



PRODUCT SAFETY DATA SHEET

SECTION 1

PRODUCT AND COMPANY IDENTIFICATION

PRODUCT

Product Name: POLYPROPYLENE FILM – BICOR WITH PVDC (POLYVINYLIDENE DICHLORIDE)
See list in section 16.

Product Description: Polymer-based film (article)

Intended Use: Labeling material, Packaging Material

COMPANY IDENTIFICATION

Supplier: Jindal Films Americas LLC
SSHE Department, Films Business
729 Pittsford-Palmyra Road
Macedon, NY 14502 USA

EMERGENCY PHONE NUMBERS

24 Hour Emergency 800-424-9300-or 703-527-3887 (CHEMTREC)
Supplier General Contact 315-966-5077

SECTION 2

HAZARDS IDENTIFICATION

This material is not considered to be hazardous as defined under the Occupational Safety and Health Administration's Hazard Communication Standard (March 2012).

POTENTIAL PHYSICAL / CHEMICAL EFFECTS

Thermal burn hazard - contact with hot material or heated surfaces may cause thermal burns.

Processing and Handling may cause static electricity to accumulate that may cause an electrical spark and be a potential ignition source.

May create a combustible dust hazard.

POTENTIAL HEALTH EFFECTS

Under normal conditions of use no effects are anticipated.

If dust is generated, dust can cause minor irritation to the eyes and respiratory tract from mechanical action or drying. When overheated, the vapors/fumes generated may cause eye and respiratory tract irritation.

NFPA Hazard ID:	Health: 0	Flammability: 1	Reactivity: 0
HMIS Hazard ID:	Health: 0	Flammability: 1	Reactivity: 0

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Contains no substances classified as hazardous above the OSHA trigger levels

SECTION 4 FIRST AID MEASURES

INHALATION

Not normally a route of exposure. In case of adverse exposure to vapors or fumes formed at elevated temperatures, immediately remove the affected victim from exposure. Administer artificial respiration if breathing is stopped. Keep at rest.

SKIN CONTACT

If burned by contact with hot material, molten material adhering to skin should be cooled as quickly as possible with water, and see a physician for removal of adhering material and treatment of burn.

EYE CONTACT

Contact with intact film not anticipated. Flush film particles in eyes thoroughly with water. If irritation occurs, get medical assistance.

INGESTION

No adverse effects due to ingestion are expected.

SECTION 5 FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA

Appropriate Extinguishing Media: Use water fog, foam, dry chemical or carbon dioxide (CO₂).

Inappropriate Extinguishing Media: Straight Streams of Water

FIRE FIGHTING

Fire Fighting Instructions: Material will burn in a fire. Evacuate area. Prevent runoff from fire control or dilution from entering streams, sewers, or drinking water supply. Firefighters should use standard protective equipment and in enclosed spaces, self-contained breathing apparatus (SCBA). Use water spray to cool fire exposed surfaces and to protect personnel. Assure an extended cooling down period to prevent re-ignition.

Unusual Fire Hazards: No unusual fire hazards. Exposure to fire can generate irritating fumes.

Hazardous Combustion Products: Smoke, Fume, Incomplete combustion products, Oxides of carbon, Nitrogen oxides

FLAMMABILITY PROPERTIES

Flash Point [Method]: N/A (Not available).

Flammable Limits (Approximate volume % in air): LEL: N/D UEL: N/D (Not Determined)

Autoignition Temperature: N/A

SECTION 6 ACCIDENTAL RELEASE MEASURES



NOTIFICATION PROCEDURES

None required.

PROTECTIVE MEASURES

See Section 5 for fire-fighting information. See Section 4 for First Aid Advice. See Section 8 for advice on the minimum requirements for personal protective equipment. Additional protective measures may be necessary, depending on the specific circumstances and/or the expert judgment of the emergency responders.

SPILL MANAGEMENT

Land Spill: Not applicable; product is not a liquid or flowable powder.

Water Spill: No immediate action required.

SECTION 7	HANDLING AND STORAGE
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HANDLING

No special precautions are necessary beyond normal good hygiene practices. See Section 8 for additional personal protection advice when handling this product.

Static Accumulator: This material can accumulate static electricity in processing that may cause an electrical spark and be a potential ignition source. Follow generally accepted engineering procedures to control static, especially in areas classified as hazardous. Generally, processing that involves unwinding, winding, and contact with rollers and nips can generate a static electrical charge. Grounding of the equipment and use of static discharge methods may be necessary.

Combustible Dust Potential: Product will burn. Grinding or processing that produces finely divided dust is not anticipated in normal use, but such processing may create a combustible dust hazard. Consult with local fire officials, OSHA, NFPA, and other sources of information on controlling combustible dust if you process the film in such a manner.

