

# **Ami Polymer**

FILMS | TUBING | HOSES | SINGLE USE ASSEMBLIES & BAGS | GASKETS & BELLOWS | INFLATABLE SEALS



POLYMER FILMS
FOR LIFE-SCIENCES INDUSTRY



www.amipolymer.com info@amipolymer.com



# **About Us**

Since 1998, APPL has been engaged in the business of polymer products, which ultimately provide solutions to fluid transfers, sealing and contamination controls for the pharma, biopharma, medical, laboratory, food, beverage and engineering sectors worldwide.

APPL has ISO class 7 and 8 cleanroom facilities certified with ISO 9001:2015, ISO 14001:2015, ISO 45001:2018, ISO 27001:2013, ISO 13485:2016 and ISO 15378:2017. We also have a BPOG extractables program for our products for regulatory markets worldwide.

APPL has world-class manufacturing technology with end-to-end process capabilities to fulfill the needs of customers. Our advanced facilities include laser-controlled extrusion, automated hose production lines, thermoplastic extrusion lines, automatic hydraulic presses for elastomers and polymeric components, a cutting-edge laboratory equipped with R&D machinery, in-house tooling and mold-making machinery, laser cutting machines and online printing and marking systems.

The company believes in "Be in business with ethics" and assure quick development, fastest delivery, ultimate quality and also very competitive rates.

# **Certification and Compliance**















































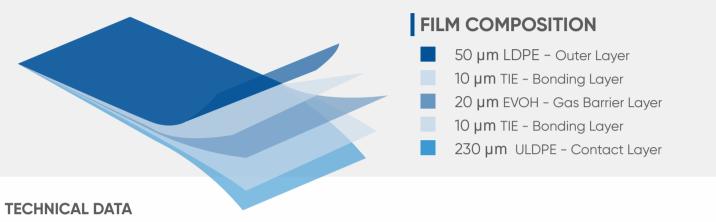




# Imaflexell™ B01

#### Aseptic Processing Film with ULDPE as contact layer & EVOH as barrier layer

The Imaflexell™ B01 features a five-layer structure with an inner contact layer of Ultra Low-Density Polyethylene (ULDPE) resists a wide range of chemicals, while enhancing mechanical strength and an outer layer of Low-Density Polyethylene (LDPE) that provides durability by resisting abrasions, punctures and tearing to prevent leaks. The core layer made of EVOH is barrier against oxygen, which helps in preserving the integrity and shelf life of sensitive products.



Appearance
Available Width
Available Thickness
Recommended Sealing Method
Recommended Sterilization Method
Manufactured Environment

Transparent 1400mm 320 µm Heat Sealing Gamma, E-Beam Cleanroom ISO Class 7

#### **PHYSICAL PROPERTIES**

Technical Data	Test Method	Unit of Measure	Values
Tensile Strength at Break	ASTM D882	MPa	13 /13
Elongation at Break (MD/TD)	ASTM D882	%	509/662
Haze	ASTM D1003	%	4.3
Transmittance	ASTM D1003	%	91.5
Density	ASTM D792	gm/cm <sup>3</sup>	0.91
Water Vapour Transmission Rate (23° C, 100% RH)	ASTM F1249	g/m²/24h	0.25
Carbon Dioxide Permeability (23°C, 0%RH)	ASTM F2476	cm <sup>3</sup> /m <sup>2</sup> /day/bar	0.25
Oxygen Permeability (23°C, 0%RH)	ASTM D3985	cm <sup>3</sup> /m <sup>2</sup> /day/bar	0.07

Gamma Irradiation Sterilization: It can be sterilized by Gamma Radiation at 25 kGy to 40 kGy.

### PHARMACOPOEIA AND BIOCOMPATIBILTY TEST

Biological Reactivity, in vitro (Cytotoxicity Test)	USP<87>	
Biological Reactivity, in vivo (Acute Systemic Toxicity, Intracutaneous and Implantation Test)	USP <88>	
Bacterial Endotoxins - LAL Test	USP<85>	
Extractable Study as per BPOG Guidelines	24 hours, 21 days, *70 days	
Physicochemical Test	USP <661.1>	
Hemocompatibility Test	ISO 10993-4	
Skin Sensitization Test	*ISO 10993-10	
Skin Irritation Test	ISO 10993-23	
Food grade test	FDA 21 CFR 177. 1520	
ROHS Complied (Restriction of hazardous substance)	Directive (EU) 2015/863	
REACH (SVHC) Complied (EC) No 1907/2006		
TSE/BSE Declaration (ADI -Animal Derived Ingredients free)		
Phthalate Content Free		
Bisphenol A (BPA) Content Free		

