

Technical Catalogue

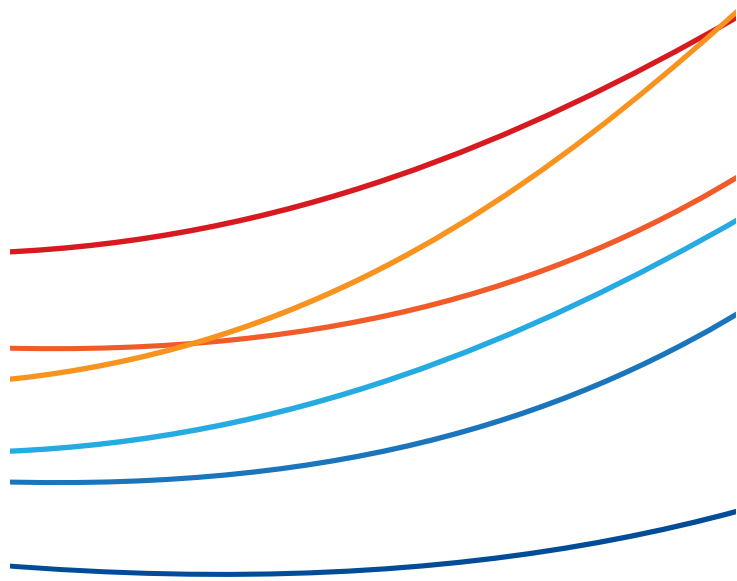
2 0 1 7

Ver 2.0



jAM
Petrochemical
Company

Global. Distinguished



HDPE Products

Products Capacity of HDPE plant

GRADES	PROPERTY	MFR (190°C/5 kg)	Density
	UNIT	(g/10 min).	g/cm ³
	ASTM METHOD	D 1238	ISO 1183
	INTERNAL METHOD	17066	
1. INJECTION MOLDING			
HC 7260	for transport and stacking bottle crates, particularly bottle crates	23±3	0.960±0.002
HD 7255	for thick walled highly stressed transport container, e.g. refuse bins and fish crates	11±2	0.954±0.002
2. SMALL BLOW MOLDING			
HF 4750	for disinfectant bottles up to 2 liters, tubes for cosmetics, containers up to 10 liters and petrol cans up to 5 liters	1.1±0.3	0.944±0.002
Available > HF 4760 (BL3)	for container with capacities ranging from a few ml up to 10 liters, also for production of sheets for thermoforming	1.2±0.3	0.954±0.002
HH 4765	for hollow articles where high stress cracking resistance is not demanded, such as bottles and caisters up to 10 liters, e.g. for fabric softeners	1.5±0.3	0.959±0.002
3. LARGE BLOW MOLDING			
Available > HM 8355	general-purpose grade for large containers	0.35±0.06	0.951±0.002
4. STRETCHED TAPE (RAFFIA)			
HF 7740 F	stretched films and tapes for production of high-strength knitted and woven	1.8±0.3	0.944±0.002
HF 7740 F2	tapes to be used for agricultural packagings and as protective cover	1.8±0.3	0.944±0.002
5. MONOFILAMENT			
HF 7750 M	production of monofilaments with high tensile strength	2.5±0.3	0.956±0.002
HF 7750 M2	monofilaments for fishing notes, geo textiles and civil engineering	3.3±0.3	0.956±0.002