STORAGE

Store in a cool, dry place.

Storage Temperature: 15°C (59°F) - 30°C (86°F)

SECTION 8	EXPOSURE CONTROLS / PERSONAL PROTECTION
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NOTE: Limits/standards shown for guidance only. Follow applicable regulations.

ENGINEERING CONTROLS

The level of protection and types of controls necessary will vary depending upon potential exposure conditions. Control measures to consider:

Whenever in processing the material and visible smoke is being created, the material is being overheated. If this occurs, adequate ventilation must be provided. Do not overheat.

PERSONAL PROTECTION

Personal protective equipment selections vary based on potential exposure conditions such as applications, handling practices, concentration and ventilation. Information on the selection of protective equipment for use with this material, as provided below, is based upon intended, normal usage.

Respiratory Protection:

No special requirements under ordinary conditions of use and with adequate ventilation.

Hand Protection:

Not required under normal conditions of use. Product should not be so hot in processing that thermally protective gloves are needed. If contact of hot product with forearms is likely, wear gauntlet style gloves.

Eye Protection:

Not required under normal conditions of use. If the product is being ground up, safety glasses with side shields are recommended to keep particles from getting in the eyes.

Skin and Body Protection:

No special clothing required under normal conditions of use. If product is overheated, thermally protective long sleeves are recommended.

Specific Hygiene Measures:

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Practice good housekeeping.

SECTION 9	PHYSICAL AND CHEMICAL PROPERTIES
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Note: Physical and chemical properties are provided for safety, health and environmental considerations only and may not fully represent product specifications. Contact the Supplier for additional information.

APPEARANCE:

Physical State: Solid

Form: Film

Color: Colorless

Odor: None to mild plastic

Odor Threshold: N/D

Relative Density (at 20 °C): 0.9 (typical)

Flash Point [Method]: N/A

Flammable Limits (Approximate volume % in air): LEL: N/D UEL: N/D

Autoignition Temperature: N/A

Decomposition Temperature: XXX

Melting Point: 116°C (240°F) - 171°C (340°F)

Boiling Point / Range: N/A

Vapor Density (Air = 1): N/A

Vapor Pressure: N/A

Evaporation Rate (n-butyl acetate = 1): N/A

pH: N/A



Log Pow (n-Octanol/Water Partition Coefficient): N/A
Solubility in Water: Negligible
Viscosity: N/A
Oxidizing Properties: Not an oxidizing solid.

SECTION 10	STABILITY AND REACTIVITY
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STABILITY: Material is stable under normal conditions.

CONDITIONS TO AVOID: None

MATERIALS TO AVOID: Strong oxidizers.

HAZARDOUS DECOMPOSITION PRODUCTS: Material does not decompose at ambient temperatures.

HAZARDOUS POLYMERIZATION: Will not occur.

SECTION 11	TOXICOLOGICAL INFORMATION
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ACUTE TOXICITY

<u>Route of Exposure</u>	<u>Conclusion / Remarks</u>
Inhalation	
Toxicity: Data available.	Under normal circumstances of use, no inhalation is likely to occur. Based on test data for structurally similar materials.
Irritation: Data available.	Under normal circumstances of use, inhalation is not a likely route of exposure at ambient/normal handling temperatures. Based on test data for structurally similar materials, excessive heating can release irritating gases.
Ingestion	
Toxicity: Data available.	Under normal circumstances of use, ingestion is not an anticipated route of exposure. Based on test data for structurally similar materials.
Skin	
Toxicity: Data available.	Under normal circumstances of use, no effects are likely to occur from contact with skin. Based on test data for structurally similar materials.
Irritation: Data available.	Not irritating to skin at ambient temperatures. Based on test data for structurally similar materials.
Eye	
Irritation: No end point data for material.	Under normal circumstances of use, eye contact is not an anticipated route of exposure.

Overheating of the product can cause polymer degradation and release of irritating gases.

The following ingredients are cited on the lists below: None.

--REGULATORY LISTS SEARCHED--



1 = NTP CARC
2 = NTP SUS

3 = IARC 1
4 = IARC 2A

5 = IARC 2B
6 = OSHA CARC

SECTION 12	ECOLOGICAL INFORMATION
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The information given is based on data available for the material, the components of the material, and similar materials.

ECOTOXICITY

Material -- Not expected to be harmful to aquatic organisms.

MOBILITY

Material -- Low solubility and floats and is expected to migrate from water to the land.
Expected to partition to sediment and wastewater solids.

