

AKPC at a glance

AMIRKABIR Petrochemical Co. (AKPC) is located in 'MAHSHAHR' petrochemical economic special zone in IRAN. AKPC is started on 2003 through installation of HDPE unit and now, is one of the biggest polyolefin complexes in IRAN which annually produces around 1.8 million tonnes of various hydrocarbon products. This production complex supplies downstream industries feedstock by producing 700,000 tonnes of LDPE, LLDPE and HDPE per year. The Olefin unit as the upstream of AKPC produces 520,000 tonnes of ethylene and 150,000 tonnes of propylene per year. 20,000 tonnes of butene-1 and 51,000 tons of butadiene are produced as well.

AKPC

Vision

AKPC, through its sustainable development approach, intends to be one of the top three profitable companies in Iranian polyethylene industry by the vision of 1404 (2025).



AKPC as a producer of raw materials and polyolefin products in domestic and international markets is committed to satisfaction of beneficiaries by permanent profitability and development of value chain through engagement in downstream industries, optimum management of energy and resources, products quality enhancement, and after-sales services. Regarding social responsibilities, we deeply believe in life quality enhancement and improvement, observance of safety, health and environment requirements.

Institutional Values







Market Development Strategy

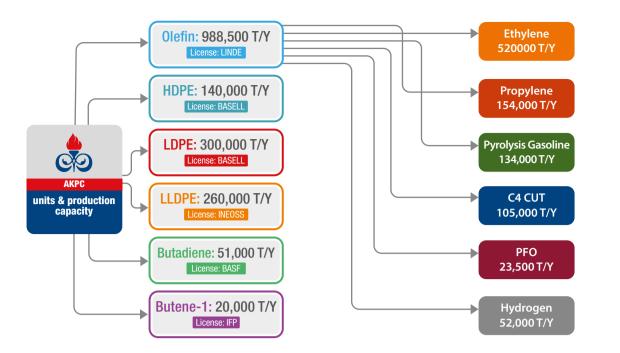
Petrochemical Company

AKPC Technical Brochure

AMIRKABIR Petrochemical Company (AKPC) is a major polyethylene producer and exporter in Iran. AKPC products are exported globally, from European countries to China, CIS, Middle East, Turkey, India, Eastern Mediterranean and neighboring countries. AKPC is also working on a market development plan for South America, Africa and South East Asia in order to geographically expansion of its customers. Furthermore, there are endeavors on balancing the export volume for different destinations and allocating some materials in each area, which is part of market development plan. To achieve this goal, AMIRKABIR petrochemical company has started a vast study on global market analysis and all markets are being studied on a routine.



Note	Note
	-



Vote		
1010		

Note		

	No. 47 Annual Classe III. Apparent its Immer-park (to be 144 thinking) the role (21 set Talante Fair - 40 (21) diff 21 to 8	L
1/2	Certificate No. 650201/03082	d
1	Constitute of Confirmity with the requirements of EU Registeres 1007013/EU 202013/EU 202013/EU	
W	PM STON	А
100	Manager with least the last office of the last of the property of the four facilities and beauty and the last of t	a
	COLUMN TRANSPORTE DE LA COLUMN	.11
	The property of the party of th	U)
- "34	Committee that the production of the production	A.
	THE PERSON NAMED IN COLUMN 2 IS NOT THE OWNER.	•
1 5-	7000 200	
400	The state of the s	
- 6	100 10 10 10 10 10 10 10 10 10 10 10 10	
1000	The state of the s	
-	CONTRACTOR OF THE PERSON NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TWO IS NAMED	١
	Section represents the second and first Statements are represent the second first agence.	
	The state of the s	
	Applicable first contract of a former partial of the former of the property of the contract of the partial of t	
	Table 1 to Admin by American Control of the Control	
	The particular is a companies with a Birth. Things then then 21, and 1011 grapher in 10 decision strictly. The particular professionality was a received for the Strictly maps of such continuous communities.	u-
	married Tracket parallel in the drawn book in the registerized of teas, agreem resons and resonable.	
	Company of the Compan	
	And child to have be expected to extend to be have been control for some report and after a set of the fine.	
	AN APPARAM AND AND AND AN APPARAM AND	5
	THE PARTY AND ADDRESS OF THE PARTY ADDR	0
400	As all the play have been been as the property of the party of the par	
_	in a formation that becoming all that have per recognitive state the continuous properties of the parties of the continuous of the continuous transfer of the continuous of th	
	which the large paper for formy country is come in the price to proper the paper in the paper in the paper and the paper in the paper i	
	Record & Appell in Subsect World Street Ph. 2017 And 31 contributed	-
	CCO to premier it to them.	
	-0/10	
	20012	
	() VA	
	No. of the latest lines.	
	The state of the s	
200		
20-81000-1	Contract designation of the contract of the co	
74-71-00-0	The state of the s	ш
- 33	Interest IIII	ı

LLDPE-0209AA

Grades	Application	Density Gr/cm ³	MFI g/10min
0209AA	cord cover, wide variety of small packaging and films, pipes, housewares, liquid container and plastic bags	0.920	0.9

HDPE-EX3		
Application	Density Gr/cm ³	MFI g/10min
bottle, cord cover, housewares, storage crates, small and large containers, petrol tanks, refuse bin, fish crate, carrier bag, pressure pipe e.g. gas, water and sewer pipes	0.945	0.45
	Application bottle, cord cover, housewares, storage crates, small and large containers, petrol tanks, refuse bin, fish crate, carrier bag, pressure pipe e.g. gas, water and sewer	Application Density Gr/cm³ bottle, cord cover, housewares, storage crates, small and large containers, petrol tanks, refuse bin, fish crate, carrier bag, pressure pipe e.g. gas, water and sewer

LDPE-2420H			
Grades	Application	Density Gr/cm ³	MFI g/10min
2420H	general purpose containers, film, polyethylene pipe, housewares, flexible injection parts, flexible toys, wide variety of car parts and etc.	0.924	1.9

LDPE-2420D			
Grades	Application	Density Gr/cm ³	MFI g/10min
2420D	general purpose containers, film, polyethylene pipe, housewares, flexible injection parts, flexible toys, wide variety of car parts, etc	0.923	0.25





Contact us

Tehran Office

- No. 21, Nafisi St. (23th East), Southern sarafha Ave., Darya Blvd., Saadat Abad, Tehran, Iran
- Phone: +98-21-84247000 / +98-21-87750
- Postal code: 1998833772

Complex

- Site 4, Special Economical Zone,
 Bandar Mahshahr, Khuzestan Province, Iran
- **\Phone:** +98-61-52174555
- **Website: www.akpc.ir**











LLDPE LL0205 AA / Linear Low Density Polyethylene

1 Product Description:

"LL0205 AA" is a LLDPE copolymer with butene-1 as comonomer which contains antioxidant. This grade is especially suitable for use pure for headwrap stretch film or blended with LDPE for heavy duty sacks.

Film made from LL0205 AA shows improved toughness compared to standard 1 MFR LLDPE butene copolymer.

Neutralizer: Calcium Stearate

Antioxidant: Irgnox1010, Irgafos168

2 Applications:

- Heavy duty sacks, Mulch films.
- Stretch film, liners, Geomembrane.

No.	Property	Value	Units	Test Method
1	MFR (190 °C/2.16Kg)	0.5	g/10min	ISO 1133
2	Density	920	Kg/m³	ISO 1183
3	Tensile Strength at Yield MD/TD	10/11	MPa	ISO 527
4	Tensile Strength at Break MD/TD	42/35	MPa	ISO 527
5	Elongation at Break MD/TD	600/700	%	ISO 527
6	Tear Strength MD/TD	155/375	g/25µm	ASTM D 1922
7	Dart Drop Impact	160	g	ASTM D 1709







LLDPE AKPC

LLDPE LL0209 AA / Linear Low Density Polyethylene

OPERATION Product Description:

"LL0209 AA" is a LLDPE copolymer with butene-1 as comonomer which contains antioxidant. It is recommended for general purpose application.

It is suitable for blending with conventional LDPE.

Film made from pure LL 0209 AA has the following advantages over conventional LDPE:

Better sealing, higher puncture resistance.

Greater drawdown capability.

Higher tensile strength.

Neutralizer: Calcium Stearate.

Antioxidant: Irgnox1010, Irgafos168

2 Applications:

- Food Grade.
- Heavy duty sacks, Agricultural films, liners.
- Produce bags, stretch film.



4 | www.akpc.ir

No.	Property	Value	Units	Test Method
1	MFR (190 °C/2.16Kg)	0.9	g/10min	ISO 1133
2	Density	920	Kg/m³	ISO 1183
3	Tensile Strength at Yield MD/TD	10/11	MPa	ISO 527
4	Tensile Strength at Break MD/TD	41/32	MPa	ISO 527
5	Elongation at Break MD/TD	620/840	%	ISO 527
6	Tear Strength MD/TD	145/370	g/25µ	ASTM D 1922
7	Dart Drop Impact	150	g	ASTM D 1709

Typical properties:
These are not to be construed as specifications

LLDPE LL0209 KJ or SR / Linear Low Density Polyethylene

1 Product Description:

"LL0209 KJ" is a LLDPE copolymer with butene-1 as comonomer which contains antioxidant. Slip and antiblock additives. It gives film of high slip which is easily separable.

It is recommended for general purpose application. It is suitable for blending with conventional LDPE. Film made from pure LL 0209 KJ has the following advantages over conventional LDPE:

Easier sealing.

Greater drawdown capability. Higher tensile strength.

Higher puncture resistance.

2 Applications:

- Food Grade.
- Refuse sacks.
- Produce bags, Carrier bags.