\*Note: Test Certifications provided above are under testing

#### **APPLICATION**

The Imaflexell™ B-01 Film is designed for biopharma applications, such as liquid single-use bags and containers for transferring and storing liquids. It offers a low oxygen transmission rate and provides excellent flexibility, mechanical strength and good puncture resistance. It is commonly used in mixing systems, media storage, bioreactor sampling and product storage containers.

# Imaflexell™ L01

#### Aseptic Processing Film with ULDPE as contact layer for liners.

The Imaflexell™ L01 features a three-layer design with an inner contact layer of Ultra Low-Density Polyethylene (ULDPE), enhancing mechanical strength, flexibility and toughness. The outer layer is made of Low-Density Polyethylene (LDPE), providing resistance to abrasions, punctures and tears, effectively preventing leaks. The core layer, made of Linear Low-Density Polyethylene (LLDPE) for flexibility with enhanced toughness, improving puncture resistance.



#### **TECHNICAL DATA**

Appearance
Available Width
Available Thickness
Recommended Sealing Method
Recommended Sterilization Method
Manufactured Environment

Transparent 1400mm 250 µm Heat Sealing Gamma, E-Beam Cleanroom ISO Class 7

#### **PHYSICAL PROPERTIES**

Technical Data	Test Method	Unit of Measure	Values
Tensile Strength at Break	ASTM D882	MPa	23/19
Elongation at Break (MD/TD)	ASTM D882	%	732/1189
Haze	ASTM D1003	%	5.9
Transmittance	ASTM D1003	%	85.6
Density	ASTM D792	gm/cm³	0.89

Gamma Irradiation Sterilization: It can be sterilized by Gamma Radiation at 25 kGy to 40 kGy.

### PHARMACOPOEIA AND BIOCOMPATIBILTY TEST

Biological Reactivity, in vitro (Cytotoxicity Test)	USP<87>	
Biological Reactivity, in vivo(Acute Systemic Toxicity, Intracutaneous and Implantation Test)	USP <88>	
Bacterial Endotoxins - LAL Test	USP<85>	
Extractable Study as per BPOG Guidelines	24 hours, 21 days, *70 days	
Physicochemical Test	USP <661.1>	
Hemocompatibility Test	ISO 10993-4	
Skin Sensitization Test	*ISO 10993-10	
Skin Irritation Test	ISO 10993-23	
Food grade test	FDA 21 CFR 177. 1520	
ROHS Complied Directive (EU) 2015/863 (Restriction of hazardous substance)		
REACH (SVHC) Complied (EC) No 1907/2006		
TSE/BSE Declaration(ADI -Animal Derived Ingredients free)		
Phthalate Content Free		
Bisphenol A (BPA) Content Free		

\*Note: Test Certifications provided above are under process of testing

as the contact layer of film is similar

Note: Certification provided above are mentioned as per Imaflexell B01 film,

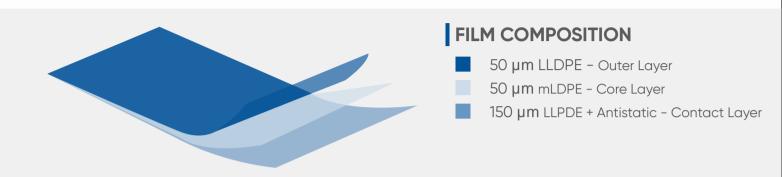
# APPLICATION

Designed for safe handling and sterile containment, this three-layer Imaflexell™ L01 liner film offers high strength, excellent flexibility, elongation and puncture resistance. It is ideal for storage, filling, mixing, waste collection, batch handling in biopharma processing.

# Imaflexell™ A01

#### Aseptic Processing Film with Antistatic LLDPE as product contact layer.

The Imaflexell™ A01 features a three-layer design. The inner layer is made of low-density polyethylene combined with an antistatic agent, providing a permanent antistatic property. The core layer is composed of Metallocene linear low-density polyethylene, offering excellent tensile strength, transparency and durability. The outer layer is made of linear low-density polyethylene, providing excellent flexibility and resistance to punctures and tears.



