شرکت پلیمر آریا ساسول(سهامی خاص)

ARYA SASOL POLYMER COMPANY

Product Data Sheet

ASPC LFI2047A

PRODUCT DESCRIPTION:

LFI2047A is a low density polyethylene, with good toughness and good optical properties. This product contains a medium level of anti-block and slip agent (Erucamide), has low energy consumption during processing and a good draw down ability. It typically exhibits low friction and low blocking.

Typical APPLICATIONS:

LFI2047A is recommended for blown film extrusion. This product is very suitable for high clarity laundry bags, textile wrapping films and zip lock bags. This grade enables high speed converting without sticking.

Typical Data

Properties	Value (1)	unit	Test method
Physical Properties			ISO 1133
MFI (190 ^{0}C /2 .16 Kg)	4.7	dg/min	ISO 1183 (A)
Density	920	Kg/m3	
Mechanical properties (2)			
Impact strength	15	KJ/m	ISO 7765-2
Tear strength (TD)	25	KN/m	ISO 6383-2
Tear Strength (MD)	80	KN/m	ISO 6383-2
Yield stress (TD)	11	MPa	ISO 527-1/3
Yield stress (MD)	12	MPa	ISO 527-1/3
Tensile Stress at break (TD)	15	MPa	ISO 527-1/3
Tensile Stress at break (MD)	27	MPa	ISO 527-1/3
Strain at Break (TD)	>500	%	ISO 527-1/3
Strain at Break (MD)	100	%	ISO 527-1/3
Modulus of Elasticity (TD)	200	MPa	ISO 527-1/3
Modulus of Elasticity (MD)	200	MPa	ISO 527-1/3
Coefficient of friction	0.2		ASTM D 1894
Blocking	20	g	SABTEC method
Re-blocking	10	g	SABTEC method
Optical properties (2)			
Haze	9	%	ASTM D 1003A
Gloss(45^o)	55	%	ASTM D 2457
Clarity	21	mV	
Additive: Antioxidant , Slip agent, Anti blocking agent			

Notes:

(1) Typical Values: not to be construed as specifications limits.

(2) Properties are based on 25 µm blown film produced at a melt temperature of 160°C and 3 BUR using 100% LTM 2047/37.

General Information

LFI2047A has been manufactured using SABTEC licensed technology.

Processing Conditions:

Extruder temperature profile: 145-160°C
Frost line height: 5-7 times die diameter.
Blow Up Ratio: 2-3
Recommended film thickness: 25 to 50 µm.
Please note that, these processing conditions are recommended by producer only for 100% LFI2047A resin (not in the case of blending with any other compatible material), but because of the many particular factors which are outside our knowledge and control, and may affect the use of product, no warranty is given.

Packaging

Supplied in pellet form and can be packaged in 25kg Bags, one ton semi bulk or 17 tons bulk containers.

Food Packaging

The above-mentioned material meets the relevant requirements as laid down in:

- Regulation 174/2015 (amending Commission Regulation (EU) No. 10/2011)
- European Pharmacopoeia, paragraph 3.1.5.
- Metals test, standard 71-3
- Halogens, IEC 61249-2-21
- Heavy metals, EC Directive 94/62/EC
- RoHS, 2011/65/EU and 2002/96/EC
- Phthalates, Directive 2005/84/EC

Pharmaceutical Application

The above-mentioned grade meets the requirements of the European pharmacopeia version 6 sections 3.1.5 for pharmaceutical application.

Conveying

Conveying equipment should be designed to prevent accumulation of fines and dust particles can, under certain conditions, pose an explosion hazard. We recommend that the conveying system used:

1. Be equipped with adequate filters.
2. Is operated and maintained in such a manner to ensure no leaks develop.
3. That adequate grounding exists at all times.

We further recommend that good housekeeping will practiced throughout the facility.

Storage

All resins should be protected from direct sunlight and/or heat during storage. The storage location should also be dry, dust free and the ambient temperature should not

exceed 50°C. It is also advisable to process polyethylene resins (in pelletized or powder from) within 6 months after delivery, this because also excessive aging of polyethylene can lead to a deterioration in quality. ASPC would not give warranty to bad storage conditions which may lead to quality deterioration such as color change, bad smell and inadequate product performance. It is also advisable to process polyethylene resins (in pelletized or powder form) within 6 months after delivery, this because also excessive aging of polyethylene can lead to a deterioration in quality.

Handling

Minimal protection to prevent possible mechanical or thermal injury to the eyes. Fabrication areas should be ventilated to carry away fumes or vapors.

Combustibility

Polyethylene resins will burn when supplied adequate heat and oxygen. They should be handled and stored away from contact with direct flames and/or other ignition sources .in burning; polyethylene resins contribute high heat and may generate a dense black smoke. Fires can be extinguished by conventional means with water and mist preferred. In enclosed areas, fire fighters should be provided with self-contained breathing apparatus.

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Note: *this information is based on our current knowledge and experience .in view of many factors that may affect processing and application, this data does not relive processors from the responsibility of carrying out their own tests and experiments, neither does it imply any legally binding assurance of certain properties or of suitability for a specific purpose. It is the responsibility of those to whom we supply our products to ensure that any proprietary rights and existing laws and legislation are observed.*

شرکت پلیمر آریا ساسول(سهامی خاص)
ARYA SASOL POLYMER COMPANY

Product Data Sheet

ASPC LFI2119

PRODUCT DESCRIPTION:

LFI2119 is a low density polyethylene, with excellent optical properties. This grade offers a high output and excellent draw down and specially designed for general purpose thin films.