High Slip/ Antiblock Grade				
Additive	Finawax	Silica	Talc	
Neutralizer	Calcium Stearat	Calcium Stearate	Calcium Stearate	
Antioxidant	Irganox1010, Irgafos168	Irganox 1010, Irgafos 168	Irganox1010, Irgafos168	
Antiblock	Finawax-S	Siloblock47	Talc ABT 250	
Slip	Finawax-O	Erucamide	Erucamide	

No.	Property	Value	Units	Test Method
1	MFR (190 °C/2.16Kg)	0.9	g/10min	ISO 1133
2	Density	921	Kg/m³	ISO 1183
3	Tensile Strength at Yield MD/TD	10/11	MPa	ISO 527
4	Tensile Strength at Break MD/TD	41/32	MPa	ISO 527
5	Elongation at Break MD/TD	620/840	%	ISO 527
6	Tear Strength MD/TD	145/370	g/25µ	ASTM D 1922
7	Dart Drop Impact	150	g	ASTM D 1709







LLDPE AKPC /

LLDPE LL0220 AA / Linear Low Density Polyethylene

1 Product Description:

"LL0220 AA" is a LLDPE copolymer with butene-1 as comonomer which contains antioxidant. This grade is suitable for the production of blown film for light duty application and for the production of cast stretch film.

Film made from pure LL 0220 AA can be produced at higher output compared to standard 1 MFR LLDPE butene copolymers.

Neutralizer: Zinc Oxide

Antioxidant: Irgnox1010, Irgafos168

2 Applications:

- Food Grade.
- Light and medium duty film.
- Stretch film.



6 | www.akpc.ir

No.	Property	Value	Units	Test Method
1	Melt Flow Rate (190 °C /2.16Kg)	2.2	g/10min	ISO 1133
2	Density	920	Kg/m³	ISO 1183
3	Tensile Strength at Yield MD/TD	10/11	MPa	ISO 527
4	Tensile Strength at Break MD/TD	36/28	MPa	ISO 527
5	Elongation at Break MD/TD	600/800	%	ISO 527
6	Tear Strength MD/TD	110/300	g/25µ	ASTM D 1922
7	Dart Drop Impact	130	g	ASTM D 1709
8	Vicat Softening T°	93	°C	ISO 306/A50

Typical properties:
These are not to be construed as specifications

LLDPE LL0220 KJ / Linear Low Density Polyethylene

1 Product Description:

"LL0220 KJ" is a LLDPE copolymer with butene -1 as comonomer which contains antioxidant. Slip and antilock additives. This grade is suitable for the production of blown film for light duty application with a high slip requirement. Film made from LL 0220 KJ can be produced at higher output compared to standard 1 MFR LLDPE butene copolymers.

2 Applications:

- Food Grade.
- Light and medium duty film.

Medium Slip/ Antiblock Grade						
Additive	Finwax	Silica	Talc			
Neutralizer	Calcium Stearate	Calcium Stearate	Calcium Stearate			
Antioxidant	Irganox1010, Irgafos168	Irganox1010, Irgafos168	Irganox1010, Irgafos168			
Antiblock	Finawax-S	Siloblock47	Talc ABT 250			
Slip	Finawax-O	Erucamide	Erucamide			

No.	Property	Value	Units	Test Method
1	Melt Flow Rate (190 °C /2.16Kg)	2.4	g/10min	ISO 1133
2	Density	921	Kg/m³	ISO 1183
3	Tensile Strength at Yield MD/TD	10/11	MPa	ISO 527
4	Tensile Strength at Break MD/TD	36/28	MPa	ISO 527
5	Elongation at Break MD/TD	600/800	%	ISO 527
6	Tear Strength MD/TD	110/300	g/25µ	ASTM D 1922
7	Dart Drop Impact	130	g	ASTM D 1709
8	Vicat Softening T°	93	°C	ISO 306/A50







LLDPE AKPC /

LLDPE HD 5218 EA / Linear Low Density Polyethylene

1 Product Description:

"HD 5218 EA" is an easy flow high density polyethylene copolymer grade with a narrow molecular weight distribution, suitable for thin wall injection moulding application. HD5218EA has the following characteristic:

Good flow.

High warpage resistance.

Suitable for fast cycling application.

Additive: Neutralizer; Calcium Stearate - Antioxidant: Irgafos168, DSTDP

2 Applications:

- · Housewares.
- Thin walled food containers.
- PET bottle base cup.



No.	Property	Value	Units	Test Method
1	Melt Flow Rate (190 °C /2.16Kg)	18	g/10min	ISO 1133
2	Density	952	Kg/m³	ISO 1183
3	Tensile Strength at Yield MD/TD	72	MPa	ISO 527
4	Elongation at Break MD/TD	>1000	%	ISO 527
5	Flexural Modulus	1050	MPa	ISO 178-1975
6	Charpy Impact Resistance	5	Kj/m²	ISO 179
7	Vicat Softening T°	123	°C	ISO 306/A50

Typical properties: These are not to be construed as specifications

LLDPE HD 5226 EA / Linear Low Density Polyethylene

1 Product Description:

"HD 5226 EA" is an easy flow high density polyethylene copolymer grade with a narrow molecular weight distribution. suitable for thin wall injection moulding application.

HD5226 EA has the following characteristic:

High flow.

High warpage resistance.

Suitable for very fast cycling application.

Additive: Neutralizer; Calcium Stearate - Antioxidant:

Irgafos168, DSTDP

2 Applications:

- Housewares.
- Thin walled food containers.
- PET bottle base cup.

No.	Property	Value	Units	Test Method
1	Melt Flow Rate (190 °C /2.16Kg)	30	g/10min	ISO 1133
2	Density	953	Kg/m³	ISO 1183
3	Tensile Strength at Yield	27	MPa	ISO 527
4	Elongation at Break	>1000	%	ISO 527
5	Flexural Modulus	1050	MPa	ISO 178-1975
6	Charpy Impact Resistance	4	Kj/m²	ISO 179
7	Vicat Softening T°	123	°C	ISO 306/A50







LLDPE AKPC /

LLDPE HD 6070 EA / Linear Low Density Polyethylene

1 Product Description:

"HD 6070 EA" is a high density polyethylene grade with a narrow molecular weight distribution. Suitable for a wide range of injection moulding application.

HD 6070 EA has the following characteristic:

Easy Processing.

High rigidity.

Good impact strength.

High warpage resistance.

Additive: Neutralizer; Calcium Stearate - Antioxidant: DSTDP

2 Applications:

- Crates.
- Boxes.
- Seats.
- Pallets.



No.	Property	Value	Units	Test Method
1	Melt Flow Rate (190 °C /2.16Kg)	8.4	g/10min	ISO 1133
2	Density	960	Kg/m³	ISO 1183
3	Tensile Strength at Yield	31	MPa	ISO 527
4	Elongation at Break	>1000	%	ISO 527
5	Flexural Modulus	1400	MPa	ISO 178-1975
6	ESCR F50, 23 °C	55	hours	ASTM D 1693
7	Charpy Impact Resistance	6	Kj/m²	ISO 179

Typical properties:
These are not to be construed as specifications

LLDPE HD 6070 UA / Linear Low Density Polyethylene

1 Product Description:

"HD 6070 UA" is a UV stabilized high density polyethylene grade with a narrow molecular weight distribution, suitable for a wide range of injection moulding application.

HD 6070 UA has the following characteristic:

Easy processing.

High rigidity.

Good impact strength.

High wrapage resistance.

Additive: Neutralizer; Calcium Stearate - Antioxidant: Irgafos168, Anti UV: Chimasorb 944

2 Applications:

- Crates.
- Boxes.
- Seats.
- Pallets.

No.	Property	Value	Units	Test Method
1	Melt Flow Rate (190 °C /2.16Kg)	8.4	g/10min	ISO 1133
2	Density	960	Kg/m³	ISO 1183
3	Tensile Strength at Yield	31	MPa	ISO 527
4	Elongation at Break	>1000	%	ISO 527
5	Flexural Modulus	1400	MPa	ISO 178-1975
6	ESCR F50, 23 °C	55	hours	ASTM D 1693
7	Charpy Impact Resistance	6	Kj/m²	ISO 179







Amir Kabir Petrochemical Company

HDPE AKPC Amir Kabir Petrochemical Co.





HDPE EX1 (GF 7740F2) / High Density Polyethylene

1 Product Description:

"EX1 (GF 7740F2)" is a high density polyethylene with Butene-1 as comonomer. It is a medium molecular mass with a narrow molar mass distribution. Stabilization: Ca-Stearate, Irganox1010, Irgafos168.

- 2 Applications:
 - Stretched film tape used in manufacture of knitted and woven fabrics (Agricultural Packaging and protective cover).

14 | www.akpc.ir

No.	Property	Units	Test Method	Value
1	MFI (190 °C /5Kg)	g/10min	ISO 1133	1.6 ± 0.4
2	MFI (190 °C /21.6 Kg)	g/10min	ISO 1133	22 ± 4
3	FRR21.6/5			14 ± 2
4	Density	g/cm³	ISO 1183	0.944 ±0.002
5	Gel Number		Internal Method	≤ 4
6	Gel Size	μm	Internal Method	≤ 150

Typical properties:
These are not to be construed as specifications

HDPE EX2 (GM 7750) / High Density Polyethylene

1 Product Description:

"EX2 (GM 7750)" is a high density polyethylene with propylene as comonomer. It is a medium molar mass with a narrow molar mass distribution. Stabilization: Ca-Stearate, Irganox1010, Irgafos168.

- 2 Applications:
 - Production of monofilaments with high tensile strength.

No.	Property	Units	Test Method	Value
1	MFI (190 °C /5Kg)	g/10min	ISO 1133	2.5 ± 0.4
2	MFI (190 °C /21.6 Kg)	g/10min	ISO 1133	27 ± 3
3	FRR21.6/5			10.5 ± 1
4	Density	g/cm³	ISO 1183	0.9560 ±0.002
5	Notched Impact Strength	mJ/mm²	ISO 179/1eA	≥ 5
6	Gel Number		Internal Method	≤ 5
7	Gel Size	μm	Internal Method	≤ 150







HDPE AKPC

HDPE EX3 / High Density Polyethylene

1 Product Description:

"EX3" is a natural colored high density polyethylene with butene-1 as comonomer.