PERSISTENCE AND DEGRADABILITY

Biodegradation:

Material -- Expected to be persistent.

Hydrolysis:

Material -- Transformation due to hydrolysis not expected to be significant.

Photolysis:

Material -- Transformation due to photolysis not expected to be significant.

Atmospheric Oxidation:

Material -- Transformation due to atmospheric oxidation not expected to be significant.

BIOACCUMULATION POTENTIAL

Material -- Potential to bioaccumulate is low.

SECTION 13	DISPOSAL CONSIDERATIONS
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DISPOSAL RECOMMENDATIONS

Disposal recommendations based on material as supplied. Disposal must be in accordance with state, federal, and local laws and regulations, and material characteristics at time of disposal.

REGULATORY DISPOSAL INFORMATION

RCRA Information: The unused product, in our opinion, is not specifically listed by the EPA as a hazardous waste (40 CFR, Part 261D), nor is it formulated to contain materials which are listed as hazardous wastes. It does not exhibit the hazardous characteristics of ignitability, corrosivity or reactivity and is not formulated with contaminants as determined by the Toxicity Characteristic Leaching Procedure (TCLP). However, used product may be regulated.

SECTION 14	TRANSPORT INFORMATION
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LAND (DOT): Not Regulated for Land Transport

LAND (TDG): Not Regulated for Land Transport

SEA (IMDG): Not Regulated for Sea Transport according to IMDG-Code

AIR (IATA): Not Regulated for Air Transport

**SECTION 15****REGULATORY INFORMATION**

OSHA HAZARD COMMUNICATION STANDARD: When used for its intended purposes, this material is not classified as hazardous in accordance with OSHA 29 CFR 1910.1200 as revised in March 2012.

Complies with the following national/regional chemical inventory requirements:

EPCRA SECTION 302: This material contains no extremely hazardous substances.

SARA (311/312) REPORTABLE HAZARD CATEGORIES: None.

SARA (313) TOXIC RELEASE INVENTORY: This material contains no chemicals subject to the supplier notification requirements of the SARA 313 Toxic Release Program.

Ingredients contained in the product are cited on the lists below: None.

--REGULATORY LISTS SEARCHED--

1 = ACGIH ALL	6 = TSCA 5a2	11 = CA P65 REPRO	16 = MN RTK
2 = ACGIH A1	7 = TSCA 5e	12 = CA RTK	17 = NJ RTK
3 = ACGIH A2	8 = TSCA 6	13 = IL RTK	18 = PA RTK
4 = OSHA Z	9 = TSCA 12b	14 = LA RTK	19 = RI RTK
5 = TSCA 4	10 = CA P65 CARC	15 = MI 293	

Code key: CARC=Carcinogen; REPRO=Reproductive

This product fully complies with Coalition of Northeastern Governors (CONEG) legislation and Directive 94/62/EC on Packaging and Packaging Waste that limits content of lead, mercury, cadmium and hexavalent chromium.

This product does not contain, nor was it manufactured with, Class I or Class II Ozone Depleting Substances (ODS), based on information from our suppliers.

SECTION 16**OTHER INFORMATION**

N/D = Not determined, N/A = Not applicable

THIS SAFETY DATA SHEET CONTAINS THE FOLLOWING REVISIONS:

Revision Changes:

Revision for GHS format updates

THIS SDS COVERS THE FOLLOWING MATERIALS: BICOR 110 ASB-X (TM) | BICOR 110 AXT (TM) | BICOR 150 ASB-X (TM) | BICOR 170 ASB-X (TM) | BICOR 210 ASB-X (TM) | BICOR 70 HBS-2 (TM) | BICOR 70 PXS (TM) | BICOR 85 AXT (TM)

Jindal Films and its affiliates have prepared this Product Safety Data Sheet to provide health and safety information on our Films products. Such products may be considered “articles” for which a (Material) Safety Data Sheet is not required.

The information and recommendations contained herein are, to the best of Jindal Films’ knowledge and belief, accurate and reliable as of the date issued. You can contact Jindal Films to insure that this document is the most current available from Jindal Films. The



information and recommendations are offered for the user's consideration and examination. It is the user's responsibility to satisfy itself that the product is suitable for the intended use. If buyer repackages this product, it is the user's responsibility to insure proper health, safety and other necessary information is included with and/or on the container. Appropriate warnings and safe-handling procedures should be provided to handlers and users. Alteration of this document is strictly prohibited. Except to the extent required by law, re-publication or retransmission of this document, in whole or in part, is not permitted. The term, "Jindal Films", is used for convenience, and may include Jindal Films, or any affiliates in which they directly or indirectly hold any interest.