	TYPICAL DATA SHEET*	ISSUE DATE	Feb-2022
	POLYETHYLENE		WWW.TPCO.IR
	LL0209KJ		IRAN/TABRIZ/TABRIZ PETROCHEMICAL COMPANY/P.O.BOX:51745-354/TEL:+984134282612

LL0209KJ is linear low density polyethylene copolymer containing butene-1(C4) as co monomer. It is suitable for blending with conventional LDPE. Film made from pure LL0209KJ has the following advantages over LDPE: better sealing, higher puncture resistance, greater drawdown ability, easy opening properties at 2-layer film and higher tensile strength. This grade has food contact approval.


Applications: green house film, silage film, hand bags and general-purpose film applications.

PROPERTY		UNIT	TEST METHOD	TYPICAL VALUE
MELT FLOW INDEX (190°C 2.16KG)		g/10min	ASTM D-1238	0.9
MFR (UNDER LOAD 21.6KG/2.16KG)				29-30
DENSITY		gr/cm ³	ASTM D-1505	0.919
VICAT SOFTENING POINT		°C	ASTM D-1525	105
FILM**				
DART DROP IMPACT	METHOD A	GR	ASTM D-1709	140
TENSILE STRESS AT YEILD	MD/TD	MPA	ASTM D-882	10/11
TENSILE STRESS AT BREAK	MD/TD	MPA	ASTM D-882	41/32
TEAR STRENGTH	MD/TD	gr/25μ	ASTM D1922	145/370
1%SECANT MODULUS	MD/TD	MPA	ISO 1184	195/205
ELONGATION AT BREAK	MD/TD	%	ASTM D-882	620/840
HAZE	-	%	ASTM D-1003	12
GLOSS (45°)		%°	ASTM D-2457	56

* All above mentioned data are typical values and not to be construed as real specifications. Users should confirm results by their own tests. For more information about guaranteed items, please refer to S.S.S. (Standard Sales Specifications)

**38μm film, 2.5:1 blow up ratio, 225°C melt temperature MD: Machine Direction, TD: Transverse Direction


Grade Suffix (Additives Indication) KJ: GENERAL ANTIOXIDANT WITH SLIP AGENT/ANTIBLOCKING AGENTS

	STANDARD SALES SPECIFICATIONS (GUARANTEED ITEMS) *	ISSUE DATE	Feb-2022
	POLYETHYLENE	WWW.TPCO.IR	
	LL0209KJ	IRAN/TABRIZ/TABRIZ PETROCHEMICAL COMPANY/P.O.BOX:51745-354/TEL:+984134282612	

PROPERTY	UNIT	TEST METHOD	SPECIFICATION RANGE
MELT FLOW INDEX (2.16KG)	g/10min	ASTM D-1238	0.8-1
DENSITY	gr/cm3	ASTM D-1505	0.918-0.921
CONTAMINATION	NO.	BP137	≤4 DEFECTS IN ** 200GR OF PELLETS

*FOR MORE INFORMATION, PLEASE CALL QUALITY ASSURANCE DEPARTMENT AT ABOVE ADDRESS

**DEFECTS REFERS TO NUMBER OF BLACK AND YELLOW PARTICLES AND THERE IS NO CHEMICAL CONTAMINATION IN THE PRODUCT

	TYPICAL DATA SHEET*	ISSUE DATE	14/JUNE/2022
	POLYETHYLENE		WWW.TPCO.IR
	HD3840UA**		IRAN/TABRIZ/TABRIZ PETROCHEMICAL COMPANY/P.O.BOX:51745-354/TEL:+984134282612


HD3840UA is high density polyethylene copolymer containing butene-1(C4) as co monomer. It is suitable for use as rotational molding applications. HD3840UA has the following characteristics: good impact strength, easy to demoulding, UV stabilized, good whiteness, excellent surface finish. This grade has food contact approval. Applications: general purpose roto molded items, septic tanks, recycling tanks