The product is classified as PE100 and shows good stress crack resistance properties (ESCR) combined with good impact strength.

Stabilization: Ca-Stearate, Zn-Stearate, Irganox1010, Irgafos168.

2 Applications:

- Food Grade.
- Pipe Extrusion PE100 Class.
- Pressure pipe.
- Drinking water and gas pipes.
- Discharge pipes.
- Sewer pipes and their fittings.
- For injection moulded and other fittings.
- Sheets.

		17			
		art.			
		T.			
100	arin	mt.	tarin.		
will be		THE ST	British S		
C		Lin.			
		100	4	1	

16 | www.akpc.ir

No.	Property	Units	Test Method	Value
1	MFI (190 °C /5Kg)	g/10min	ISO 1133	0.45 ± 0.05
2	MFI (190 °C/21.6 Kg)	g/10min	ISO 1133	12.0 ± 3.0
3	FRR21.6/5			28 ± 4
4	Density	g/cm³	ISO 1183	0.945 ± 0.002
5	Notched Impact Strength	mJ/mm ²	ISO 179/1eA	>12
6	Pipe Evaluation Hydrostatic Strength (80 °C,5N/mm²)	Hours	DIN 8074 DIN 8075 ISO 1167	1000 min.

Typical properties:
These are not to be construed as specifications

HDPE EX4 (GM 9455F) / High Density Polyethylene

1 Product Description:

"EX4 (GM 9455F)" is a high density polyethylene with Butene -1 as comonomer. It is high molar mass for blown film with very high stiffness and good tenacity. Stabilization: Ca-Stearate, Zn-Stearate, Irgafos168.

2 Applications:

- Paper like film suitable wrapping.
- Counter bags and carrier bags.

No.	Property	Units	Test Method	Value
1	MFI (190 °C /5Kg)	g/10min	ISO 1133	0.28 ± 0.07
2	MFI (190 °C/21.6 Kg)	g/10min	ISO 1133	8 ± 2
3	FRR21.6/5			29
4	Density	g/cm³	ISO 1183	0.956 ±0.002
5	Gel Number		Internal Method	≤ 3
6	Gel Size	μm	Internal Method	≤ 120









HDPE AKPC

HDPE EX5 (GM 9450 F) / High Density Polyethylene

1 Product Description:

"EX5 (GM 9450F)" is a high Density polyethylene with Butene-1 as comonomer. It is high molar mass for blown film with in comparison to EX4 lower stiffness and increased tenacity.

The product has good toughness, low gel level and good tear strength. Stabilization: Ca-Stearate, Zn-Stearate, Irgafos168.

2 Applications:

- Food Grade.
- Blown film with paper like quality.
- Suitable for counter bags.
- Carrier bags.
- Wrapping films and sheets.
- Blending partner.

	17.17			
	THE STREET			
	1			
	Int.	THE REAL PROPERTY AND ADDRESS OF THE PERTY ADDRESS OF THE PERTY AND ADDRESS OF THE PERTY ADDRESS OF		
5				
		-		
	The same		S MAN	

18 | www.akpc.ir

P*4.-

No	. Property	Units	Test Method	Value
1	MFR (190 °C /5Kg)	g/10min	ISO 1133	0.28 ± 0.07
2	MFR (190 °C/21.6 Kg)	g/10min	ISO 1133	8.0 ± 2.0
3	FRR5/21.6/5			30 ± 4
4	Density	g/cm³	ISO 1183	0.949 ±0.002
5	Gel Number		Internal Method	≤ 3
6	Gel Size	μm	Internal Method	≤ 120

Typical properties: These are not to be construed as specifications

HDPE I1 (GA 7260) / High Density Polyethylene

1 Product Description:

"I1 (GA 7260)" is a high density polyethylene with propylene as comonomer. It is very easy flowing, high density, hardness and stiffness, largely warpage free, for mass product articles in rapid shot frequence. Stabilization: Ca-Stearate, MgO, Irganox1010, UMV 13.

2 Applications:

- Lightweight household.
- Disposable articles.
- Large moulding and complicated parts where high impact strength and stress cracking resistance (ESCR) are not demanded.

No.	Property	Units	Test Method	Value
1	MFI (190 °C/2.16 Kg)	g/10min	ISO 1133	17 ± 3
2	MFI (190 °C/5Kg)	g/10min	ISO 1133	52 ± 8
3	FRR5/2.16			3 ± 0.8
4	Density	g/cm³	ISO 1183	0.957 ±0.002
5	Notched Impact Strength	MJ/mm ²		2









HDPE I2 (GB 7250) / High Density Polyethylene

1 Product Description:

"I2 (GB 7250)" is a high density polyethylene with propylene as comonomer. It is very easy flowing, low warpage, less hard and stiff than I1. Stabilization: Ca-Stearate, Irganox1010.

- **2** Applications:
 - Household articles.
 - Closures/seals.
 - Packaging.

		E			
		ATC.			
		THE COLUMN			
	alle	TE .			
· BA		THE R	Marine Street,		
	世間				
		Line.	-		
		The same		NA.	

20 | www.akpc.ir

No.	Property	Units	Test Method	Value
1	MFI (190 °C /2.16Kg)	g/10min	ISO 1133	10 ± 1.4
2	MFI (190 °C/5 Kg)	g/10min	ISO 1133	28 ± 4
3	FRR5/2.16			2.8 ± 0.7
4	Density	g/cm³	ISO 1183	0.950 ±0.002
5	Notched Impact Strength	mJ/mm²	ISO 179/1eA	3

Typical properties: These are not to be construed as specifications

HDPE I3 (GC 7260) / High Density Polyethylene

1 Product Description:

"I3 (GC 7260)" is a high density polyethylene with propylene as comonomer. The product has good impact strength, good stress cracking resistance (ESCR), low warping and good flow ability as well as high density, hardness and stiffness Stabilization: Ca-Stearate, Irganox1010.

- **2** Applications:
 - Food Grade.
 - Transport and stacking carts.
 - Particularly bottle crates.
 - Engineering parts.
 - Closures.

No.	Property	Units	Test Method	Value
1	MFR (190 °C /2.16Kg)	g/10min	ISO 1133	8.0 ± 1.0
2	MFR (190 °C/5 Kg)	g/10min	ISO 1133	23 ± 3
3	FRR5/2.16			2.8 ± 0.6
4	Density	g/cm³	ISO 1183	0.957 ±0.002
5	Notched Impact Strength	mJ/mm²	ISO 179/1eA	3.0









HDPE I4 (GD 7255) / High Density Polyethylene

1 Product Description:

"I4 (GD 7255)" is a high density polyethylene with propylene as comonomer. It has high impact strength and low warping tendency. Stabilization: Ca-Stearate, Irganox1010, Irgafos168

- **2** Applications:
 - For thick walled, highly steered transport containers e.g. refuse bins and fish crates.



22 | www.akpc.ir

No	. Property	Units	Test Method	Value
1	MFI (190 °C /2.16Kg)	g/10min	ISO 1133	4.0 ± 0.7
2	MFI (190 °C/5 Kg)	g/10min	ISO 1133	11 ± 2
3	FRR5/2.16			2.8 ± 0.9
4	Density	g/cm³	ISO 1183	0.954 ±0.002
5	Notched Impact Strength	mJ/mm²	ISO 179/1eA	4

Typical properties:
These are not to be construed as specifications

HDPE BL2 (GF 4750) / High Density Polyethylene

1 Product Description:

"BL2 (GF 4750)" as a high density polyethylene with Butene-1 as comonomer. It is high impact strength and slightly lower stiffness than BL3, high stress cracking resistance (ESCR) even in contact with surfactants. Stabilization: Ca-Stearate, Irganox1010, Irgafos168

- 2 Applications:
 - Disinfectant bottles up to 2 liters.
 - Containers up to 10 liters.
 - Petrol cans up to 5 liters.

No.	Property	Units	Test Method	Value
1	MFI (190 °C /5Kg)	g/10min	ISO 1133	1.2± 0.3
2	MFI (190 °C /21.6 Kg)	g/10min	ISO 1133	23±4
3	FRR21.6/5			19
4	Density	g/cm³	ISO 1183	0.946±0.002
5	Notched Impact Strength	mJ/mm²	ISO 179/1eA	10









HDPE BL3 (GF 4760) / High Density Polyethylene

1 Product Description:

"BL3 (GF 4760)" is a high density polyethylene with Butene-1 as comonomer. The product is high density and high stiffness, good flow ability and impact strength and good stress cracking resistance (ESCR). Stabilization: Ca-Stearate, Irganox1010, Irgafos168

2 Applications:

- Food Grade.
- Containers with capacities ranging from a few ml up to 10 liters.
- Production of sheets for thermoforming.

		五			
		17			
and a second		1			
12	2017	Int.	THE REPLACE		
	STATES OF				
STEE	2.00				
0		Lin	ECC		
		- Sec		3,80	

24 | www.akpc.ir

No.	Property	Units	Test Method	Value
1	MFI (190 °C /5Kg)	g/10min	ISO 1133	1.2± 0.3
2	MFI (190 °C /21.6 Kg)	g/10min	ISO 1133	23±4
3	FRR21.6/5			19
4	Density	g/cm³	ISO 1183	0.954±0.002
5	Notched Impact Strength	mJ/mm²	ISO179/1eA	9

Typical properties: These are not to be construed as specifications

HDPE BL4 (GM 8255) / High Density Polyethylene

1 Product Description:

"BL4 (GM 8255)" is a high density polyethylene with Butene-1 as comonomer. It is a high molar mass, easily process able, High stiffness and impact good stress cracking resistance (ESCR) and even good moulding surface finish. Stabilization: Ca-Stearate, Irganox1010, Irgafos168

2 Applications:

• General purpose grade for containers from 1 liter to about 500 liters capacity.