# **TECHNICAL DATA**

Appearance
Available Width
Available Thickness
Recommended Sealing Method
Recommended Sterilization Method
Manufactured Environment

Transparent 1400mm 250 µm Heat Sealing Gamma, E-Beam Cleanroom ISO Class 7

#### **PHYSICAL PROPERTIES**

Technical Data	Test Method	Unit of Measure	Values
Tensile Strength at Break	ASTM D882	MPa	26/ 13
Elongation at Break (MD/TD)	ASTM D882	%	472/1103
Haze	ASTM D1003	%	23
Transmittance	ASTM D1003	%	90.2
Density	ASTM D792	gm/cm <sup>3</sup>	0.9
Water Vapour Transmission Rate (23° C, 100% RH)	ASTM F1249	g/m²/24h	0.26
Oxygen Permeability (23°C, 0%RH)	ASTM D3985	cm <sup>3</sup> /m <sup>2</sup> /day/bar	0.002

Gamma Irradiation Sterilization: It can be sterilized by Gamma Radiation at 25 kGy to 40 kGy.

### PHARMACOPOEIA AND BIOCOMPATIBILTY TEST

Ami Polymer Pvt. Ltd. certifies that the product mentioned in this catalogue complies as per below listed testing requirments. Described here in;		
Biological Reactivity, in vitro (Cytotoxicity Test)	*USP<87>	
Biological Reactivity, in vivo (Acute Systemic Toxicity, Intracutaneous and Implantation Test)	*USP <88>	
Bacterial Endotoxins - LAL Test	USP<85>	
Extractable Study as per BPOG Guidelines	*24 hours, 7 days	
Physicochemical Test	USP <661.1>	
Hemocompatibility Test	*ISO 10993-4	
Skin Sensitization Test	*ISO 10993-10	
Skin Irritation Test	*ISO 10993-23	
Food grade test	FDA 21 CFR 177. 1520	
ROHS Complied (Restriction of hazardous substance)	Directive (EU) 2015/863	
REACH (SVHC) Complied (EC) No 1907/2006		
TSE/BSE Declaration (ADI -Animal Derived Ingredients free)		
Phthalate Content Free		
Bisphenol A (BPA) Content Free		

\*Note: Test Certifications provided above are under testing

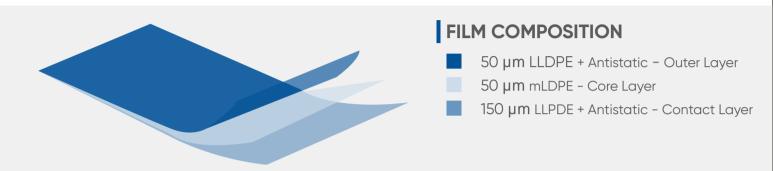
#### **APPLICATION**

The One-Sided Antistatic Imaflexell™ A01 Film is developed for biopharma and pharmaceutical applications, ensuring electrostatic protection, cleanroom compatibility and contamination control. It is ideal for sterile packaging and sensitive drug formulations. The film is also used in optimal powder handling, preventing static buildup and ensuring smooth material flow with its static dissipative properties.

# Imaflexell™ A02

#### Aseptic Processing Film with both side (inner/outer) Antistatic LLDPE layers.

The Imaflexell™ AO2 features a three-layer structure with antistatic properties on both sides. The inner layer is made of linear low-density polyethylene combined with an antistatic agent, ensuring product cleanliness and providing a permanent antistatic effect. The core layer is composed of Metallocene linear low-density polyethylene, offering excellent tensile strength, transparency, and durability. The outer layer also consists of linear low-density polyethylene mixed with a long-lasting antistatic agent.