Typical APPLICATIONS:

LFI2119 is recommended for blown film extrusion. This product is suitable for manufacture of general purpose LDPE film packaging and general lamination films.

Typical Data

Properties	Value (1)	unit	Test method
Physical Properties			
MFI (190 ^{0}C /2 .16 Kg)	1.9	dg/min	ISO 1133
Density	921	Kg/m3	ISO 1183 (A)
Mechanical properties (2)			
Impact strength	26	KJ/m	ISO 7765-2
Tear strength (TD)	25	KN/m	ISO 6383-2
Tear Strength (MD)	60	KN/m	ISO 6383-2
Yield stress (TD)	11	MPa	ISO 527-1/3
Yield stress (MD)	13	MPa	ISO 527-1/3
Tensile stress at break (TD)	20	MPa	ISO 527-1/3
Tensile stress at break (MD)	35	MPa	ISO 527-1/3
Strain at Break (TD)	>500	%	ISO 527-1/3
Strain at Break (MD)	>150	%	ISO 527-1/3
Modulus of Elasticity (TD)	200	MPa	ISO 527-1/3
Modulus of Elasticity (MD)	190	MPa	ISO 527-1/3
Coefficient of friction	>1		ASTM D 1894
Blocking	20	g	SABTEC method
Re-blocking	100	g	SABTEC method
Optical properties (2)			
Haze	9	%	ASTM D 1003A
Gloss (45º)	55	%	ASTM D 2457
Clarity	26	mV	
Additive : Antioxidant			

Notes:
(1) Typical Values: not to be construed as specifications limits.

(2) Properties are based on 25 µm blown film produced at a melt temperature of 170°C and 3 BUR using 100% LFI2119.

General Information

LFI2119 has been manufactured using SABTEC licensed technology.

Processing Conditions:

Extruder temperature profile: 160-185°C
Frost line height: 5-7 times die diameter.
Blow Up Ratio: 2-3
Recommended film thickness: 20 to 50 µm.
Please note that, these processing conditions are recommended by producer only for 100% LFI2119 resin (not in the case of blending with any other compatible material), but because of the many particular factors which are outside our knowledge and control, and may affect the use of product, no warranty is given.

Packaging

Supplied in pellet form and can be packaged in 25kg Bags, one ton semi bulk or 17 tons bulk containers.

Food Packaging

The above-mentioned material meets the relevant requirements as laid down in:

- Regulation 174/2015 (amending Commission Regulation (EU) No. 10/2011)
- European Pharmacopoeia, paragraph 3.1.5.
- Metals test, standard 71-3
- Halogens, IEC 61249-2-21
- Heavy metals, EC Directive 94/62/EC
- RoHS, 2011/65/EU and 2002/96/EC
- Phthalates, Directive 2005/84/EC

Pharmaceutical Application

The above-mentioned grade meets the requirements of the European pharmacopeia version 6 sections 3.1.5 for pharmaceutical application.

Conveying

Conveying equipment should be designed to prevent accumulation of fines and dust particles can, under certain conditions, pose an explosion hazard. We recommend that the conveying system used:

1. Be equipped with adequate filters.
2. Is operated and maintained in such a manner to ensure no leaks develop.
3. That adequate grounding exists at all times.

We further recommend that good housekeeping will practiced throughout the facility.

Storage

All resins should be protected from direct sunlight and/or heat during storage. The storage location should also be dry, dust free and the ambient temperature should not exceed 50°C. It is also advisable to process polyethylene resins (in pelletized or powder from) within 6 months after delivery, this because also excessive aging of polyethylene can lead to a deterioration in quality. ASPC would not give warranty to bad storage conditions, which may lead to quality deterioration such as color change, bad smell and inadequate product performance. It is also advisable to process

Polyethylene resins (in pelletized or powder form) within 6 months after delivery, this because also excessive aging of polyethylene can lead to a deterioration in quality.

Handling

Minimal protection to prevent possible mechanical or thermal injury to the eyes. Fabrication areas should be ventilated to carry away fumes or vapors.

Combustibility

Polyethylene resins will burn when supplied adequate heat and oxygen. They should be handled and stored away from contact with direct flames and/or other ignition sources .in burning; polyethylene resins contribute high heat and may generate a dense black smoke. Fires can be extinguished by conventional means with water and mist preferred. In enclosed areas, fire fighters should be provided with self-contained breathing apparatus.

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(TEC-PRO-PDS-001- Ver.8 - Date: 05.NOV.2016)

شرکت پلیمر آریا ساسول(سهامی خاص)
ARYA SASOL POLYMER COMPANY

Product Data Sheet

ASPC LFI2125A

PRODUCT DESCRIPTION:

LFI2125A is a low density polyethylene, with a high level of anti-block and slip agent (Erucamide). This grade offers good optical properties, low energy consumption during processing, adequate COF level and excellent draw down.

APPLICATIONS:

LFI2125A is recommended for blown film extrusion. This product is suitable for manufacture of general purpose LDPE film packaging for food and industrial goods and general lamination films. This grade is especially suitable when ultimate down gauging is required.