No.	Property	Units	Test Method	Value
1	MFI (190 °C /5Kg)	g/10min	ISO 1133	0.35± 0.06
2	MFI (190 °C /21.6 Kg)	g/10min	ISO 1133	8.5±2.0
3	FRR21.6/5			24
4	Density	g/cm³	ISO 1183	0.952±0.002
5	Notched Impact Strength	mJ/mm²	ISO 179/1eA	25









HDPE BL5 (GM 7746) / High Density Polyethylene

1 Product Description:

"BL5 (GM 7746)" is a high density polyethylene with Butene-1 as comonomer. It has a high molar mass, very good impact strength and optimum stress cracking resistance (ESCR).

Stabilization: Ca-Stearate, Irganox1010, Irgafos168

- **2** Applications:
 - Large container above 5 liters capacity e.g. petrol tanks.
 - For manufacture of semi-finished products.

		8			
		7			
		福			
		世			
		I 6			
770	aries	m	artin.		
· BAS	50E	75	The Party of the P		
THE PERSON NAMED IN	藝能超		Market I		
MSILUL.	7.40		+		
EA.		No.	3,000		
		300	All	8,000	
		200	4	1	

26 | www.akpc.ir

No	Property	Units	Test Method	Value
1	MFI (190 °C /5Kg)	g/10min	ISO 1133	0.2 ± 0.04
2	MFI (190 °C /21.6 Kg)	g/10min	ISO 1133	4.0 ± 0.4
3	FRR21.6/5			20
4	Density	g/cm³	ISO 1183	0.943 ± 0.002
5	Notched Impact Strength	mJ/mm²	ISO 179/1eA	25

Typical properties:
These are not to be construed as specifications

HDPE BL6 (GM 7255) / High Density Polyethylene

1 Product Description:

"BL6 (GM 7255)" is a high density polyethylene with Butene-1 as comonomer. It is a high molar mass material with very good impact strength and stiffness and good stress cracking resistance (ESCR) and even good moulding surface finish. Stabilization: Ca-Stearate, Irganox1010, Irgafos168, HOE Wax PED 191.

- 2 Applications:
 - For large containers above 5 liters capacity for manufacture of semi-finished products.

No.	Property	Units	Test Method	Value
1	MFI (190 °C /5Kg)	g/10min	ISO 1133	0.12 ± 0.02
2	MFI (190 °C /21.6 Kg)	g/10min	ISO 1133	2.7± 0.4
3	FRR21.6/5			23
4	Density	g/cm³	ISO 1183	0.952 ± 0.002
5	Notched Impact Strength	mj/mm²	ISO 179/1eA	42









HDPE BL7 (GM 6255) / High Density Polyethylene

1 Product Description:

"BL7 (GM 6255)" is a high density polyethylene with Butene-1 as comonomer. It is a special grade for particularly high requirements like low temperature impact strength and stacking, good stress cracking resistance (ESCR). Stabilization: Ca-Stearate, Irganox1010, Irgafos168, HOE Wax PED 191.

- **2** Applications:
 - For large containers e.g. ring drums with 220 liters capacity.



28 | www.akpc.ir

No.	Property	Units	Test Method	Value
1	MFI (190 °C /5Kg)	g/10min	ISO 1133	≤ 0.1
2	MFI (190 °C /21.6 Kg)	g/10min	ISO 1133	2.2 ± 0.2
3	Density	g/cm³	ISO 1183	0.950 ± 0.002
4	Notched Impact Strength	mJ/mm²	ISO 179/1eA	≥ 45

Typical properties:
These are not to be construed as specifications

HDPE BL8 (GM 7745) / High Density Polyethylene

1 Product Description:

"BL8 (GM 7745)" is a high density polyethylene with Butene-1 as comonomer. It is a special grade.

Stabilization: Ca-Stearate, Irganox1010, Irgafos168, Tinevin326, Tinevin622.

2 Applications:

- For heating oil strong tanks.
- Large containers for various products.

No.	Property	Units	Test Method	Value
1	MFI (190 °C /5Kg)	g/10min	ISO 1133	0.31 ± 0.04
2	MFI (190 °C /21.6 Kg)	g/10min	ISO 1133	7.5 ± 1.5
3	FRR21.6/5			24
4	Density	g/cm³	ISO 1183	0.944 ± 0.002
5	Notched Impact Strength	mJ/mm²	ISO 179/1eA	19







LDPE AKPC
Amir Kabir Petrochemical Co.



LDPE 1800 S

1 Product Description:

Typical application include caps & closures, engineering parts and leisure & sports equipment.

- 2 Applications:
 - Caps & closures
 - Sports
 - Leisure and Toys
- **3** Processing Method:
 - Injection Moulding
- 4 Features:

Fast cycle (Production), Low Density, Good Flexibility, Good Processability



No.	Property	Value	Units	Test Method
1	Density	0.917	g/cm³	ISO 1183
2	Melt flow rate (MFR) (190 °C/2.16Kg)	20.0	g/10 min	ISO 1133
3	Tensile Modulus	150	MPa	ISO 527-1, -2
4	Tensile Stress at Yield	8.0	MPa	ISO 527-1, -2
5	Vicat Softening Temprature	80	°C	ISO 306/A50

32 | www.akpc.ir

Typical properties: These are not to be construed as specifications

LDPE 2420 D

1 Product Description:

Lupolen 2420 D is a non-additivated, low density Polyethylene. It is delivered in pellet form.

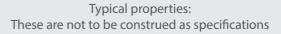
- **2** Applications:
 - Food Grade
 - Bags & Pouches
 - Bottles for Consumer Goods
 - Shrink Film
 - Blown Film
 - Film
- 4 Features:

Good Processability, Good Tear strength, Good Toughness

3	Processing Method:	
	Blown Film	

- Injection Moulding
- Extrusion Blow Moulding

No.	Property	Value	Units	Test Method
1	Density	0.923	g/cm³	ISO 1183
2	Melt flow rate (MFR) (190 °C /2.16Kg)	0.25	g/10 min	ISO 1133
3	Tensile Modulus	240	MPa	ISO 527-1, -2
4	Tensile Stress at Yield	10	MPa	ISO 527-1, -2
5	Tensile Strength MD/TD	27/20	MPa	ISO 527-1, -3
6	Tensile Strain at Break MD/TD	200/500	%	ISO 527-1, -3
7	Dart Drop Impact (50µ Blown Film)	250	g	ASTM D 1709
8	Vicat Softening Temperature	94	°C	ISO 306/A50
9	Haze (50µ)	<14	%	ASTM D 1003
10	Gloss (60 °, 50μ)	>50	-	ASTM D 2457
11	Shore Handness (Shore D)	48	-	ISO 868









LDPE 2420 F

1 Product Description:

Lupolen 2420 F is a non-additivated, low density Polyethylene. It is delivered in pellet form.

- **2** Applications:
 - Food Grade
 - Bags & Pouches
 - Blow Moulding Application
 - Shrink Film
 - Blown Film
 - Film

Good Heat Seal, Optical, Good Processability, Good Melt Strength

4 Features:



A	K	PC
34 I w	ww.	akpc.ir

No.	Property	Value	Units	Test Method
1	Density	0.923	g/cm³	ISO 1183
2	Melt flow rate (MFR) (190 °C /2.16Kg)	0.75	g/10 min	ISO 1133
3	Tensile Modulus	260	MPa	ISO 527-1, -2
4	Tensile Stress at Yield	11	MPa	ISO 527-1, -2
5	Tensile Strength MD/TD	26/20	MPa	ISO 527-1, -3
6	Tensile Strain at Break MD/TD	300/600	%	ISO 527-1, -3
7	Dart Drop Impact (50µ Blown Film)	150	g	ASTM D 1709
8	Vicat Softening Temperature	96	°C	ISO 306/A50
9	Haze (50µ)	<8.0	%	ASTM D 1003
10	Gloss (60 °, 50μ)	>90	-	ASTM D 2457
11	Shore Hardness (Shore D)	48	-	ISO 868

3 Processing Method:

Injection Moulding

Extrusion Blow Moulding

Blown Film

Typical properties: These are not to be construed as specifications

LDPE 2420 H

1 Product Description:

Lupolen 2420 H is a non-additivated, low density Polyethylene. It is delivered in pellet form.

- **2** Applications:
 - Food Grade
 - Bags & Pouches
 - Film
 - Shrink Film
 - Blown Film
 - Cast Film
- 4 Features:

Good Heat Seal, Optical, Good Processability

No.	Property	Value	Units	Test Method
1	Density	0.924	g/cm³	ISO 1183
2	Melt flow rate (MFR) (190 °C /2.16Kg)	1.9	g/10 min	ISO 1133
3	Tensile Modulus	260	MPa	ISO 527-1, -2
4	Tensile Stress at Yield	11	MPa	ISO 527-1, -2
5	Tensile Strength at Break MD/TD	26/18	MPa	ISO 527-1, -3
6	Tensile Strain at Break MD/TD	250/600	%	ISO 527-1, -3
7	Dart Drop Impact (50µ Blown Film)	110	g	ASTM D 1709
8	Vicat Softening Temperature	94	°C	ISO 306/A50
9	Haze (50µ)	<8.0	%	ASTM D 1003
10	Gloss (60 °, 50μ)	>100	-	ASTM D 2457
11	Shore Hardness (Shore D)	48	-	ISO 868



- Cast Film
- Blown Film







LDPE 2420 K

1 Product Description:

Lupolen 2420 K is a non-additivated, low density Polyethylene. It is delivered in pellet form.

