 Saulteaux Crescent
Winnipeg, Manitoba, Canada
R3J 3T3

FOR MORE INFORMATION CALL:
(Monday-Friday, 9:00am-5:30 pm, EST)
204-837-0650

IN CASE OF EMERGENCY CALL:
(24 Hours/Day, 7 Days/Week)
204-795-0470

2. COMPOSITION/INFORMATION ON INGREDIENTS

<u>INGREDIENT NAME</u>	<u>CAS NUMBER</u>	<u>WEIGHT %</u>
Nylon 6	25038-54-4	99-100
Caprolactam	105-60-2	0-1
Urethane Polymer Adhesive	N/A	0-2
Silica	N/A	trace

This product does not contain toxic chemicals or chemicals subject to reporting under Section 313 of the Superfund Amendment of 1986 and 40 CFR Part 372.

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: This clear plastic film is not considered hazardous under normal usage. Irritating and/or toxic vapors may be released at elevated processing temperatures or if involved in a fire.

POTENTIAL HEALTH HAZARDS

SKIN: Not considered hazardous.

EYES: Not considered hazardous. May cause mechanical irritation if film comes into contact with the eye.

INHALATION: Not a route of exposure under normal usage. Elevated processing temperatures may release irritating vapors

INGESTION: Not a route of exposure. Not considered hazardous.

DELAYED EFFECTS: None known.

No ingredients are designated as carcinogenic by the OSHA.

REVISION DATE: January 31, 2012

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4. FIRST AID MEASURES

INHALATION: None needed under normal usage. If exposed to vapors at elevated processing temperatures, remove to fresh air.

SKIN/EYES/INGESTION: None needed.

ADVICE TO PHYSICIAN: None.

5. FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES

FLASH POINT:	752 F (400°C)
FLASH POINT METHOD:	ASTM D 1929 B.
AUTOIGNITION TEMPERATURE:	Not determined.
UPPER FLAME LIMIT (volume % in air):	Not applicable. Non-volatile solid.
LOWER FLAME LIMIT (volume % in air):	Not applicable. Non-volatile solid.
FLAME PROPAGATION RATE (solids):	Not determined.
OSHA FLAMMABILITY CLASS:	Not determined.

EXTINGUISHING MEDIA:

Carbon dioxide, dry chemical foam, water or other agents as appropriate for materials in surrounding fire.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

Molten film at higher temperatures can ignite and will burn.

SPECIAL FIRE FIGHTING PRECAUTIONS/INSTRUCTIONS:

Wear NIOSH/MSHA approved positive pressure self-contained breathing apparatus and full protective clothing.

6. ACCIDENTAL RELEASE MEASURES

IN CASE OF SPILL OR OTHER RELEASE:

Collect and place in a solid waste container.

Spills and releases may have to be reported to Federal and/or local authorities. See Section 15 regarding reporting requirements.

7. HANDLING AND STORAGE

NORMAL HANDLING:

If intended for food packaging applications, the product should be handled according to applicable Good Manufacturing Practices.

STORAGE RECOMMENDATIONS:

Store in a cool, dry area, away from direct heat or sunlight. If the product is to be used in food packaging applications, keep away from hazardous chemicals.



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8. EXPOSURE CONTROLS/PERSONAL PROTECTION

PERSONAL PROTECTIVE EQUIPMENT

SKIN PROTECTION:

Not normally required. Use heat resistant gloves if handling melted material.

EYE PROTECTION:

Not required.

RESPIRATORY PROTECTION:

Not required.

ADDITIONAL RECOMMENDATIONS:

None.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE:	Clear or metallized plastic film.
PHYSICAL STATE:	Solid.
ODOR:	None.
SPECIFIC GRAVITY (water = 1.0):	1.15
SOLUBILITY IN WATER (weight %):	Negligible.
pH:	Not applicable.
BOILING POINT:	Not applicable.
MELTING POINT:	428 °F (220 °C)
VAPOR PRESSURE:	Negligible at room temperature.
VAPOR DENSITY (air = 1.0):	Not determined.
EVAPORATION RATE:	Not determined. COMPARED TO: Not applicable.
% VOLATILES:	Negligible.
FLASH POINT:	752 F (400°C)

(Flash point method and additional flammability data are found in Section 5.)