Products Capacity of HDPE plant

GRADES	PROPERTY		MFR (190°C/5kg)	Density
	UNIT		(g/10 min).	g/cm ³
	ASTM METHOD		D 1238	ISO 1183
	INTERNAL METHOD		17066	
6. CABLE				
HF 4750 K	cable insulation		3.5±0.5	0.946±0.002
7. PIPE(NATURAL/COLOR)				
Available >	HM 5010 T2 N	pressure pipes, e.g. drinking-water and gas pipes,waste pipes and sewer pipes,their fittings and also sheets(UV stabilization and pigments during processing)	0.45±0.06	0.945±0.002
	HM 5010 T3 N	high-quality PE 80 pressure pipes for gas and water transportation(UV stabilization and pigments during processing)	0.43±0.03	0.944±0.002
	HM 5010 T3 Black	high-quality PE 80 pressure pipes for gas and water transportation(UV stabilization and pigments during processing)	0.43±0.03	0.954±0.002
Available >	HM CRP 100 N	top quality PE 100 pressure pipes for gas and water transportation at higher pressures or with thinner walls as PE 80 (UV stabilization and/or pigments during precessing)	0.22±0.03	0.948±0.002
Available >	HM CRP 100 Black	top quality PE 100 pressure pipes for gas and water transportation at higher pressures or with thinner walls as PE 80 (UV stabilization and/or pigments during precessing)	0.22±0.02	0.957±0.002
	HM CRP 100 Blue	top quality PE 100 pressure pipes for gas and water transportation at higher pressures or with thinner walls as PE 80 (UV stabilization and/or pigments during precessing)	0.22±0.02	0.948±0.002
	HM CRP 100 O/Y	top quality PE 100 pressure pipes for gas and water transportation at higher pressures or with thinner walls as PE 80 (UV stabilization and/or pigments during precessing)	0.22±0.02	0.949±0.002
8. FILM				
	HM 9455 F	for blown films with paperlike quality,suitable for counter bags,carrier bags and wrapping films,excellent processing	0.28±0.05	0.956±0.002
Available >	HM 9450 F	for blown films with paperlike quality,suitable for counter bags,carrier bags and wrapping films,excellent processing	0.28±0.05	0.949±0.002
	HM 9450 F1	for blown films with paperlike quality,suitable for counter bags,carrier bags and wrapping films,excellent processing and sealability	0.22±0.05	0.950±0.002
	HM 9455 F1	for blown films with paperlike quality,suitable for counter bags,carrier bags and wrapping films,excellent processing	0.22±0.05	0.957±0.002
	HM 9445 HT	for blown films with paperlike quality,suitable for counter bags,carrier bags and wrapping films,excellent processing	0.18±0.03	0.944±0.002

Product data sheet

➤ HDPE made via Hostalen Process

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 it's spetial properties. High rigidity and good flowablity which made it proper for usage in bottles and small blow molding goods.

HDPE: HF-4760(BL₃)

Characteristic Properties

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

Density: 0.952-0.956 g/cm³

Main Applications

- For container with capacities ranging from a few ml up to 10 liters, also for production of sheets for thermoforming.

MFR 190/5: 0.9-1.5

Additives

- Antioxidant/Process stabilizer
- Lubricant/ acid scavenger

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(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
Moulded Properties	Unit	Typical Value	Test Method
Notched Impact @ 23 °C	mJ/mm ²	9	ISO 179/ 1 eA

Handling 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

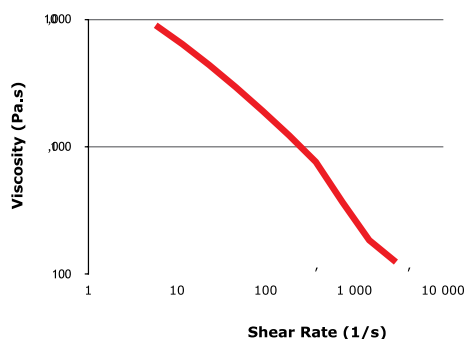
Polyethylene products (in pelletised or powder form) should not be stored in direct sunshine and/or heat radiation. Ultraviolet cause a change in the material properties. The Storage area should be dry and preferably don't exceed 50 °C. Under cool, dry, dark conditions Jam Polymers polyolefin resins 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 Pellet form packed in 25kg bags. Alternative packaging modes are available for selected grades.

- On compression moulded according to ASTM D1928C
Processing Conditions
Recommended barrel temperatures 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 tem-
perature using a 2:1 blow ratio
and a gap die of 3.0 mm.

> HDPE made via Hostalen Process



HM-8355 (BL4)

HM-8355(BL4) is a Blow molding grade resin which is manufactured by suspension polymerization of ethylene monomer. HM-8355 (BL4) is a bi-modal high density polyethylene with Butene-1 as co monomer with general purpose of large container.

HDPE: HM-8355(BL4)

Characteristic Properties



- High molar mass, easily processable high stiffness Strength, good stress Cracking resistance and very good molding surface finish.

Density: 0.949-0.953 g/cm³

Main Applications



- General purpose grade for large container.