- 2 Applications:
 - Food Grade
 - Coatings
 - Protective
 - Shrink Film
 - Surface Protection Film
- **4** Features:

Good Heat Seal, Good Optical Processability, Good Processability

- Good Heat

A	K	PC
36 l w	ww.	akpc.ir

No.	Property	Value	Units	Test Method
1	Density	0.924	g/cm³	ISO 1183
2	Melt flow rate (MFR) (190 °C /2.16Kg)	4	g/10 min	ISO 1133
3	Tensile Modulus	260	MPa	ISO 527-1, -2
4	Tensile Stress at Yield	11	MPa	ISO 527-1, -2
5	Tensile Strength MD/TD	22/17	MPa	ISO 527-1, -3
6	Tensile Strain at Break MD/TD	300/600	%	ISO 527-1, -3
7	Dart Drop Impact (50µ Blown Film)	100	g	ASTM D 1709
8	Vicat Softening Temperature	92	°C	ISO 306/A50
9	Haze (50µ)	< 8	%	ASTM D 1003
10	Gloss (60 °, 50μ)	>105	-	ASTM D 2457

3 Processing Method:

Extrusion Coating

• Injection Moulding

Blown FilmCast Film

Typical properties:
These are not to be construed as specifications

LDPE 2426 F

1 Product Description:

Lupolen 2426 F is an additivated, low density Polyethylene. It contains slip and anti-blocking agent. It is delivered in pellet form.

3 Processing Method:

• Blown Film

- 2 Applications:
 - Cast & Blown Film
 - Bags & Pouches
 - Film & Shrink Film
 - Food Packaging Film
 - Surface Protection Film
- **4** Features:

Unspecified Antiblocking, Optical, Good Processability, Unspecified Slip, Low Friction

No.	Property	Value	Units	Test Method
1	Density	0.924	g/cm³	ISO 1183
2	Melt flow rate (MFR) (190 °C /2.16Kg)	0.75	g/10 min	ISO 1133
3	Tensile Modulus	260	MPa	ISO 527-1, -2
4	Tensile Stress at Yield	11	MPa	ISO 527-1, -2
5	Tensile Strength MD/TD	26/20	MPa	ISO 527-1, -3
6	Tensile Strain at Break MD/TD	300/600	%	ISO 527-1, -3
7	Dart Drop Impact (50µ Blown Film)	150	g	ASTM D 1709
8	Vicat Softening Temperature	96	°C	ISO 306/A50
9	Haze (50µ)	< 9.0	%	ASTM D 1003
10	Gloss (60 °, 50μ)	> 90	-	ASTM D 2457







LDPE 2426 H

1 Product Description:

Lupolen 2426 H is a non-additivated, low density Polyethylene. It contains slip and anti-blocking agent. it is delivered in pellet form.

- 2 Applications:
 - Cast Film
 - Bags & Pouches
 - Film & Shrink Film
 - Blown Film
 - Surface Protection Film

Unspecified Antiblocking, Opticals, Good Processability, Unspecified Slip, Low Friction

- 4 Features:



A	K	PC
38 W	ww.	akpc .ir

No.	Property	Value	Units	Test Method
1	Density	0.925	g/cm³	ISO 1183
2	Melt flow rate (MFR) (190 °C /2.16Kg)	1.9	g/10 min	ISO 1133
3	Tensile Modulus	260	MPa	ISO 527-1, -2
4	Tensile Stress at Yield	11	MPa	ISO 527-1, -2
5	Tensile Strength MD/TD	26/18	MPa	ISO 527-1, -3
6	Tensile Strain at Break MD/TD	250/600	%	ISO 527-1, -3
7	Dart Drop Impact (50µ Blown Film)	110	g	ASTM D 1709
8	Vicat Softening Temperature	94	°C	ISO 306/A50
9	Haze (50μ)	<9.0	%	ASTM D 1003
10	Gloss (60 °, 50μ)	>100	-	ASTM D 2457
11	Shore Hardness (Shore D)	48	-	ISO 868

3 Processing Method:

Cast Film

• Blown Film

Typical properties: These are not to be construed as specifications

LDPE 2426 K

1 Product Description:

Lupolen 2426 K is an additivated, low density Polyethylene. It contains slip and anti-blocking agent. It is delivered in pellet form.

- 2 Applications:
 - Cast Film
 - Food Packaging Film
 - Film and shirink Film
 - Blown Film
 - Surface Protection Film

3	Processing	Method
---	-------------------	--------

3 Features: Unpecifed Antiblocking, Opticals, Good Processability, Unspecified Slip, Low Friction

No.	Property	Value	Units	Test Method
1	Density	0.925	g/cm³	ISO 1183
2	Melt flow rate (MFR) (190 °C /2.16Kg)	4	g/10 min	ISO 1133
3	Tensile Modulus	260	MPa	ISO 527-1, -2
4	Tensile Stress at Yield	11	MPa	ISO 527-1, -2
5	Tensile Strength MD/TD	22/15	MPa	ISO 527-1, -3
6	Tensile Strain at Break MD/TD	300/600	%	ISO 527-1, -3
7	Dart Drop Impact (50µ Blown Film)	100	g	ASTM D 1709
8	Vicat Softening Temperature	92	°C	ISO 306/A50
9	Haze (50µ)	<9.0	%	ASTM D 1003
10	Gloss (60 °, 50μ)	>105	-	ASTM D 2457
11	Shore Hardness (Shore D)	48	_	ISO 868







LDPE 3020 F

1 Product Description:

Lupolen 3020 F is a non-additivated, low density Polyethylene with high rigidity, good optical and good chemical resistance. It is delivered in pellet form.

- **2** Applications:
 - Bags & Pouches
 - Cast & Blown Film
 - Film & Shrink Film
 - Food Packaging Film
 - Surface Protection Film
- **4** Features:

Optical, Good Processability, Good Stiffness



A	K	PC
40 W	ww.	akpc.ir

No.	Property	Value	Units	Test Method
1	Density	0.927	g/cm³	ISO 1183
2	Melt flow rate (MFR) (190 °C /2.16Kg)	0.9	g/10 min	ISO 1133
3	Tensile Modulus	300	MPa	ISO 527-1, -2
4	Tensile Stress at Yield	13.0	MPa	ISO 527-1, -2
5	Tensile Strength MD/TD	27/19	MPa	ISO 527-1, -3
6	Tensile Strain at Break MD/TD	300/600	%	ISO 527-1, -3
7	Dart Drop Impact (50µ Blown Film)	120	g	ASTM D 1709
8	Vicat Softening Temperature	100	°C	ISO 306/A50
9	Haze (50μ)	< 6.5	%	ASTM D 1003
10	Gloss (60 °, 50μ)	>100	-	ASTM D 2457
11	Shore Hardness (Shore D)	51	-	ISO 868

3 Processing Method:

Blown Film

Typical properties:
These are not to be construed as specifications

LDPE 3020 H

1 Product Description:

Lupolen 3020 H is a non-additivated, low density Polyethylene with high rigidity, good opticals and good chemical resistance. It is delivered in pellet form.

2 Applications:

4 Features:

- Cast & Blown Film
- Bags & Pouches
- Film & Shrink Film
- Food Packaging Film
- Surface Protection Film

- **3** Processing Method:
 - Cast Film
 - Blown Film

No.	Property	Value	Units	Test Method
1	Density	0.927	g/cm³	ISO 1183
2	Melt flow rate (MFR) (190 °C /2.16Kg)	2.0	g/10 min	ISO 1133
3	Tensile Modulus	300	MPa	ISO 527-1, -2
4	Tensile Stress at Yield	13	MPa	ISO 527-1, -2
5	Tensile Strength MD/TD	25/18	MPa	ISO 527-1, -3
6	Tensile Strain at Break MD/TD	350/600	%	ISO 527-1, -3
7	Dart Drop Impact (50µ Blown Film)	110	g	ASTM D 1709
8	Vicat Softening Temperature	100	°C	ISO 306/A50
9	Haze (50µ)	< 6.5	%	ASTM D 1003
10	Gloss (60 °, 50μ)	>110	-	ASTM D 2457
11	Shore Hardness (Shore D)	51	-	ISO 868

Good Heat Seal, Optical, Good Processability, Good Stiffness





LDPE 3020 K

1 Product Description:

Lupolen 3020 K is a non-additivated, low density Polyethylene with high rigidity, good opticals and good chemical resistance. It is delivered in pellet form.

- 2 Applications:
 - Cast & Blown Film
 - Lamination Film
 - Film & Shrink Film
 - Food Packaging Film
 - Surface Protection Film

at Seal, Optical, Good Processability, Good Stiffness

Footuroo

4	realu	res:
	Good	Heat





No.	Property	Value	Units	Test Method
. 1	Density	0.927	g/cm³	ISO 1183
2	Melt flow rate (MFR) (190 °C /2.16Kg)	4.0	g/10 min	ISO 1133
3	Tensile Modulus	300	MPa	ISO 527-1, -2
4	Tensile Stress at Yield	13.0	MPa	ISO 527-1, -2
5	Tensile Strength MD/TD	20/15	MPa	ISO 527-1, -3
6	Tensile Strain at Break MD/TD	350/600	%	ISO 527-1, -3
7	Dart Drop Impact (50µ Blown Film)	100	g	ASTM D 1709
8	Vicat Softening Temperature	97	°C	ISO 306/A50
9	Haze (50µ)	< 6.5	%	ASTM D 1003
10	Gloss (60 °, 50μ)	>115	-	ASTM D 2457
11	Shore Hardness (Shore D)	51	-	ISO 868

3 Processing Method:

Injection Mouling

Cast Film

Blown Film

Typical properties: These are not to be construed as specifications

LDPE 3026 H

1 Product Description:

Lupolen 3026 H is an additivated, low density Polyethylene with high rigidity, It Contains slip & anti-blocking agent. It is delivered in pellet form.