Typical Data

Properties	Value (1)	unit	Test method
Physical Properties			
MFI (190 ^{0}C /2 .16 Kg)	2.5	dg/min	ISO 1133
Density	921	Kg/m3	ISO 1183 (A)
Mechanical properties (2)			
Impact strength	23	KJ/m	ISO 7765-2
Tear strength (TD)	25	KN/m	ISO 6383-2
Tear Strength (MD)	70	KN/m	ISO 6383-2
Yield stress (TD)	11	MPa	ISO 527-1/3
Yield stress (MD)	13	MPa	ISO 527-1/3
Tensile Stress at break (TD)	19	MPa	ISO 527-1/3
Tensile Stress at break (MD)	30	MPa	ISO 527-1/3
Strain at Break (TD)	>500	%	ISO 527-1/3
Strain at Break (MD)	>100	%	ISO 527-1/3
Modulus of Elasticity (TD)	180	MPa	ISO 527-1/3
Modulus of Elasticity (MD)	190	MPa	ISO 527-1/3
Coefficient of friction	0.2		ASTM D 1894
Blocking	<5	g	SABTEC method
Re-blocking	0	g	SABTEC method
Optical properties (2)			
Haze	9	%	ASTM D 1003A
Gloss(45^o)	60	%	ASTM D 2457
Clarity	30	mV	
Additive: Antioxidant,, Slip agent, Anti blocking agent			

Notes:

(1) Typical Values: not to be construed as specifications limits.

(2) Properties are based on 25 µm blown film produced at a melt temperature of 165°C and 3 BUR using 100% LFI2125A.

General Information

LFI2125A has been manufactured using SABTEC licensed technology.

Processing Conditions:

Extruder temperature profile: 160-180°C
Frost line height: 5-7 times die diameter.
Blow Up Ratio: 2-3
Recommended film thickness: 20 to 50 µm.
Please note that, these processing conditions are recommended by producer only for 100% LFI2125A resin (not in the case of blending with any other compatible material), but because of the many particular factors which are outside our knowledge and control, and may affect the use of product, no warranty is given.

Packaging

Supplied in pellet form and can be packaged in 25kg Bags, one ton semi bulk or 17 tons bulk containers.

Food Packaging

The above-mentioned material meets the relevant requirements as laid down in:

- Regulation 174/2015 (amending Commission Regulation (EU) No. 10/2011)
- European Pharmacopoeia, paragraph 3.1.5.
- Metals test, standard 71-3
- Halogens, IEC 61249-2-21
- Heavy metals, EC Directive 94/62/EC
- RoHS, 2011/65/EU and 2002/96/EC
- Phthalates, Directive 2005/84/EC

Pharmaceutical Application

The above-mentioned grade meets the requirements of the European pharmacopeia version 6 sections 3.1.5 for pharmaceutical application.

Conveying

Conveying equipment should be designed to prevent accumulation of fines and dust particles can, under certain conditions, pose an explosion hazard. We recommend that the conveying system used:

1. Be equipped with adequate filters.
2. Is operated and maintained in such a manner to ensure no leaks develop.
3. That adequate grounding exists at all times.

We further recommend that good housekeeping will practiced throughout the facility.

Storage

All resins should be protected from direct sunlight and/or heat during storage. The storage location should also be dry, dust free and the ambient temperature should not exceed 50°C. It is also advisable to process polyethylene resins (in pelletized or powder from) within 6 months after delivery, this because also excessive aging of polyethylene can lead to a deterioration in quality. ASPC would not give warranty to bad storage conditions which may lead to quality deterioration such as color change, bad smell and inadequate product performance. It is also advisable to process polyethylene resins (in pelletized or powder form) within 6 months after delivery, this because also excessive aging of polyethylene can lead to a deterioration in quality.

Handling

Minimal protection to prevent possible mechanical or thermal injury to the eyes. Fabrication areas should be ventilated to carry away fumes or vapors.

Combustibility

Polyethylene resins will burn when supplied adequate heat and oxygen. They should be handled and stored away from contact with direct flames and/or other ignition sources .in burning; polyethylene resins contribute high heat and may generate a dense black smoke. Fires can be extinguished by conventional means with water and mist preferred. In enclosed areas, fire fighters should be provided with self-contained breathing apparatus.

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ARYA SASOL POLYMER COMPANY

Product Data Sheet

ASPC LFI2130

PRODUCT DESCRIPTION:

LFI2130 is a low density polyethylene, suitable for producing heavy-duty films and contains no slip and anti-block additives. It gives outstanding toughness, draw down ability and very good biaxial shrink properties.

Typical APPLICATIONS:

LFI2130 is recommended for blown film extrusion. This product is suitable for manufacture of heavy duty LDPE film packaging for application like shrink hoods, industrial sacks, Carrier bags and liners.