#### **TECHNICAL DATA**

Appearance
Available Width
Available Thickness
Recommended Sealing Method
Recommended Sterilization Method
Manufactured Environment

Transparent
1400mm
250 µm
Heat Sealing
Gamma, E-Beam
Cleanroom ISO Class 7

#### **PHYSICAL PROPERTIES**

Technical Data	Test Method	Unit of Measure	Values
Tensile Strength at Break	ASTM D882	MPa	24/ 14
Elongation at Break (MD/TD)	ASTM D882	%	1368/1278
Haze	ASTM D1003	%	29
Transmittance	ASTM D1003	%	61.2
Density	ASTM D792	gm/cm <sup>3</sup>	0.89
Water Vapour Transmission Rate (23° C, 100% RH)	ASTM F1249	g/m²/24h	0.26*
Oxygen Permeability (23°C, 0%RH)	ASTM D3985	cm <sup>3</sup> /m <sup>2</sup> /day/bar	0.002*

\*Above Test Results mentioned are as per Imaflexell<sup>®</sup> A01 film, as the contact layer of film is similar Gamma Irradiation Sterilization:It can be sterilized by Gamma Radiation at 25 kGy to 40 kGy.

#### PHARMACOPOEIA AND BIOCOMPATIBILTY TEST

Ami Polymer Pvt. Ltd. certifies that the product mentioned in this catalogue complies as per below listed testing requirments. Described here in;		
Biological Reactivity, in vitro (Cytotoxicity Test)	*USP<87>	
Biological Reactivity, in vivo (Acute Systemic Toxicity, Intracutaneous and Implantation Test)	*USP <88>	
Bacterial Endotoxins - LAL Test	USP<85>	
Extractable Study as per BPOG Guidelines	*24 hours, 7 days	
Physicochemical Test	USP <661.1>	
Hemocompatibility Test	*ISO 10993-4	
Skin Sensitization Test *ISO 10993-10		
Skin Irritation Test	*ISO 10993-23	
Food grade test	FDA 21 CFR 177. 1520	
ROHS Complied Directive (EU) 2015/863 (Restriction of hazardous substance)		
REACH (SVHC) Complied (EC) No 1907/2006		
TSE/BSE Declaration (ADI -Animal Derived Ingredients free)		
Phthalate Content Free		
Bisphenol A (BPA) Content Free		

\*Note: Test Certifications provided above are under process of testing Note: Certification provided above are mentioned as per Imaflexell<sup>®</sup> B01 film, as the contact layer of film is similar

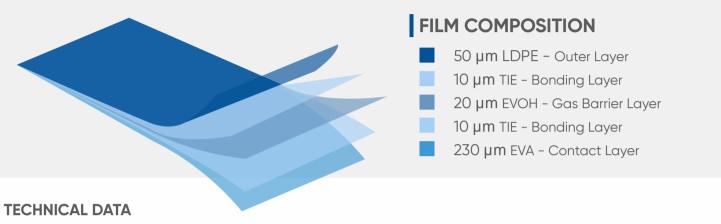
### **APPLICATION**

The Imaflexell<sup> $^{\infty}$ </sup> A02 can be utilised in flexible enclosures and isolators, offering permanent antistatic properties with a surface resistivity of 10<sup> $^{\circ}$ </sup>  $\Omega$  per square. Both sides of the film are treated with antistatic agents, providing effective electrostatic control in cleanrooms, sterile packaging and pharmaceutical applications. It's ideal for powder handling, material flow and protecting sensitive material.

# Imaflexell™ C01

#### Freezing Application Film with EVA as Contact Layer

The Imaflexell™C01 features a five-layer structure, with an inner contact layer made from Ethylene-Vinyl Acetate (EVA), providing mechanical strength and high flexibility in low-temperature environments. The outer layer is constructed from Low-Density Polyethylene (LDPE), providing transparency and flexibility. EVA ensures the film maintains its integrity in cryogenic conditions by resisting abrasions, punctures, stretching, and tearing, while staying flexible and not becoming brittle in low temperatures. The film enhance the product's lifespan in demanding cold storage environments.



Appearance
Available Width
Available Thickness
Recommended Sealing Method
Recommended Sterilization Method
Manufactured Environment

Transparent 1400mm 320 µm Heat Sealing Gamma, E-Beam Cleanroom ISO Class 7

#### **PHYSICAL PROPERTIES**

Technical Data	Test Method	Unit of Measure	Values
Tensile Strength at Break	ASTM D882	MPa	16/8
Elongation at Break (MD/TD)	ASTM D882	%	380/ 482
Haze	ASTM D1003	%	3.57
Transmittance	ASTM D1003	%	93.4
Density	ASTM D792	gm/cm <sup>3</sup>	0.95
Water Vapour Transmission Rate (23° C, 100% RH)	ASTM F1249	g/m²/24h	0.46
Oxygen Permeability (23°C, 0%RH)	ASTM D3985	cm <sup>3</sup> /m <sup>2</sup> /day/bar	0.002

Gamma Irradiation Sterilization: It can be sterilized by Gamma Radiation at 25 kGv to 40 kGv.