MFR 190/5: 0.29-0.41

Additives



- Antioxidant/Process stabilizer
- Lubricant/ acid scavenger

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(21.6)	(g/10 min)	9.5	ISO 1133
Melt Index(5)	(g/10 min)	0.35	ISO 1133
FRR (21.6/5)		27	
Density	g/cm ³	0.951	ISO 1183
Swell Ratio	%	110	
Moulded Properties	Unit	Typical Value	Test Method
Notched Impact @ 23 °C	mJ/mm ²	10	ISO 179/ 1 eA

Handling 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

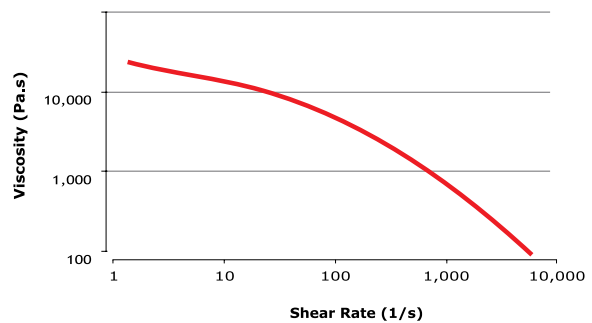
Polyethylene products (in pelletised or powder form) should not be stored in direct sunshine and/or heat radiation. Ultraviolet cause a change in the material properties. The Storage area should be dry and preferably don't exceed 50 °C. Under cool, dry, dark conditions Jam Polymers polyolefin resins 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 Pellet form packed in 25kg bags. Alternative packaging modes are available for selected grades.

- On compression moulded according to ASTM D1928C
Processing Conditions
Recommended barrel temperatures 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 tem-
perature using a 2:1 blow ratio
and a gap die of 3.0 mm.

Product data sheet

➤ **HDPE made via Hostalen Process**



HM-5010T2N (EX3)

HM-5010T2N (EX3) is a pipe grade resin which is manufactured by suspension polymerization of ethylene monomer. HM-5010T2N (EX3) is a bi-model high density polyethylene with 1-Butene as co monomer.

HDPE: HM-5010T2N (EX₃)

Characteristic Properties



- Tough and rigid pipe resin.

Density: 0.943-0.947 g/cm³

Main Applications



- Pressure pipes, e.g. drinking-water and gas pipes, waste pipes and sewer pipes, their fittings and also sheets (UV stabilization and pigments during processing)

MFR 190/5: 0.39-0.51

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.)

Resin Properties	Unit	Typical Value	Test Method
Melt Index (21.6)	(g/10 min)	12	ISO 1133
Melt Index (5)	(g/10 min)	0.45	ISO 1133
FRR (21.6/5)		27	
Density	g/cm ³	0.945	ISO 1183
Moulded Properties	Unit	Typical Value	Test Method
Notched Impact @ 23 °C	mJ/mm ²	12	ISO 179/ 1 eA
Mechanical Properties	Unit	Typical Value	Test Method
Hydrostatic Strength (80 °C)	h	(4.0 N/mm ²) 1000	ISO 1167

Handling 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

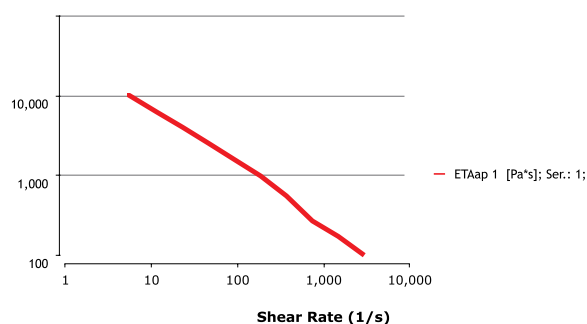
Polyethylene products (in pelletised or powder form) should not be stored in direct sunshine and/or heat radiation. Ultraviolet cause a change in the material properties. The Storage area should be dry and preferably don't exceed 50 °C. Under cool, dry, dark conditions Jam Polymers polyolefin resins 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 Pellet form packed in 25kg bags. Alternative packaging modes are available for selected grades.

- On compression moulded according to ASTM D1928C
Processing Conditions
Recommended barrel temperatures 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 tem-
perature using a 2:1 blow ratio
and a gap die of 3.0 mm.

Product data sheet

➤ **HDPE made via Hostalen Process**



HM-CRP 100N (PE100)

HM-CRP100N (PE100) is a natural pipe grade resin which is manufactured by suspension polymerization of ethylen monomer, HM-CRP100N (PE100) is a bi-model high density polyethylene with 1-Butene as co monomer.

HDPE: HMCRP 100 N (PE100)

Characteristic Properties



- Natural PE100 pipe resin.

Density: 0.946-0.950 g/cm³

Main Applications



- Top quality PE100 pressure
- Pipes for gas and water transportaion at higher pressures or with thinner walls as PE80 (UV stabilization and/ or pigments during precessing)

MFR 190/5: 0.19-0.25

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.)