Typical Data

Properties	Value (1)	unit	Test method
Physical Properties			
MFI(190 ^{0}C /2 .16 Kg)	0.3	Dg/min	ISO 1133
Density	921	Kg/m3	ISO 1183 (A)
Mechanical properties (2)			
Impact strength	31	KJ/m	ISO 7765-2
Tear strength (TD)	45	KN/m	ISO 6383-2
Tear Strength (MD)	20	KN/m	ISO 6383-2
Yield stress (TD)	10	MPa	ISO 527-1/3
Yield stress (MD)	11	MPa	ISO 527-1/3
Tensile Stress at break (TD)	24	MPa	ISO 527-1/3
Tensile Stress at break (MD)	22	MPa	ISO 527-1/3
Strain at Break (TD)	>500	%	ISO 527-1/3
Strain at Break (MD)	>350	%	ISO 527-1/3
Modulus of Elasticity (TD)	150	MPa	ISO 527-1/3
Modulus of Elasticity (MD)	140	MPa	ISO 527-1/3
Coefficient of friction	0.7		ASTM D 1894
Blocking	<5	g	SABTEC method
Re-blocking	20	g	SABTEC method
Optical properties (2)			
Haze	12	%	ASTM D 1003A
Gloss (45^o)	55	%	ASTM D 2457
Clarity	50	mV	SABTEC method
Additive :Antioxidant			

Notes:
(1) Typical Values: not to be construed as specifications limits.
(2) Properties are based on 120 µm blown film produced at a melt temperature of 200°C and 3 BUR using 100% LFI2130.

General Information

LFI2130 has been manufactured using SABTEC licensed technology.

Processing Conditions:

Extruder temperature profile: 185-200°C
Frost line height: 5-7 times die diameter.
Blow Up Ratio: 2-4
Recommended film thickness: 45 to 150 µm.
Please note that, these processing conditions are recommended by producer only for 100% LFI2130 resin (not in the case of blending with any other compatible material), but because of the many particular factors which are outside our knowledge and control, and may affect the use of product, no warranty is given.

Packaging

Supplied in pellet form and can be packaged in 25kg Bags, one ton semi bulk or 17 tons bulk containers.

Food Packaging

The above-mentioned material meets the relevant requirements as laid down in:

- Regulation 174/2015 (amending Commission Regulation (EU) No. 10/2011)
- European Pharmacopoeia, paragraph 3.1.5.
- Metals test, standard 71-3
- Halogens, IEC 61249-2-21
- Heavy metals, EC Directive 94/62/EC
- RoHS, 2011/65/EU and 2002/96/EC
- Phthalates, Directive 2005/84/EC

Conveying

Conveying equipment should be designed to prevent accumulation of fines and dust particles can, under certain conditions, pose an explosion hazard. We recommend that the conveying system used:
Be equipped with adequate filters.
Is operated and maintained in such a manner to ensure no leaks develop.
That adequate grounding exists at all times.
We further recommend that good housekeeping will practiced throughout the facility.

Storage

All resins should be protected from direct sunlight and/or heat during storage. The storage location should also be dry, dust free and the ambient temperature should not exceed 50°C. It is also advisable to process polyethylene resins (in pelletized or powder from) within 6 months after delivery, this because also excessive aging of polyethylene can lead to a deterioration in quality. ASPC would not give warranty to bad storage conditions which may lead to quality deterioration such as color change, bad smell and inadequate product performance. It is also advisable to process

polyethylene resins (in pelletized or powder form) within 6 months after delivery, this because also excessive aging of polyethylene can lead to a deterioration in quality.

Handling

Minimal protection to prevent possible mechanical or thermal injury to the eyes. Fabrication areas should be ventilated to carry away fumes or vapors.

Combustibility

Polyethylene resins will burn when supplied adequate heat and oxygen. They should be handled and stored away from contact with direct flames and/or other ignition sources .in burning; polyethylene resins contribute high heat and may generate a dense black smoke. Fires can be extinguished by conventional means with water and mist preferred. In enclosed areas, fire fighters should be provided with self-contained breathing apparatus.

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شرکت پلیمر آریا ساسول(سهامی خاص)
ARYA SASOL POLYMER COMPANY

Product Data Sheet

ASPC LFI2185

PRODUCT DESCRIPTION:

LFI2185 is a low density polyethylene, with good toughness and good biaxial shrink properties. This product contains no slip and anti-block additives, has low energy consumption during processing, good melt strength and a good draw down ability.

Typical APPLICATIONS:

LFI2185 is recommended for blown film extrusion. This product is very suitable for thin shrink films, thin packaging films and bags.

Typical Data

Properties	Value (1)	unit	Test method
Physical Properties			
MFR (190 ^{0}C /2 .16 Kg)	0.85	dg/min	ISO 1133
Density	921	Kg/m3	ISO 1183 (A)
Mechanical properties (2)			
Impact strength	28	KJ/m	ISO 7765-2
Tear strength (TD)	30	KN/M	ISO 6383-2
Tear Strength (MD)	40	KN/m	ISO 6383-2
Yield stress (TD)	11	MPa	ISO 527-1/3
Yield stress (MD)	12	MPa	ISO 527-1/3
Tensile Stress at break (TD)	21	MPa	ISO 527-1/3
Tensile Stress at break (MD)	24	MPa	ISO 527-1/3
Strain at Break (TD)	>500	%	ISO 527-1/3
Strain at Break (MD)	>200	%	ISO 527-1/3
Modulus of Elasticity (TD)	170	MPa	ISO 527-1/3
Modulus of Elasticity (MD)	160	MPa	ISO 527-1/3
Coefficient of friction	1.0		ASTM D 1894
Blocking	40	g	SABTEC method
Re-blocking	140	g	SABTEC method
Optical properties (2)			
Haze	9	%	ASTM D 1003A
Gloss (45^o)	60	%	ASTM D 2457
Clarity	27	mV	SABTEC method
Additive : Antioxidant			

Notes:

(1) Typical Values: not to be construed as specifications limits.