- 2 Applications:
 - Cast & Blown Film
 - Bags & Pouches
 - Film & Shrink Film
 - Food Packaging Film

- **3** Processing Method:
 - Cast Film
 - Blown Film

4 Features:

Optical, Good Processability, Unspecified /slip, Low Friction, Good Stiffness

No.	Property	Value	Units	Test Method
1	Density	0.927	g/cm³	ISO 1183
2	Melt flow rate (MFR) (190 °C /2.16Kg)	2.0	g/10 min	ISO 1133
3	Tensile Modulus	300	MPa	ISO 527-1, -2
4	Tensile Stress at Yield	13.0	MPa	ISO 527-1, -2
5	Tensile Strength MD/TD	25/18	MPa	ISO 527-1, -3
6	Tensile Strain at Break MD/TD	350/600	%	ISO 527-1, -3
7	Dart Drop Impact (50µ Blown Film)	110	g	ASTM D 1709
8	Vicat Softening Temperature	100	°C	ISO 306/A50
9	Haze (50μ)	< 7.0	%	ASTM D 1003
10	Gloss (60 °, 50μ)	>110	-	ASTM D 2457
11	Shore Hardness (Shore D)	51	-	ISO 868







Amir Kabir Petrochemical Company _

LDPE 3026 K

1 Product Description:

Lupolen 3026 K is an additivated, low density Polyethylene with high rigidity. It contains slip & antiblocking agent. It is delivered in pellet form.

2 Applications:

- Cast & Blown Film
- Lamination Film
- Film & Shrink Film
- Food Packaging Film
- Surface Protection Film

ed Antiblocking, Opticals, Good Processability, Unspecified Slip, Low Friction, Good Stiffness.

J	reatures:
	Unspecified





No.	Property	Value	Units	Test Method
1	Density	0.927	g/cm³	ISO 1183
2	Melt flow rate (MFR) (190 °C /2.16Kg)	4.0	g/10 min	ISO 1133
3	Tensile Modulus	300	MPa	ISO 527-1, -2
4	Tensile Stress at Yield	13.0	MPa	ISO 527-1, -2
5	Tensile Strength at Break MD/TD	20/15	MPa	ISO 527-1, -3
6	Tensile Strain MD/TD	350/600	%	ISO 527-1, -3
7	Dart Drop Impact (50µ Blown Film)	100	g	ASTM D 1709
8	Vicat Softening Temperature	97	°C	ISO 306/A50
9	Haze (50µ)	< 6.5	%	ASTM D 1003
10	Gloss (60 °, 50μ)	>105	-	ASTM D 2457
11	Shore Hardness (Shore D)	51	-	ISO 868

3 Processing Method:

Injection Mouling

Cast Film

• Blown Film

Typical properties: These are not to be construed as specifications



BD & BUTEN-1 AKPC Amir Kabir Petrochemical Co.





1,3 -Butadiene Product

BUTENE-1 Product



46 | www.akpc.ir

Property	Units	Test Method	Value
1, 3-Buadiene	% Wt	ASTM D2593	>99.5
Total Acetylen (VAC, EAC, MAC)	Wt ppm	ASTM D2593	<40
Vlnyl Acetylene	Wt ppm	ASTM D2593	<14
Carbonyl	Wt ppm	ASTM D4423	<20
Butadiene Dimer	% Wt	ASTM D2426	<0.1
Peroxide	Wt ppm	ASTM D5799	<5
Non Volatile	% Wt	ASTM D1025	<0.1
InhibitorTBC	Wt ppm	ASTM D1157	40-150
Total Sulfur	Wt ppm	ASTM D6667	<5
Oxygen	% Mol	O ₂ Analyzer (Teledyne)	<0.2
Water	Wt ppm	ASTM D2029	<300

Typical properties:
These are not to be construed as specifications

Property	Units	Test Method	Value
Butene -1	% Wt	GC Analysis	>99.0
1, 3-Buadiene	Wt ppm	GC Analysis	<10
N-Butane	% Wt	GC Analysis	
ISO-Butane	% Wt	GC Analysis	<1
ISO-Butylene	% Wt	GC Analysis	
Propadiene	Wt ppm	GC Analysis	
Total Acetylene	Wt ppm	GC Analysis	<5
Water	Wt ppm	ASTM D2029	<4
Oxygen	Wt ppm	O ₂ Analyzer (Teledyne)	<1
Carbonyl Monoxide	Wt ppm	GC Analysis	<1
Carbonyl Dioxide	Wt ppm	GC Analysis	<1
Total Sulfur	Wt ppm	ASTM D6667	<1
Ether	Wt ppm	GC Analysis	<2
Methanol	Wt ppm	GC Analysis	<5
MTBE	Wt ppm	GC Analysis	<5









OLEFINE AKPC

Ethylene Product

Propylene Product



50 | www.akpc.ir

Property	Units	Test Method	Value
Ethylene	% Vol	GC Analysis	>99.95 min
Hydrogen	Vol ppm	GC Analysis	<5
Methane + Ethane	Vol ppm	GC Analysis	<500
Acetylene	Vol ppm	GC Analysis	<1
Propylene + Higher	Vol ppm	GC Analysis	<10
Carbon Monoxide	Vol ppm	GC Analysis	<0.2
Carbon Dioxide	Vol ppm	GC Analysis	<1
Oxygen	Vol ppm	O ₂ Analyzer (Teledyne)	<1
Water	Vol ppm	ASTM D2029	<1
Sulphur as H₂S	Vol ppm	ASTM D6228	<1
Methanol	Vol ppm	GC Analysis	<1
Oxygenated organics	Vol ppm	GC Analysis	<1
Carbonyl Sulphide	Mag loV	ASTM D6228	<0.1

Typical properties:
These are not to be construed as specifications

Property	Units	Test Method	Value
Propylene	% Vol	GC Analysis	>99.8
Propylene and Heavier	Vol ppm	GC Analysis	Balance
Methane	Vol ppm	GC Analysis	<10
Ethane	Vol ppm	GC Analysis	<20
Hydrogen	Vol ppm	GC Analysis	<5
Ethylene	Vol ppm	GC Analysis	<1
Acetylene	Vol ppm	GC Analysis	<1
C4 Hydrocarbon	Vol ppm	GC Analysis	<1
Methyle Acetylene	Vol ppm	GC Analysis	<1
Propadiene	Vol ppm	GC Analysis	<1
Carbon Monoxide	Vol ppm	GC Analysis	<0.2
Carbon Dioxide	Vol ppm	GC Analysis	<2
Water	Vol ppm	ASTM D2029	<5
Total Sulfer	Vol ppm	ASTM D6667	<2
Methanol + Ketones	Vol ppm	GC Analysis	<5
Oxygen	Vol ppm	O ₂ Analyzer (Teledyne)	<2







OLEFINE AKPC

Hydrogen Product

CFO Product



52|www.akpc.ir

Property	Units	Test Method	Value
Hydrogen	% Vol	GC Analysis	>99.9
Nitrogen	% Vol	GC Analysis	<0.1
Methane	% Vol	GC Analysis	<0.1
Other Hydrocarbons	Vol ppm	GC Analysis	<10
Acetylene	Vol ppm	GC Analysis	<1
Oxygen	Vol ppm	O ₂ Analyzer (Teledyne)	<0.5
Total Combined Sulphur	Wt ppm	ASTM D6667	<1
Water	Vol ppm	ASTM D2029	<0.5
Total Combined Nitrogen	Vol ppm	ASTM D4629	<1
Carbon Monoxide	Vol ppm	GC Analysis	<5
Carbon Dioxide	Vol ppm	GC Analysis	<1

Typical properties:
These are not to be construed as specifications

Property	Units	Test Method	Value
Sulfur	Wt%	D - 5453	<3.7
Flash Point	°C	D - 93	≤100
Pour Point	°C	D - 97	To be reported
Viscosity at 100°C	Cst	D - 88	To be reported
Specific Gravity		D - 1250	0.98 - 1.06







Pyrolysis Gasoline Product



54|www.akpc.ir

Property	Units	Method (ASTM)	Expected
Density at 15.6 °C (60 °F)	gr/cm³	ASTM D-4052	0.9 Max.
R.V.P	Psi	ASTM D-323	12 Max.
Total Sulfur	ppm	ASTM D-5453	300 Max.
IBP	°C	ASTM D-86	30 Min.
5 PCT Vol Recovered	°C	ASTM D-86	45 Min.
95 PCT Vol Recovered	°C	ASTM D-86	200 Max.
FBP	°C	ASTM D-86	210 Max.
Paraffins	Wt%	GC Analysis	4 Max.
Olefins	Wt%	GC Analysis	30 Max.
Naphthenes	Wt%	GC Analysis	1.2 Max.
Aromatics	Wt%	GC Analysis	60 Min.
Others	Wt%	GC Analysis	20 Max.
Benzen Content	Wt%	GC Analysis	30 Min.
Gum	ma/100ml	ASTM D-381	200 Max

Typical properties: These are not to be construed as specifications



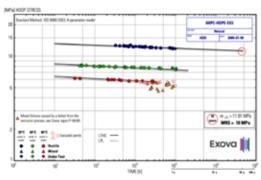
Amir Kabir Petrochemical Co.





CLIENT: Amir Kabir Petrochemical Company

REGRESSION ANALYSIS ACCORDING TO ISO 9080 OF THE PE PIPE GRADE AKPC-HDPE-EX3 NATURAL



INTRODUCTION

Exova Polymer (formerly Bodycote Polymer) offers accredited testing and evaluation according to ISO 9090, i.e. hydrostatic pressure testing followed by evaluation of the long-term hydrostatic strength and MRS-classification according to ISO 12162.

TAS

The aim was to evaluate the compound according to ISO 9980 in order to obtain a MRS classification according to ISO 12162 of the PE pipe grade AKPC-HDPE-EX3 Natural from Amir Kabir Petrochemical Company

RESULTS OBTAINED

The evaluation was performed in accordance with ISO 9080:2003. The 4-parameter model gave the best fit. More information can be found in Exova Report P-09/81.