Test/Composition	Typical Value	Unit	ASTM Method
Density	0.948	g/ml ³	ISO1183
FRR 21.6/5	28		
Hydrostatic Strength (80°C)	5000 (4.5N/mm ²)	h	ISO1167
MFR190°/21.6	6.2	(g/10 min)	ISO1133
MFR190°/5	0.22	(g/10 min)	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 .

Handling 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

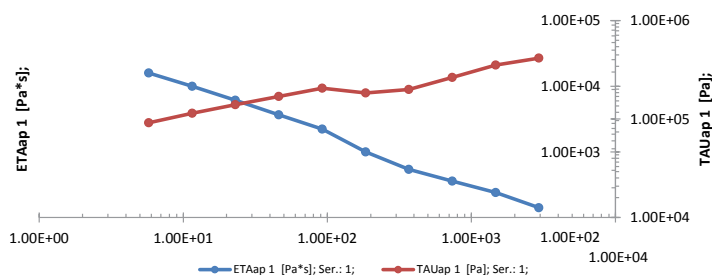
Polyethylene products (in pelletised or powder form) should not be stored in direct sunshine and/or heat radiation. Ultraviolet cause a change in the material properties. The Storage area should be dry and preferably don't exceed 50 °C. Under cool, dry, dark conditions Jam Polymers polyolefin resins 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 Pellet form packed in 25kg bags. Alternative packaging modes are available for selected grades.

- On compression moulded according to ASTM D1928C
Processing Conditions
Recommended barrel temperatures 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 tem-
perature using a 2:1 blow ratio
and a gap die of 3.0 mm.

➤ HDPE made via Hostalen Process



HM-CRP 100 Black

HM-CRP100 Black is a black pipe grade resin (PE100) which is manufactured by suspension polymerization of ethylene monomer. HM-CRP100 Blue is a bi-model high density polyethylene with 1-Butene as co monomer.

HDPE: HM CRP 100 Black (PE100 Black)

Characteristic Properties



- Black PE100 resin

Density: 0.955-0.959 g/cm³

Main Applications



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

MFR 190/5: 0.20-0.24

Additives



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

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

Test/Composition	Typical Value	Unit	ASTM Method
Density	0.957	g/cm ³	ISO1183
FRR 21.6/5	28		
Hydrostatic Strength (80°C)	5000 (4.5N/mm ²)	h	ISO1167
MFR190°/21.6	6.2	(g/10 min)	ISO1133
MFR190°/5	0.22	(g/10 min)	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
- Test specimen from compressed moulded sheet 23 C sheet 23 °C
- The data quoted are average values
- The data quoted are average values

Handling 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

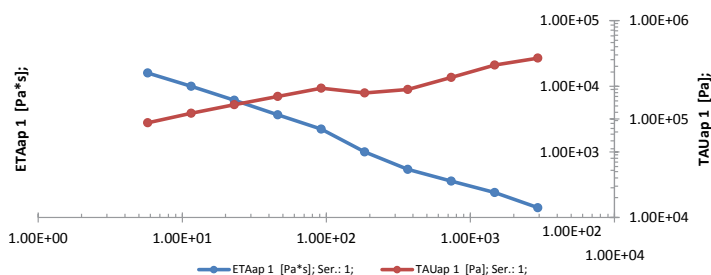
Polyethylene products (in pelletised or powder form) should not be stored in direct sunshine and/or heat radiation. Ultraviolet cause a change in the material properties. The Storage area should be dry and preferably don't exceed 50 °C. Under cool, dry, dark conditions Jam Polymers polyolefin resins 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 Pellet form packed in 25kg bags. Alternative packaging modes are available for selected grades.

- On compression moulded according to ASTM D1928C
Processing Conditions
Recommended barrel temperatures 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 tem-
perature using a 2:1 blow ratio
and a gap die of 3.0 mm.

Product data sheet

➤ HDPE made via Hostalen Process



HM-9450F (EX5)

HM-9450F (EX5) is blown film grade resin which is manufactured by suspension polymerization of ethylene monomer. HM-9450F (EX5) is a bi-modal high density polyethylene with 1-Butene as co monomer.

HDPE: HM9450F (EX5)

Density: 0.947-0.951 g/cm³

MFR 190/5: 0.23-0.33

Characteristic Properties



- High molar mass film grade, good stiffness and tenacity

Main Applications



- For blown films with paperlike quality, suitable for counter bags, carrier bags and wrapping films, excellent processing.

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.)

Test/Composition	Typical Value	Unit	Method
Density	0.949	g/cm ³	ISO1183
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