(2) Properties are based on 45 µm blown film produced at a melt temperature of 190°C and 3 BUR using 100% LFI2185.

General Information

LFI2185 has been manufactured using SABTEC licensed technology.

Processing Conditions:

Extruder temperature profile: 175-190°C
Frost line height: 5-7 times die diameter.
Blow Up Ratio: 2-4
Recommended film thickness: 45 to 100 µm.
Please note that, these processing conditions are recommended by producer only for 100% LFI2185 resin (not in the case of blending with any other compatible material), but because of the many particular factors which are outside our knowledge and control, and may affect the use of product, no warranty is given.
Packaging
Supplied in pellet form and can be packaged in 25kg Bags, one ton semi bulk or 17 tons bulk containers.

Food Packaging

The above-mentioned material meets the relevant requirements as laid down in:

- Regulation 174/2015 (amending Commission Regulation (EU) No. 10/2011)
- European Pharmacopoeia, paragraph 3.1.5.
- Metals test, standard 71-3
- Halogens, IEC 61249-2-21
- Heavy metals, EC Directive 94/62/EC
- RoHS, 2011/65/EU and 2002/96/EC
- Phthalates, Directive 2005/84/EC

Conveying

Conveying equipment should be designed to prevent accumulation of fines and dust particles can, under certain conditions, pose an explosion hazard. We recommend that the conveying system used:
Be equipped with adequate filters.
Is operated and maintained in such a manner to ensure no leaks develop.
That adequate grounding exists at all times.
We further recommend that good housekeeping will practiced throughout the facility.

Storage

All resins should be protected from direct sunlight and/or heat during storage. The storage location should also be dry, dust free and the ambient temperature should not exceed 50°C. It is also advisable to process polyethylene resins (in pelletized or powder from) within 6 months after delivery, this because also excessive aging of polyethylene can lead to a deterioration in quality. ASPC would not give warranty to bad storage conditions which may lead to quality deterioration such as color change, bad smell and inadequate product performance. It is also advisable to process

polyethylene resins (in pelletized or powder form) within 6 months after delivery, this because also excessive aging of polyethylene can lead to a deterioration in quality.

Handling

Minimal protection to prevent possible mechanical or thermal injury to the eyes. Fabrication areas should be ventilated to carry away fumes or vapors.

Combustibility

Polyethylene resins will burn when supplied adequate heat and oxygen. They should be handled and stored away from contact with direct flames and/or other ignition sources .in burning; polyethylene resins contribute high heat and may generate a dense black smoke. Fires can be extinguished by conventional means with water and mist preferred. In enclosed areas, fire fighters should be provided with self-contained breathing apparatus.

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Product Data Sheet

ASPC LFI2185A

PRODUCT DESCRIPTION:

LFI2185A is a low density polyethylene, with good toughness and good biaxial shrink properties. This product contains a high anti block level and medium level of slip agent (Erucamide), has low energy consumption during processing, good melt strength and a good draw down ability. It typically exhibits low friction and low blocking.

Typical APPLICATIONS:

LFI2185A is recommended for blown film extrusion. This product is very suitable for thin shrink films, thin packaging films and bags. This grade enables high speed converting without sticking.

Typical Data

Properties	Value (1)	unit	Test method
Physical Properties			
MFR (190 ^{0}C /2 .16 Kg)	0.85	dg/min	ISO 1133
Density	921	Kg/m3	ISO 1183 (A)
Mechanical properties (2)			
Impact strength	30	KJ/m	ISO 7765-2
Tear strength (TD)	30	KN/M	ISO 6383-2
Tear Strength (MD)	40	KN/m	ISO 6383-2
Yield stress (TD)	11	MPa	ISO 527-1/3
Yield stress (MD)	12	MPa	ISO 527-1/3
Tensile Stress at break (TD)	21	MPa	ISO 527-1/3
Tensile Stress at break (MD)	24	MPa	ISO 527-1/3
Strain at Break (TD)	>500	%	ISO 527-1/3
Strain at Break (MD)	>200	%	ISO 527-1/3
Modulus of Elasticity (TD)	170	MPa	ISO 527-1/3
Modulus of Elasticity (MD)	160	MPa	ISO 527-1/3
Coefficient of friction	0.1		ASTM D 1894
Blocking	10	g	SABTEC method
Re-blocking	30	g	SABTEC method
Optical properties (2)			
Haze	11	%	ASTM D 1003A
Gloss (45˚)	55	%	ASTM D 2457
Clarity	37	mV	SABTEC method
Additive ; Antioxidant ,Slip agent, Anti blocking agent			

Notes:

(1) Typical Values: not to be construed as specifications limits.

(2) Properties are based on 45 µm blown film produced at a melt temperature of 190°C and 3 BUR using 100% LTM 2185/47.

General Information

LFI2185A has been manufactured using SABTEC licensed technology.