	RIKAPULATE	SINGNUMVA	LUES
Temp	Time	σ_{iP_i}	G (DIS
Ld	[Yts]	[MPs]	[MPs]
20	50	11.011	11.332
60	2.34	7.085	7.331
80	0.39	5.452	5.665

CLASSIFICATION MRS = 10 MPa

CONTACT

Phone +46 155 22 14 76
Fax +46 155 26 31 25
Email info@body.cstpolymer.com
Web www.extva.com
© Belastia Testing Group 2017 - 8xt 87 rev 01-5728





To whom it may concern

REACH Certificate of Compliance - OR Confirmation

In compliance with Article 8 of Regulation (EC) 1907/2006 of 18th December 2006 of the European Parliament and of the Council on Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), we ChemSafe S.r.l., located at Via Ribes 5, 10010 Colleretto Giacosa (TO), Italy, hereby confirm that the Non-EU manufacturer:

Amir Kabir Petrochemical Company

Having its principal offices located at

No.21, Nafisi St. (23rd East), Southern Sarrafha Ave, Darya BLVD, Saadat Abad, Tehran, IRAN

Has appointed **ChemSafe S.r.l.** as its Only Representative for REACH compliance of the following substance:

Substance name	EC n°	CAS n°	Registration No.	Tonnage (ton/y)
1-Butene	203-449-2	106-98-9	01-2119456615-34-0068	100-1.000

Please note that the registration only covers the EU customers identified by **Amir Kabir**Petrochemical Company and whose details are communicated to ChemSafe S.r.I. Therefore, if you are a customer of Amir Kabir Petrochemical Company and you wish to be covered by our registration, please ensure that they pass your details to us.

To fully comply with REACH, EU customers shall apply for tonnage certificate to Amir Kabir Petrochemical Company when importing products to EU.

This REACH compliance certificate is valid until 31 December 2022 and it is annually renewable.

Signature (the Only representative)

Dr. Antonio Conto Managing Director CHEMSAFE S.r.I.

CHEMSAFE Srl

Sede Legale: via Ribes 5, 10010 Colleretto Giacosa (TO)
Sede Operativa: via Lugnacco 4, 10010 Parella (TO)
P, 1, 08274890014
Tel: 0039 0125 538888, Fax: 0039 0125 538475 E-mail chemsafe@chemsafe-consulting.com





Amir Kabir Petrochemical Company.



58 www.akpc.ir



Validity: until 31/12/2022

20th December 2021

To whom it may concern

REACH Certificate of Compliance - OR Confirmation

In compliance with Article 8 of Regulation (EC) 1907/2006 of 18th December 2006 of the European Parliament and of the Council on Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), we ChemSafe S.r.I., located at Via Ribes 5, 10010 Colleretto Giacosa (TO), Italy, hereby confirm that the Non-EU manufacturer:

Amir Kabir Petrochemical Company

Having its principal offices located at

No.21, Nafisi St. (23rd East), Southern Sarrafha Ave, Darya BLVD, Saadat Abad, Tehran,

Has appointed ChemSafe S.r.I. as its Only Representative for REACH compliance of the following substance:

Substance name	EC n°	CAS n°	Registration No.	Tonnage (ton/y)
Ethylene	200-815-3	74-85-1	01-2119462827-27-0160	Over 1.000

Please note that the registration only covers the EU customers identified by Amir Kabir Petrochemical Company and whose details are communicated to ChemSafe S.r.l. Therefore, if you are a customer of Amir Kabir Petrochemical Company and you wish to be covered by our registration, please ensure that they pass your details to us.

To fully comply with REACH, EU customers shall apply for tonnage certificate to Amir Kabir Petrochemical Company when importing products to EU.

This REACH compliance certificate is valid until 31 December 2022 and it is annually renewable.

Signature (the Only representative)

Dr. Antonio Conto Managing Director CHEMSAFE S.r.I.

CHEMSAEE ST

Sede Legale: via Ribes 5, 10010 Colleretto Giacosa (TO) Sede Operativa: via Lugnacco 4, 10010 Parella (TO) P. I. 08274890014 Tel: 0039 0125 538888, Fax: 0039 0125 538475 E-mail chemsafe@chemsafe-consulting.com



No. 47. Ahmad Ghasir St., Argentina Sq. Tehran -Iran P.O. Box 14155-4999 Tel +98 (21)88736554 Fax +98 (21) 88731808



Certificate No. 650201/03078

Certificate of Conformity with the requirements of EU Regulation 10/2011(EU) 2020/1245,

Product Name: LOPE Drade 11(1209AA Lot No. 400427

Manufacturer Supplier Amir Kabir Petro cheminal Co. No. 21 East Ahmad NAFISI St. South Sarafra Danya 65v5 Saedat

The above product has been tested for overall migration with the simulants and test conditions liesed below. The food remaining and test conditions are those defined in EC directive 1935/2004 JEC \$1249-2-XITSOSEU.

Under the transitional amengements contained in EU/regulation 10/2011/EU/2000/1245, these conditions may continue. to be used to demonstrate safety of food contact plestics until 23. Sep 2022

Fred Street, Land	Daruttori	Term
Weter	10 days	40° C)(2
10% Ethanol	10 days	40° 042
Ph Apetic Apid	10 days	40" Cs2
20% eftianol	10 days	40° CsZ
6% sthanol	10 days	40° Cs2
sooctane	2 days	20° C±1
PN Apetic Acid	10 days	60° C±2
65% ethanol	10 days	60° Cs2
the middle of recipied and the edition of the	the and the line begins the many	all enjoyatoo limba defined in E11 moulatio

Additionally SGS have carried out a document leview of the furnitation of the above resin. All monomers and additives

portained in the formulation are approved for use in food-contact plastics with our restrictions under EU regulation 10/2011 (EU) 2020/1245 as amended The above product is in compliance with ultimate limits in force from 30 June 2001; specified in EC directive \$4452/EC.

The packaging and packaging waste directive for the combined levels of lead, cadmium, thercury and hexavalent chromium. The limit specified in EC directive \$482/EC for the combined total of lead, cadmium, mercury and hexavalent

Towns are terminant that EU regulation to 2011 1011 2001/11341, related to Shahed articles materials manufactured from planton Users of the

blets are remodes that EU regulation 1000 11EU 2001 12EU samples). The Company accepts no liability with regard to the origin or source from which the samplests liability with regard to the origin or source from which the samplests liability and to be extended.

Signed & dated in Tehran-IRAN / Nov 29, 2021

AG 21-04470L01 For and behalf of SGS (IRAN)



Not discover to insure, as the Cont's behalf, by the Congress make the Consum Continues of Section (e.) The Elizably inhamine to the destroyer of hadding industrial and particular format format.

They will be defined at this discussion for advisors that information contained become informative Supposity's Statings at the that of the processing and part within the trace of Clause Industries. It was The Company's arts responsibility in to to Claric self-this photomet down out consistent perfect to a transmission from manning of their Aghic and antiquation substitute the transmitter Assuments.





60 www.akpc.ir

SGS (Iran) Ltd.

No. 47, Ahmad Ghasir St., Argentina Sq. Tehran -Iran P.O.Box 14155-4999 Tel +98 (21)88736554 Fax +98 (21) 88731808



Certificate No. 650201/03080

Certificate of Conformity with the requirements of EU Regulation 10/2011(EU) 2020/1245,

Product Name: LOPE Grade 2420 D Lot No. 90505190

Manufacturer Supplier: Amir Katir Peiro chemical Co. No. 21 East Altmost NATISI St. South Earsha Darya Blod , Swidet

Press. Termin. Item.

The above product has been tested for overall migration with the simularits and test conditions isled below. The food simulate and test conditions are those defined in E.C. directive 1935/2004. EC. 61749-2.2019.05.80.

Under the transformal arrangements contained in EU regulation 10/2011/EUI 20201245, these conditions may continue to be used to demonstrate safety of food contact presides with 23 Sep 2022.

The Street Street	CoreSus	Territor .
Water	90 days	40° C42
10% Ethanol	10 days	40° C±2
3% Acetic Acet	10 days	40° Cs2
20% ethanol	10 days	40° Cs2
96% ethanol	f 10 days	40° C+2
sooctane 117	2 days	20° Ce1
3% Agetic Ackt	10 days	60° Cs2
95% emanol	10 days	60° Cs2

Additionally 8GS have carried out a document review of the formulation of the above risin. All monomers and additives contained in the formulation are approved for use in food dontact plastics with out restrictions under EU regulation. 10/2011 (EU) 2020/1245 as amended.

The above product is in compliance with ultimate limities force from 30 June 2001) specified in EC directive 94/62/EC. The packaging and packaging waste directive for the contributed levels of lead, cadmium, mercury and hexavalent chromium. The limit specified in EC directive 94/92/EC for the considered total of lead, cadmium, mercury and hexavalent chromium is as follows:

100 mg/kg from 30 June 2001.

Uses an exeminent and Life regulation index in 100 mg/kg from 30 June 2001.

Uses an exeminent and Life regulation index in 100 mg/kg from 10

Signed & dated in Tehran-IRAN / Nov 29, 2021

also (Nepth and Humble)

AG 21-04470L01 For and behalf of SGS (IRAN)

This discusses in mostly on the Edward Social, he fire Demonstration to Entered Destitions of Section printed institud The Direct resource is design to the function of balling indirectly interest order per print other based below.

Any other Solder of this discussion is solvined that officeration contented become solvents for Company's destings on the lima of its immediate only and unlike the limits of District immediates, if any The Disapporphis and oppositably in its to their sell first former than not common parties of a remarker than personing off first higher and orthograms. which the format is the same of

SGS (Iran) Ltd.

No. 47, Ahmad Ghasir St., Argentina Sq. Tehran -Iran P O Box 14155-4999 Tel +98 (21)88736554 Fax +98 (21) 88731808



Certificate No. 650201/03081

Certificate of Conformity with the requirements of EU Regulation 10/2011(EU) 2020/1245.