PROPERTY	UNIT	TEST METHOD	TYPICAL VALUE
MELT FLOW INDEX (190°C 2.16KG)	g/10min	ASTM D-1238	4
DENSITY	gr/cm3	ASTM D-1505	0.938
YELLOWNESS INDEX	-	ASTM E-313	-1
WHITENESS INDEX	-	ASTM E-313	60
VICAT SOFTENING POINT	°C	ASTM D-1525	115
TENSILE STRESS AT YEILD	MPA	ASTM D-638	15
ELONGATION AT BREAK	%	ASTM D-638	900
ESCR (IGEPAL10% F50,50°C)	HR	ASTM D-1693	200
FLEXURAL MODULUS	MPA	ISO178-197	650
CHARPY IMPACT	KJ/M2	ASTM D-6110	18

*All above mentioned data are typical values and not to be construed as real specifications. Users should confirm results by their own tests. For more information about guaranteed items, please refer to S.S.S. (Standard Sales Specifications)

** HD3840UA falls into the density range of MDPE. However, in order to observing the nomenclature procedure of PE plant licensor (INEOS), this grade is designated as HDPE; while it can be introduced as MD3840UA as well


Grade Suffix (Additives Indication) UA: GENERAL ANTIOXIDANT AND LIGHT STABLISER

	STANDARD SALES SPECIFICATIONS (GUARANTEED ITEMS) *	ISSUE DATE	Feb-2022
	POLYETHYLENE	WWW.TPCO.IR	
	HD3840UA	IRAN/TABRIZ/TABRIZ PETROCHEMICAL COMPANY/P.O.BOX:51745-354/TEL:+984134282612	

PROPERTY	UNIT	TEST METHOD	SPECIFICATION RANGE
MELT FLOW INDEX (2.16KG)	g/10min	ASTM D-1238	3.8-4.5
DENSITY	gr/cm3	ASTM D-1505	0.935-0.939
CONTAMINATION	NO.	BP137	≤5 DEFECTS IN ** 200GR OF PELLETS

*FOR MORE INFORMATION, PLEASE CALL QUALITY ASSURANCE DEPARTMENT AT ABOVE ADDRESS

**DEFECTS REFERS TO NUMBER OF BLACK AND YELLOW PARTICLES AND THERE IS NO CHEMICAL CONTAMINATION IN THE PRODUCT

	TYPICAL DATA SHEET*	ISSUE DATE	26/JUNE/2022
	POLYETHYLENE	WWW.TPCO.IR	
	HD3030UA**	IRAN/TABRIZ/TABRIZ PETROCHEMICAL COMPANY/P.O.BOX:51745-354/TEL:+984134282612	

HD3030UA is high density polyethylene copolymer containing butene-1(C4) as co monomer. It is suitable for use as rotational molding applications. HD3030UA has the following characteristics: good impact strength, easy to demolding, UV stabilized, good whiteness, excellent surface finish. HD3030UA has the following advantages:

- Good Charpy impact
- Good ESCR


Applications: general purpose roto molded items, small septic tanks (max 500 lit), small recycling tanks (max 500 lit), Toys, Traffic warning signs, Pleasure boats

PROPERTY	UNIT	TEST METHOD	TYPICAL VALUE
MELT FLOW INDEX (190°C 2.16KG)	g/10min	ASTM D-1238	3
DENSITY	gr/cm3	ASTM D-1505	0.930
YELLOWNESS INDEX	-	ASTM E-313	-1
WHITENESS INDEX	-	ASTM E-313	55
VICAT SOFTENING POINT	°C	ASTM D-1525	110
TENSILE STRESS AT YEILD	MPA	ASTM D-638	12
ELONGATION AT BREAK	%	ASTM D-638	800
ESCR (IGEPAL10% F50,50°C)	HR	ASTM D-1693	400
FLEXURAL MODULUS	MPA	ISO178-197	600
CHARPY IMPACT	KJ/M2	ASTM D-6110	60

*All above mentioned data are typical values and not to be construed as real specifications. Users should confirm results by their own tests. For more information about guaranteed items, please refer to S.S.S. (Standard Sales Specifications)