Processing Conditions:

Extruder temperature profile: 175-190°C
Frost line height: 5-7 times die diameter.
Blow Up Ratio: 2-4
Recommended film thickness: 45 to 100 µm.
Please note that, these processing conditions are recommended by producer only for 100% LFI2185A resin (not in the case of blending with any other compatible material), but because of the many particular factors which are outside our knowledge and control, and may affect the use of product, no warranty is given.

Packaging

Supplied in pellet form and can be packaged in 25kg Bags, one ton semi bulk or 17 tons bulk containers.

Food Packaging

The above mentioned grade meets the relevant requirements of plastics directive 2002/72/EC (06-08-2002) and its amendments till directive 2008/39EC relating to plastic materials and articles intended to come into contact with foodstuffs.

Pharmaceutical Application

The above mentioned grade meets the requirements of the European pharmacopeia version 6 sections 3.1.5 for pharmaceutical application.

Conveying

Conveying equipment should be designed to prevent accumulation of fines and dust particles can, under certain conditions, pose an explosion hazard. We recommend that the conveying system used:

1. Be equipped with adequate filters.
2. Is operated and maintained in such a manner to ensure no leaks develop.
3. That adequate grounding exists at all times.

We further recommend that good housekeeping will practiced throughout the facility.

Storage

All resins should be protected from direct sunlight and/or heat during storage. The storage location should also be dry, dust free and the ambient temperature should not exceed 50°C. It is also advisable to process polyethylene resins (in pelletized or powder from) within 6 months after delivery, this because also excessive aging of polyethylene can lead to a deterioration in quality. ASPC would not give warranty to bad storage conditions which may lead to quality deterioration such as color change, bad smell and inadequate product performance. It is also advisable to process polyethylene resins (in pelletized or powder form) within 6 months after delivery, this because also excessive aging of polyethylene can lead to a deterioration in quality.

Handling

Minimal protection to prevent possible mechanical or thermal injury to the eyes. Fabrication areas should be ventilated to carry away fumes or vapors.

Combustibility

Polyethylene resins will burn when supplied adequate heat and oxygen. They should be handled and stored away from contact with direct flames and/or other ignition sources .in burning; polyethylene resins contribute high heat and may generate a dense black smoke. Fires can be extinguished by conventional means with water and mist preferred. In enclosed areas, fire fighters should be provided with self-contained breathing apparatus.

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Product Data Sheet

ASPC LFI2447A

PRODUCT DESCRIPTION:

LFI2447A is a low density polyethylene, with good toughness and good optical properties. This product contains a high level of anti-block and slip agent (Erucamide), has low energy consumption during processing and a good draw down ability. It typically exhibits low friction and no blocking.

Typical APPLICATIONS:

LFI2447A is recommended for blown film extrusion. This product is very suitable for high clarity laundry bags, textile wrapping films and zip lock bags. This grade enables high speed converting without sticking.

Typical Data

Properties	Value (1)	unit	Test method
Physical Properties			
MFR (190 ^{0}C /2 .16 Kg)	4.7	dg/min	ISO 1133
Density	924	Kg/m3	ISO 1183 (A)
Mechanical properties (2)			
Impact strength	13	KJ/m	ISO 7765-2
Tear strength (TD)	30	KN/m	ISO 6383-2
Tear Strength (MD)	90	KN/m	ISO 6383-2
Yield stress (TD)	13	MPa	ISO 527-1/3
Yield stress (MD)	13	MPa	ISO 527-1/3
Tensile Stress at break (TD)	16	MPa	ISO 527-1/3
Tensile Stress at break (MD)	27	MPa	ISO 527-1/3
Strain at Break (TD)	>450	%	ISO 527-1/3
Strain at Break (MD)	>100	%	ISO 527-1/3
Modulus of Elasticity (TD)	250	MPa	ISO 527-1/3
Modulus of Elasticity (MD)	230	MPa	ISO 527-1/3
Coefficient of friction	0.2		ASTM D 1894
Blocking	<5	g	SABTEC method
Re-blocking	20	g	SABTEC method
Optical properties (2)			
Haze	9	%	ASTM D 1003A
Gloss (45^o)	55	%	ASTM D 2457
Clarity	28	mV	SABTEC method
Additive: Antioxidant , Slip agent , Anti blocking agent			

Notes:
(1) Typical Values: not to be construed as specifications limits.
(2) Properties are based on 25 µm blown film produced at a melt temperature of 160°C and 3 BUR using 100% LFI2447A.

General Information

LFI2447A has been manufactured using SABTEC licensed technology.

Processing Conditions:

Extruder temperature profile: 145-160°C
Frost line height: 5-7 times die diameter.
Blow Up Ratio: 2-3
Recommended film thickness: 25 to 50 µm.
Please note that, these processing conditions are recommended by producer only for 100% LFI2447A resin (not in the case of blending with any other compatible material), but because of the many particular factors which are outside our knowledge and control, and may affect the use of product, no warranty is given.

Packaging

Supplied in pellet form and can be packaged in 25kg Bags, one ton semi bulk or 17 tons bulk containers.

Food Packaging

The above mentioned grade meets the relevant requirements of plastics directive 2002/72/EC (06-08-2002) and its amendments till directive 2008/39EC relating to plastic materials and articles intended to come into contact with foodstuffs.

Pharmaceutical Application
The above mentioned grade meets the requirements of the European pharmacopeia version 6 sections 3.1.5 for pharmaceutical application.