Product Name: LOPE Grade 2470 H Lot No. 00404182

Manufacturer Supplier Amir Kater Petro chamical Co. No. 21 East Ahmed NAFSI St. South Sarafra Danie Blief. Seedlet

The above product has been tested for overall migrators with the aimulants and test conditions listed below. The food simulants and lest conditions are those defined in EC directive 1935/2004 (EC 81249-2-2011/05/EU) Under the transformal arrangements command in 6U regulation 10/2011(EU)/2020/1245, Trese conditions may continue to be used to demonstrate safety of bood opinion plastics until 23. Sep 2022.

JO DRI FIDE	a: sa: aem	OTEVANE	MATRIX OF	F PD003 4060	œ

Water	10 days	40° C#2
10% Ethanol	10 days	40° Ox2
Ph Apelic And	10 days	40° Ce2
20% ethanol	10 days	40° C+2
io's, etnanol	10 days	40° C±2
sooties	2 days	20° C±1
Di Abesig Acid	10 days	60° Ck2
ION Whenci	10 days	60° C±2

The overall regration results obtained were found to be below the overall regration limits defined in EU regulation.

Additionally \$GS have carried but a document review of the formulation of the above resin. At monomers and additives contained in the formulation are approved for use in food-contact plantice with our restrictions under EU regulation 10/2011 (EU) 2020/1245 as amended.

Taken't (Ed) countries as america. The above power is the first first from 10 June 2001; specified in EC directive (MAD/EC.) The packaging and packaging waste directive to the contributed levels of feed. Jadminn, mercury and becausers directive to the Contributed levels for feed. Jadminn, mercury and becausers directive to the Contributed from the Contributed for the Contributed from the Contributed for the Contributed for the Contributed from the Contributed for the Contributed for the Contributed for the Contributed for the Contributed from the Contributed for the Contributed f chromoum is an follows:

100 mg/kg from 30 June 2001.

100 mg/kg from 30 June 2001.

When are semined and Europalation 10081 (EU) 3000 1041, installs to finalled proteins materials manufactured from passins. Users of the store proteins are there fore exponents from the freedom proteins compared to the contract and the specific magnetic store exposure for the contract and the specific magnetic materials along the greatest proteins are foreign proteins the contract proteins the first even proteins are foreigned to the contract and the specific magnetic materials and the specific magnetic materials are specific magnetic materials and the specific magnetic materials are specific materials. The specific materials are specific materials are specific materials are specific materials. The specific materials are specific materials are specific materials are specific materials. The specific materials are specific materials are specific materials and proteins are specific materials. The specific materials are specific materials are specific materials are specific materials. The specific materials are specific materials are specific materials are specific materials. The specific materials are specific materials are specific materials. The specific materials are specific materials are specific materials. The specific materials are specific materials are specific materials. The specific materials are specific materials are specific materials. The specific materials are specific materials are specific materials. The specific materials are specific materials are specific materials. The specific materials are specific materials are specific materials. The specific materials are specific materials are specific materials. The specific materials are specific materials are specific materials. The specific materials are specific materials are specific materials. The specific materials are specific materials. The specific materials are specific materials are specific materials. The specific materials are specific materials are specific materials. The specific materials are specific mater

Signed & dated in Tehran-IRAN / Nov 29, 2021

AG 21-04470001 For and behalf of SGS (IRAN)



the discount is most or the Charle behalf, by the Language more by Socreti Sauthiers of Sarvara private The Edward amounts in disease of the Emilianus of Louisia, comments are and provided in community flowers.

For ellis haline of this theorem is selected that inhomely common better inhority the Company's belongs at the may of its intersection sole and printer the looks of filters instrument if one. The Community into inspeculability is in to Client and the Assessment Sees and constraint parties or a transmittee from precising all their rights and strippings.





Amir Kabir Petrochemical Company.

SGS (Iran) Ltd.

No. 47, Ahmad Ghasir St., Argentina Sq. Tehran -Iran P.O. Box 14155-4999 Tel +98 (21)88736554 Fax +98 (21) 88731808



Certificate No. 650201/03083

Certificate of Conformity with the requirements of EU Regulation 10/2011(EU) 2020/1245,

Product Name: HOPE Grade EX3 Lot No. 400263

Manufacturer Supplier: Arriv Katur Petro chemical Co. No. 21,East African NAFISI St. South Sarafina Darya Blvd. Soathol.

Apple, berein, san. The above product has been rested for overall migration with pite timularis and seef-conditions traded below. The food simularist and seef conditions are those refined to EC directive 1935/2004 IEC 61249-2 20T1.05/EU Under the transformal ammigrations continued to EU regulation 10/2011/EU/20201/245. Wasse conditions may continue to be used to demonstrate safety of food contact playless only 23. See 2022.

Food Streeters	Dutwinst	Telep
VVaner	010 days	40°Ct2
10% Ethanol	10 days	40° C#2
3% Acetic Acid	10 ctays	40° Ce2
20% oftend	10 days	43" Ct2
95% ethanol	10 days	40° Ct2
Ispoctane	2 days	20° Cs1
3% Agetic Acid	10 days	60° Cs2
55% ethanol	10 days	60° Ct2

The overall migration results obtained were found to be below the overall migration limits defined in EU regulation 10/2011 (EU) 2020/1245

Additionally EGS have carried out a document review of the formulation of the above main. All monomers and additives contained in the formulation are approved for use in food contait plastics with our restrictions under EU regulation 10/2011 (EU) 2020/1245 as amended.

102011 (EU) 2020/1245 as amended.
The above product in compliance with ultimate limit in force from 30 June 2001 specified in EC directive S442/EC. The packaging and packaging water directive S442/EC to the packaging and packaging water directive by 5402/EC for the combined tends of lead, calcimitim, mercury and harawaters of comment. The shirt appendix in EC directive S442/EC for the combined state of lead, calcimitim, mercury and hepatography.

Days are remarked that \$U regulation 10/2011/SU) 2020/1345, related to finished articled, materials manufactured from places. Users of the Users are reminded that EU regulation 1920 (1180), 2007 (136), existed to find a direct or materials manufactured from places, sizes of the species produces are three three representable to result upon that the find poducts comply with the overall regulation finding and the aspection regulation into membrand above, by conceptual to produce of the products of the products of the regulation into membrand above, the conceptual to the find and conceptual to the find that the regulation of the regulation and the regulation of the regulation and the regulation of the re

to a restriction from electrony all, their operations programs update the transaction occurrence and programs determined from the individual or of the occurrence of this occurrence is unlessed and inflements raisy of processor for the subsequence of the subsequence of the subsequence of the occurrence o

Signed & dated in Tehran-IRAN / Nov 29, 2021

AG 21-04470L01 For and behalf of SGS (IRAN)

H & W Sertision (Health and Nutrition)

The Diserts assume a most to the installer of totaling, interestinates and paradictive toron defend forms.

Any other believe of this accessor is activated that information continued become otherwise the Company's Bellings or the tion of the interportant and and entire the form of Manual Association, it has The Community and responsibility in the to Titled and his recommend times not incommon product to a stressorier have accomming all their rights and altiful town

3GSPAPER 20415637

SGS (Iran) Ltd.

No. 47, Ahmad Ghasir St., Argentina Sq. Tehran -Iran P.O.Box 14155-4999 Tel +98 (21)88736554 Fax +98 (21) 88731808



Certificate No. 650201/03082

Certificate of Conformity with the requirements of EU Regulation 10/2011(EU) 2020/1245,

Product Name, HOPE Grade EX5 Lot No.400016

Manufacturer Supplier: American Petro chemicar Co. No. 21 East Ahmad NAFISI St. South Sarafra Darya (Blvd. Saadet

The above product has been tested for own all migration with the smularits and test conditions lated below. The food services and lest conditions are those defined in Ed directive; 1935/2004 IEC 971445-27100-10. Under the straightful among primering contained in EM eguidated 1920-11 to be used to demonstrate safety of food contact presides until 23. Sep 2022

First Desired	Charletter	Trees
Witter	d0 days	40" 612
10% Ethanol	10 days	40° Ch2
3% Apetic Apid	10 days	40° Ct2
20% arhanol	10 days	
90% etcanol	10 days	40° C±2
Isooclane	2 days	20° C±1
3% Agetic Acid	10 days	60° Ct2
95% atturol	10 days	60° C±2

The overall migration results obtained were found to be below the overall migration limits defined in EU regulation.

Additionally SGS have carried out a document review of the formulation of the above resin. All monomers and additives contained in the formulation are approved for use in food contact plastics with our restrictions under EU regulation 15/2011 (EU) 2020/1245 as amended.

1920/11 (EU) 2020/1245 as ancered The above crosscor an compliance with utilizate limition broke from 20 June 2001) specified in EU declave 94/92/EU. The pseudoging and packaging waste detective for the combined several feed and cademium, reviewy and necessation chromium. The limit specified in EU directive by MEDIC for the confined several feed and of lead, cademium, mercury and hexavitated chromium. The limit specified in EU directive by MEDIC for the confined several feed and of lead, cademium, mercury and hexavitated chromium. chromium is as follows:

100 mg/kg from 30 June 2001.

This compared is supported by the control of the compared by t

Signed & dated in Tehran-IRAN / Nov 29, 2021

For anii-thinaif of SGS (IRAN)

We describe the travel as the Ottor's latest, by the Donney cotter in Linear Constitute of the rose protect or No Filest's princetor in design in the furthernal of habities, responsible transport conditions in commendence in the contract function

Any other halfor of this becomes in minimal that information common factors in European's Series at the time of its intermediant below and arrites the basis of Educini Saparations. If you The Comments such assumptible is as to Cherry and the discourses into an excessed parties to a framewhat have according all their rights and abligations