** HD3030UA falls into the density range of MDPE. However, in order to observing the nomenclature procedure of PE plant licensor (INEOS), this grade is designated as HDPE; while it can be introduced as MD3030UA as well

Grade Suffix (Additives Indication) UA GENERAL ANTIOXIDANT AND LIGHT STABLISER

	STANDARD SALES SPECIFICATIONS (GUARANTEED ITEMS) *	ISSUE DATE	JUNE-2022
	POLYETHYLENE	WWW.TPCO.IR	
	HD3030UA	IRAN/TABRIZ/TABRIZ PETROCHEMICAL COMPANY/P.O.BOX:51745-354/TEL:+984134282612	

PROPERTY	UNIT	TEST METHOD	SPECIFICATION RANGE
MELT FLOW INDEX (2.16KG)	g/10min	ASTM D-1238	2.7-3.3
DENSITY	gr/cm3	ASTM D-1505	0.929-0.933
CONTAMINATION	NO.	BP137	≤5 DEFECTS IN ** 200GR OF PELLETS

*FOR MORE INFORMATION, PLEASE CALL QUALITY ASSURANCE DEPARTMENT AT ABOVE ADDRESS

**DEFECTS REFERS TO NUMBER OF BLACK AND YELLOW PARTICLES AND THERE IS NO CHEMICAL CONTAMINATION IN THE PRODUCT



HDPE made via Hostalen Process



Product data sheet HF-4760(BL₃)

HF-4760(BL₃) is a blow molding grade resin with high density polyethylene with 1-Butene as co monomer which is manufactured by the suspension polymerization of ethylene monomer. Stiffness, good ESCR are its special properties. High rigidity and good flowability which made it proper for usage in bottles and small blow molding goods.

HDPE: HF-4760(BL₃)

Density: 0.954

MFI: 23±4

Features



- High density and Stiffness, good flowability and impact Strength and good Stress Cracking resistance.

Applications



- Small blow moulding Bottles Containers (up to 5 lit)
- Packing of pharmaceuticals & surfactants

Additives



- Antioxidant / Process stabilizer
- Lubricant / acid scavenger

Material properties (This data are typical values and are not to be construed as product specifications.)

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Resin Properties	Unit	Typical Value	Test Method
Melt Index(21.6)	g/10 min	23	ISO 1133
Melt Index(5)	g/10 min	1.2	ISO 1133
FRR (21.6/5)		19	
Density	g/cm ³	0.954	ISO 1183
Molded Properties	Unit	Typical Value	Test Method
Notched Impact @ 23 °C	mJ/mm ²	9	ISO 179/ 1 eA



Handelling and Health Safety

Molten polymers could be injured skin or eye so safety glasses and appropriate gloves are suggested to prevent possible thermal injuries. Also appropriate ventilation is suggested in working by melt polymer.

Accumulation of fines or dust particles that are in this grade is not suitable because of explosion hazard probability. So adequated filters and grounding exists at all time are recommended.

Storage

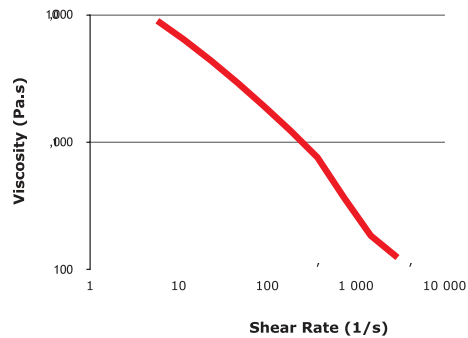
Polyethylene products (in pelletised or powder form) should not be stored in direct sunshine and/or heat radiation. Ultraviolet cause a change in the material properties. The Storage area should be dry and preferably don't exceed 50 °C. Under cool, dry, dark conditions Jam Polymers polyolefin resins are expected to maintain the original material and processing properties for at least 18 month. JPC would not responsible about quality diminishing such as color change, bad smell or ets which caused by bad storage conditions. It is better to process PE resin within 6 months after delivery.