Conveying

Conveying equipment should be designed to prevent accumulation of fines and dust particles can, under certain conditions, pose an explosion hazard. We recommend that the conveying system used:

1. Be equipped with adequate filters.
2. Is operated and maintained in such a manner to ensure no leaks develop.
3. That adequate grounding exists at all times.

We further recommend that good housekeeping will practiced throughout the facility.

Storage

All resins should be protected from direct sunlight and/or heat during storage. The storage location should also be dry, dust free and the ambient temperature should not exceed 50°C. It is also advisable to process polyethylene resins (in pelletized or powder from) within 6 months after delivery, this because also excessive aging of polyethylene can lead to a deterioration in quality. ASPC would not give warranty to bad storage conditions which may lead to quality deterioration such as color change, bad smell and inadequate product performance. It is also advisable to process polyethylene resins (in pelletized or powder form) within 6 months after delivery, this because also excessive aging of polyethylene can lead to a deterioration in quality.

Handling

Minimal protection to prevent possible mechanical or thermal injury to the eyes. Fabrication areas should be ventilated to carry away fumes or vapors.

Combustibility

Polyethylene resins will burn when supplied adequate heat and oxygen. They should be handled and stored away from contact with direct flames and/or other ignition sources .in burning; polyethylene resins contribute high heat and may generate a dense black smoke. Fires can be extinguished by conventional means with water and mist preferred. In enclosed areas, fire fighters should be provided with self-contained breathing apparatus.

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Product Data Sheet

ASPC LFI2575

PRODUCT DESCRIPTION:

LFI2575 is a low density polyethylene, with good toughness and good biaxial shrink properties. This product is suitable for producing medium duty films and containers and contains no slip and anti-block additives, has low energy consumption during processing, good melt strength and a good draw down ability.

Typical APPLICATIONS:

LFI2575 is recommended for blown film extrusion. This product is suitable for surface protection films, lamination films and in applications where low blocking behavior is required and the presence of slip and anti-block is unwanted.

Typical Data

Properties	Value (1)	unit	Test method
Physical Properties			
MFI (190 ^{0}C /2 .16 Kg)	0.75	dg/min	ISO 1133
Density	925	Kg/m3	ISO 1183 (A)
Mechanical properties (2)			
Impact strength	20	KJ/m	ISO 7765-2
Tear strength (TD)	30	KN/m	ISO 6383-2
Tear Strength (MD)	35	KN/m	ISO 6383-2
Yield stress (TD)	12	MPa	ISO 527-1/3
Yield stress (MD)	12	MPa	ISO 527-1/3
Tensile stress at break (TD)	25	MPa	ISO 527-1/3
Tensile stress at break (MD)	28	MPa	ISO 527-1/3
Strain at Break (TD)	>500	%	ISO 527-1/3
Strain at Break (MD)	>200	%	ISO 527-1/3
Modulus of Elasticity (TD)	200	MPa	ISO 527-1/3
Modulus of Elasticity (MD)	190	MPa	ISO 527-1/3
Coefficient of friction	0.7		ASTM D 1894
Blocking	<5	g	SABTEC method
Re-blocking	20	g	SABTEC method
Optical properties (2)			
Haze	11	%	ASTM D 1003A
Gloss(45°)	50	%	ASTM D 2457
Clarity	34	mV	SABTEC method
Additive: Antioxidant			

Notes:
(1) Typical Values: not to be construed as specifications limits.

(2) Properties are based on 25 µm blown film produced at a melt temperature of 165°C and 3 BUR using 100% LFI2125A.

General Information

LFI2575 has been manufactured using SABTEC licensed technology.

Processing Conditions:

Extruder temperature profile: 175-190°C
Frost line height: 5-7 times die diameter.
Blow Up Ratio: 2-4
Recommended film thickness: 45 to 100 µm.
Please note that, these processing conditions are recommended by producer only for 100% LFI2575 resin (not in the case of blending with any other compatible material), but because of the many particular factors which are outside our knowledge and control, and may affect the use of product, no warranty is given.

Packaging

Supplied in pellet form and can be packaged in 25kg Bags, one ton semi bulk or 17 tons bulk containers.

Food Packaging

The above mentioned grade meets the relevant requirements of plastics directive 2002/72/EC (06-08-2002) and its amendments till directive 2008/39EC relating to plastic materials and articles intended to come into contact with foodstuffs.

Pharmaceutical Application

The above mentioned grade meets the requirements of the European pharmacopeia version 6 section 3.1.5 for pharmaceutical application.

Conveying

Conveying equipment should be designed to prevent accumulation of fines and dust particles can, under certain conditions, pose an explosion hazard. We recommend that the conveying system used:

1. Be equipped with adequate filters.
2. Is operated and maintained in such a manner to ensure no leaks develop.
3. That adequate grounding exists at all times.

We further recommend that good housekeeping will practiced throughout the facility.

Storage

All resins should be protected from direct sunlight and/or heat during storage. The storage location should also be dry, dust free and the ambient temperature should not exceed 50°C. It is also advisable to process polyethylene resins (in pelletized or powder from) within 6 months after delivery, this because also excessive aging of polyethylene can lead to a deterioration in quality. ASPC would not give warranty to

bad storage conditions which may lead to quality deterioration such as color change, bad smell and inadequate product performance. It is also advisable to process polyethylene resins (in pelletized or powder form) within 6 months after delivery, this because also excessive aging of polyethylene can lead to a deterioration in quality.