### PHARMACOPOEIA AND BIOCOMPATIBILTY TEST

Ami Polymer Pvt. Ltd. certifies that the product mentioned in this catalogue complies as per below listed testing requirments. Described here in;		
Biological Reactivity, in vitro (Cytotoxicity Test)	*USP<87>	
Biological Reactivity, in vivo (Acute Systemic Toxicity, Intracutaneous and Implantation Test)	*USP <88>	
Bacterial Endotoxins - LAL Test	USP<85>	
Extractable Study as per BPOG Guidelines	*24 hours, 21 days, 70 days	
Physicochemical Test	*USP <661.1>	
Hemocompatibility Test	*ISO 10993-4	
Skin Sensitization Test	*ISO 10993-10	
Skin Irritation Test	*ISO 10993-23	
ROHS Complied (Restriction of hazardous substance)	Directive (EU) 2015/863	
REACH (SVHC) Complied (EC) No 1907/2006		
TSE/BSE Declaration (ADI -Animal Derived Ingredients free)		
Phthalate Content Free		
Bisphenol A (BPA) Content Free		

\*Note: Test Certifications provided above are under testing

#### **APPLICATION**

The single-sided EVA Imaflexell™ C01 film offers excellent flexibility, making it ideal for bioprocessing, storage and pharmaceutical packaging. Designed for low-temperature applications, it provides good moisture and oxygen barrier properties, preserving the stability of critical products like stem cells during storage. It is commonly used in freezing bags, ensuring safe and secure containment in cryogenic conditions.

### Our Presence In World





## **Our Branches in India**

#### BADDI (H.P.)

+91 9816 595 011/+91 9218 595 011 baddi@amipolymer.com

#### **DELHI**

+91 9977 600 935 harsh.s@amipolymer.com

#### **HYDERABAD**

+91 7700 908 414/ +91 9515 113 662 hybd@amipolymer.com

#### **HARIDWAR**

+91 9977 600 935/+91 7718 888 743 roorkee@amipolymer.com

#### **PUNE**

+91 9512 298 787 hrishikesh.g@amipolymer.com

#### **BENGALURU**

+91 8123 023 922 support1@amipolymer.com

#### GOA

+91 9223 290 943 / +91 9223 290 940 goa@amipolymer.com

#### **INDORE**

+91 9712 588 819 / +91 9512 273 730 sanjay.p@amipolymer.com

#### **SIKKIM**

+91 9512 274 748 sikkim@amipolymer.com

#### **SILVASSA**

+91 9223 290 934 / +91 9512 235 354 rohit.s@amipolymer.com

#### CHENNAI

+91 7738 788 877 chennai@amipolymer.com

#### **AHMEDABAD**

+91 9152 032 305/ +91 9712 588 819 guj@amipolymer.com

#### **MUMBAI**

+91 9223 290 943 / +91 9512 283 830 mumbai@amipolymer.com

#### **VIZAG**

+91 7700 908 414/ +91 9515 113 662 hybd@amipolymer.com

#### **ROI**

+91 9223 290 936 info@amipolymer.com

#### **CORPORATE OFFICE**

Office No. 6 & 7, Upper Basement, Western Edge II, Behind Metro Stores, W.E. Highway, Borivali, Mumbai, Maharashtra – 400066 Cell: +91 9081 488 825/ +91 9223 290 943

#### **USA OFFICE**

800 West Cummings Park, Suite 3325 | Woburn, Massachusetts 01801 Cell: +1 (978) 482–5400/+1 (267) 810–3834 | Email: usa@amipolymer.com

MANUFACTURING UNIT- II

#### **MANUFACTURING UNIT-I**

Plot No. 66-D/E, Govt. Industrial Estate, Near Beekaylon Factory, Masat, Silvassa, UT of Dadra & Nagar Haveli and Daman & Diu, India 396230

# Survey No. 106/2/1, 106/2/2, 113/3/P1, Opp. Guarniflon India Pvt. Ltd,

Karajgam Road, Village Kala, Khanvel, UT of Dadra & Nagar Haveli and Daman & Diu, India 396230