packaging

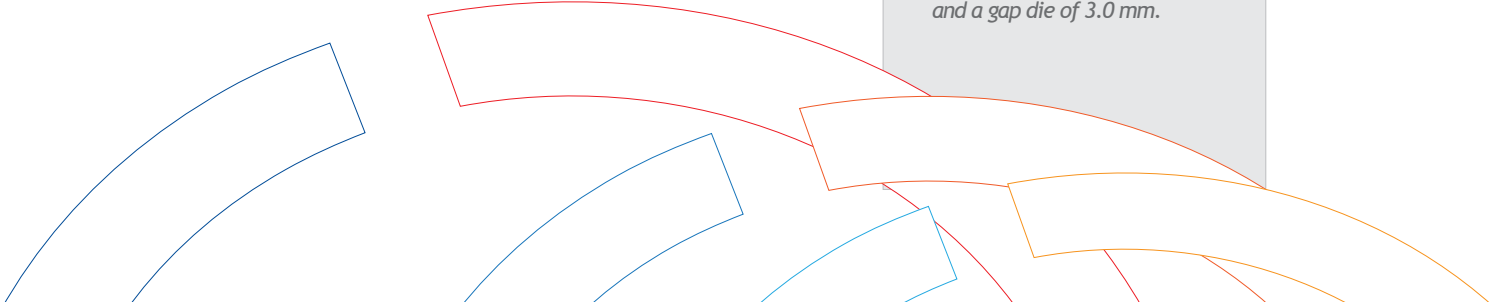
Jam Polymers Polyolefin resins are supplied in pilet form packed in 25kg bags. Alternative packaging modes are available for selected grades.

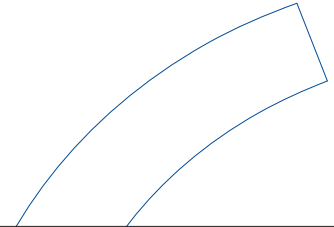
- On compression molded according to ASTM D1928C Processing Conditions
Recommended barrel tempratures range between 190 °C and 280 °C.

Shear-Viscosity @ 190 °C



The above values were Calculated from data for 100 µm produced on a 75mm Barrnage extruder with 190°C melt temperature using a 2:1 blow ratio and a gap die of 3.0 mm.





HDPE made via Hostalen Process



Product data sheet HMCRP 100 N

- Top quality PE100 pressure pipes for gas and water transportation at higher pressures or with thinner walls as PE80.

HDPE: HMCRP 100 N

Density: 0.948

MFI: 0.22

Features



- Natural PE100 pipe resin.

Applications



- Top quality PE100 pressure
- Pipes

Additives



- Antioxidant / Process stabilizer
- Lubricant (processing aid) / acid scavenger

Material properties (This data are typical values and are not to be construed as product specifications.)

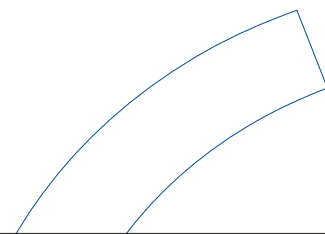
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Test/Composition	Typical Value	Unit	Method
Density	0.948	g/cm ³	ISO 1183
FRR 21.6/5	28		
Hydrostatic Strength(80 °C)	5000 (4.5 N/mm ²)	h	ISO1167
MFR 190° /21.6	6.2	g/10min	ISO1133
MFR190° /5	0.22	g/10min	ISO1133
Notched Impact (23 °c)	24	mJ/mm ²	ISO179/1eA

- Test specimen from compression moulded sheet at 23 °C.

- FRR values are statistical and calculated by dividing MFR values.

- Notch Impact Test specimen from compressed moulded sheet 23 °C and The data quoted are average values .



HDPE made via Hostalen Process



Product data sheet HM9450F (EX₅)

- For blown films with paper like quality, suitable for counter bags, carried bags and w/aping films, excellent processing.