Handling

Minimal protection to prevent possible mechanical or thermal injury to the eyes. Fabrication areas should be ventilated to carry away fumes or vapors.

Combustibility
Polyethylene resins will burn when supplied adequate heat and oxygen. They should be handled and stored away from contact with direct flames and/or other ignition sources .in burning; polyethylene resins contribute high heat and may generate a dense black smoke. Fires can be extinguished by conventional means with water and mist preferred. In enclosed areas, fire fighters should be provided with self-contained breathing apparatus.

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شرکت پلیمر آریا ساسول(سهامی خاص)

ARYA SASOL POLYMER COMPANY

Product Data Sheet

ASPC LIM1922

PRODUCT DESCRIPTION:

LIM1922 is a low density polyethylene, offering a unique combination of consistent process ability, flexibility and toughness. This grade developed for applications that require a good balance between flow properties and mechanical properties.

Typical APPLICATIONS:

LIM1922 is recommended for injection molding process. This product is injected for producing flexible injection molded articles such as toys, household articles, caps, lids and as base resin for master batches.

Typical Data

Properties	Value (1)	unit	Test method
Polymer Properties			
MFI (190 ^{0}C /2 .16 Kg)	22	dg/min	ISO 1133
MFI (190 ^{0}C /5 Kg)	75	dg/min	ISO 1133
MVR (190 ^{0}C /2 .16 Kg)	29	ml/10min	ISO 1133
MVR (190 ^{0}C /5 Kg)	98	ml/10min	ISO 1133
Density	919	Kg/m3	ISO 1183 (A)
Thermal Properties(2)			
Heat deflection temperature at 0.45MPa (HDT/B)	39	°C	ISO 75
Vicat softening temperature at 10N (VST/A)	82	°C	ISO 306
Melting Point	105	°C	ASTM D 3418
Enthalpy change	104	j/g	ASTM D 3417
Mechanical properties(2)			
Stress at yield	8	MPa	ISO 527-1/2
Stress at break	7	MPa	ISO 527-1/2
Strain at break	400	%	ISO 527-1/2
Tensile modulus	175	MPa	ISO 527-1/2
Creep modulus (After 1 hour)	80	MPa	ISO 899-1
Creep modulus (After 1000 hour)	45	MPa	ISO 899-1
Notched Izod at +23°C Notched Izod at -30 °C	42 5	KJ/m^2 KJ/m^2	ISO 180 A ISO 180 A
Notched Tensile impact strength	86	KJ/m^2	ISO 8256/1B
Elongation at break	8.4	%	ISO 8256/1B
Maximum Tension	16	MPa	ISO 8256/1B
Hardness Shore D	45	-	ISO 868
Ball indentation test Applied load Ball indentation hardness ESCR	 49 16 3	 N MPa h	 ISO 2039-1 ISO 2039-1 SABTEC Method
Additive : Antioxidant			

Notes:

(1) Typical Values: not to be construed as specifications limits.

(2) Properties are based on 45 µm blown film produced at a melt temperature of 190°C and 3 BUR using 100% LTM 2185/47.

General Information

LFI2185A has been manufactured using SABTEC licensed technology.

Processing Conditions:

Extruder temperature profile: 175-190°C
Frost line height: 5-7 times die diameter.
Blow Up Ratio: 2-4
Recommended film thickness: 45 to 100 µm.
Please note that, these processing conditions are recommended by producer only for 100% LFI2185A resin (not in the case of blending with any other compatible material), but because of the many particular factors which are outside our knowledge and control, and may affect the use of product, no warranty is given.

Packaging

Supplied in pellet form and can be packaged in 25kg Bags, one ton semi bulk or 17 tons bulk containers.

Food Packaging

The above mentioned grade meets the relevant requirements of plastics directive 2002/72/EC (06-08-2002) and its amendments till directive 2008/39EC relating to plastic materials and articles intended to come into contact with foodstuffs.

Pharmaceutical Application

The above mentioned grade meets the requirements of the European pharmacopeia version 6 sections 3.1.5 for pharmaceutical application.

Conveying

Conveying equipment should be designed to prevent accumulation of fines and dust particles can, under certain conditions, pose an explosion hazard. We recommend that the conveying system used:

1. Be equipped with adequate filters.
2. Is operated and maintained in such a manner to ensure no leaks develop.
3. That adequate grounding exists at all times.

We further recommend that good housekeeping will practiced throughout the facility.

Storage

All resins should be protected from direct sunlight and/or heat during storage. The storage location should also be dry, dust free and the ambient temperature should not exceed 50°C. It is also advisable to process polyethylene resins (in pelletized or powder from) within 6 months after delivery, this because also excessive aging of

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Handling

Minimal protection to prevent possible mechanical or thermal injury to the eyes. Fabrication areas should be ventilated to carry away fumes or vapors.

Combustibility

Polyethylene resins will burn when supplied adequate heat and oxygen. They should be handled and stored away from contact with direct flames and/or other ignition sources .in burning; polyethylene resins contribute high heat and may generate a dense black smoke. Fires can be extinguished by conventional means with water and mist preferred. In enclosed areas, fire fighters should be provided with self-contained breathing apparatus.

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