10. STABILITY AND REACTIVITY

NORMALLY STABLE? (CONDITIONS TO AVOID)

Normally stable. Avoid exposure to open flame or temperatures exceeding recommended processing temperatures. The maximum temperature to which the film can be exposed will vary with exposure (dwell) time. American Biaxis should be contacted if questions arise concerning specific processing conditions.

INCOMPATIBILITIES:

Strong oxidizers.

HAZARDOUS DECOMPOSITION PRODUCTS:

Thermal decomposition products may include caprolactam, hydrogen cyanide, carbon monoxide, carbon dioxide and combustion by-products (oxidized and non-oxidized hydrocarbons).

HAZARDOUS POLYMERIZATION:

Will not occur.



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11. TOXICOLOGICAL INFORMATION

IMMEDIATE (ACUTE) EFFECTS:

Not determined.

DELAYED (SUBCHRONIC AND CHRONIC) EFFECTS:

None known.

OTHER DATA:

None.

12. ECOLOGICAL INFORMATION

Material is considered inert and not expected to be biodegradable or toxic.

13. DISPOSAL CONSIDERATIONS

RCRA

Is the unused product a RCRA hazardous waste if discarded? No.

If yes, the RCRA ID number is: Not applicable.

OTHER DISPOSAL CONSIDERATIONS:

Dispose of in compliance with Federal, state and local government regulations. Usually considered an inert packaging material that can be recycled or landfilled.

The information offered here is for the product as shipped. Use and/or alterations to the product such as mixing with other materials may significantly change the characteristics of the material and alter the RCRA classification and the proper disposal method.

14. TRANSPORT INFORMATION

US DOT HAZARD CLASS: Not regulated.

US DOT ID NUMBER: Not applicable.



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15. REGULATORY INFORMATION

TOXIC SUBSTANCES CONTROL ACT (TSCA)

TSCA INVENTORY STATUS: All components are listed on the TSCA Inventory.

OTHER TSCA ISSUES: None.

SARA TITLE III/CERCLA

"Reportable Quantities" (RQs) and/or "Threshold Planning Quantities" (TPQs) exist for the following ingredients.

<u>INGREDIENT NAME</u>	<u>SARA/CERCLA RQ (lb)</u>	<u>SARA EHS TPQ (lb)</u>
Caprolactam	5,000	N/A

Spills resulting in the loss of any ingredient at or above its RQ requires immediate notification to the National Response Center (1-800-424-8802) and to your Local Emergency Planning Committee.

SECTION 311 HAZARD CLASS: None.

SARA 313 "Toxic Chemicals": None.

STATE RIGHT-TO-KNOW

In addition to the ingredients found in Section 2, the following are listed for state right-to-know purposes.

<u>INGREDIENT NAM</u>	<u>WEIGHT %</u>	<u>COMMENT</u>
Caprolactam (105-60-2)	<0.20	Fla. Toxic Subs. Right-to-Know. Ill. Toxic Subs. Disclosure to Emp. Act. La. Right-to-Know Reporting List. Mass. Right-to-Know Substance List. N. J. Right-to-Know Substances. Pa. Right-to-Know Haz. Substances. R. I. Haz. Subs. Right-to-Know Act.

ADDITIONAL REGULATORY INFORMATION

FOOD PACKAGING - UNITED STATES:

BIAXIS film complies with:

U.S. Food and Drug Administration (FDA) Regulation 21CFR, Part 177, Subpart B, Paragraph 177.1500

WHMIS CLASSIFICATION (CANADA):

Not a controlled substance. (Considered to be a manufactured article.)

FOREIGN INVENTORY STATUS:

Not applicable.

16. OTHER INFORMATION

PREVIOUS ISSUE DATE: June 12, 2009

OTHER INFORMATION: None.