HDPE: HM9450F

Density: 0.949

MFI: 0.28±0.05

Features



- High molar mass film grade, good stiffness and tenacity

Applications



- blown
- Film

Additives



- Antioxidant / Process stabilizer
- Lubricant (processing aid) / acid scavenge

Material properties (This data are typical values and are not to be construed as product specifications.)

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Test/Composition	Typical Value	Unit	Method
Density	0.949	g/cm ³	ISO 1183
Fish Eye Note	≤3	note	Internal
FRR 21.6/5	29		
MFR 190°/21.6	8.0	g/10min	ISO1133
MFR190°/5	0.28	g/10min	ISO1133

- Test specimen from compression moulded sheet at 23°C.
- FRR values are statistical and calculated by dividing MFR values.
- Notch Impact Test specimen from compressed moulded sheet 23°C and The data quoted are average values



HDPE made via Spherilene Process



Product data sheet

HD-52518

HD-52518 is a HDPE copolymer which manufactured by gas phase process. This grade is LLDPE Injection Moulding, Extrusion Coating & Rotomoulding. Injection molding for application requiring a good balance between easy of processability and flowability and mechanical properties are the special perpose of this grade.

HDPE: HD-52518

Density: 0.952

MFI: 18

Features



- Good balance between easy of processability and flowability

Applications



- Housewares
- High fluidity

Additives



- Thermal Antioxidant

30

Material properties (This data are typical values and are not to be construed as product specifications.)

Resin Properties	Unit	Typical Value	Test Method
Melt Index	g/10'	18	D1238
Density	g/cc	0.952	D1505
Thermal Properties	Unit	Typical Value	Test Method
Vicat Softening Point	°C	122	D1525
Molded Properties	Unit	Typical Value	Test Method
Flectural Modulus	Mpa	1350	D790
Notched Izod Impact @ 23 °C	J/m	25	D256/A



Handelling and Health Safety

Molten polymers could be injured skin or eye so safety glasses and appropriate gloves are suggested to prevent possible thermal injuries. Also appropriate ventilation is suggested in working by melt polymer.

Accumulation of fines or dust particles that are in this grade is not suitable because of explosion hazard probability. So adequate filters and grounding exists at all time are recommended.

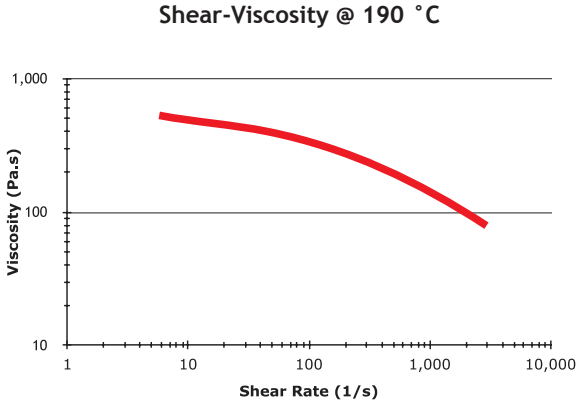
Storage

Polyethylene products (in pelletised or powder form) should not be stored in direct sunshine and/or heat radiation. Ultraviolet cause a change in the material properties. The Storage area should be dry and preferably don't exceed 50 °C. Under cool, dry, dark conditions Jam Polymers polyolefin resins are expected to maintain the original material and processing properties for at least 18 month. JPC would not responsible about quality diminishing such as color change, bad smell or ets which caused by bad storage conditions. It is better to process PE resin within 6 months after delivery.

packaging

Jam Polymers Polyolefin resins are supplied in pilet form packed in 25kg bags. Alternative packaging modes are available for selected grades.

- On compression molded according to ASTM D1928C
Processing Conditions
Recommended barrel temperatures range between 190 °C and 280 °C.



The above values were Calculated from data for 100 µm produced on a 75mm Barrnage extruder with 190°C melt temperature using a 2:1 blow ratio and a gap die of 3.0 mm.

