



# NIC GmbH

## Polyethylene

<b>LLDPE</b>	<b>22501</b>	<b>22502</b>	-	-	-
<b>HDPE</b>	<b>HD52518</b>	<b>HM9450F</b>	<b>HF4760</b>	<b>HM8355</b>	<b>CRP100</b>
<b>Wax</b>	<b>L-P-F079</b>	-	-	-	-



## LL-22501

### *Blown Film Grade*

#### *Product Description:*

LL-22501 is a LLDPE blown film grade design for application requiring good optical properties even at low extrusion temperature. This resin combines ease of processing with low gels and it is well suited for blending with LDPE and for general applications.

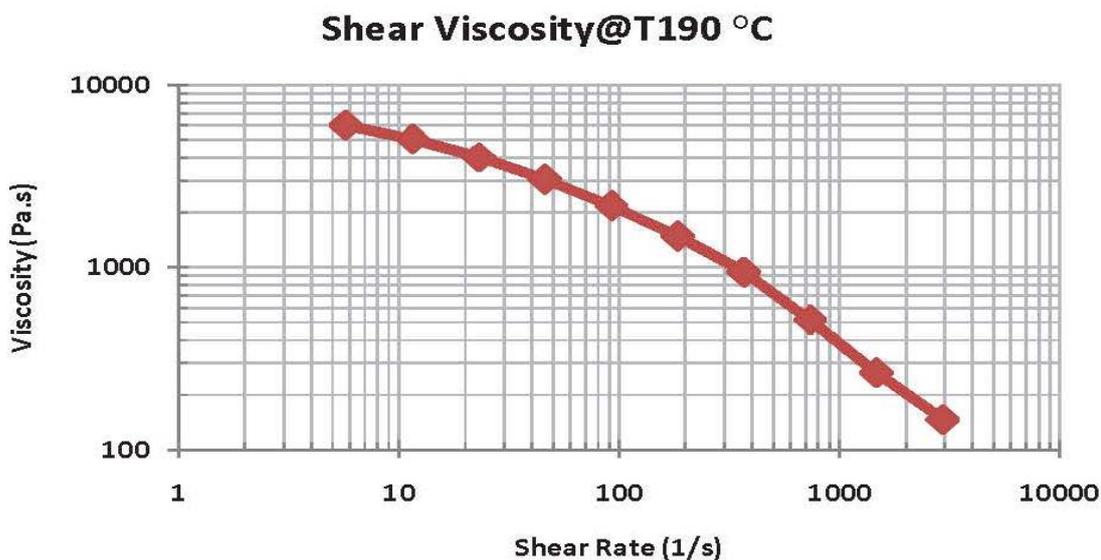
Resin Properties	Unit		Value	Test Method
Melt Index	g/10 min		0.95	D1238
Density	g/cm <sup>3</sup>		0.922	D1505
Film Properties	Unit		Value	Test Method
Dart Impact	g		80	D 1709
Elmendorf Tear	g	(MD/TD)	105/460	D1922
Tensile Strenght at Yield	Mpa	(MD/TD)	13/12.5	D638
Tensile Strenght at Break	Mpa	(MD/TD)	45/30	D638
Ultimate Elongation	%	(MD/TD)	680/780	D638
2 % Secant Modulus	Mpa	(MD/TD)	200/240	
Gloss 45°			38	D2457
Haze	%		21	D1003

- On compression molded according to ASTM D 1928 C 25 micron film obtained on collin 25



## Processing Conditions

- Melt Temperature (°C): 190 □ 280
- Blow up Ratio: 2.0 □ 3.0
- Die Gap (mm): 2.0 □ 2.5
- Thickness (micron) : 15 □ 150



- Polyethylene products (in pelletized or powder form) should not be stored in direct sunshine and/or heat radiation.
- The Storage area should be dry and preferably don't exceed 50 °C. JPC would not responsible about quality
- Diminishing such as color change, bad smell or est. which caused by bad storage conditions. It is better to process PE resin within 6 months after delivery.



## LLDPE22502

### Plant

### Grade: Film

Test/Composition	value	Unit	Method
Dart	70	g	D1709/A
Density	922-924	g	D 1505
Elmendorf tear, MD	130	g/1	D 1922
Elmendorf tear, TD	350	g	D 1922
Elongation at break, MD	600	%	D 882
Elongation at break, TD	700	%	D 882
Gloss 45°	38	0/%	D1709/A
Haze	21	%	D 1003
MFR "E"	1.8	g/10 min	D 1238
Tensile Strenght, MD	40	Mpa	D 882
Tensile Strenght, TD	32	Mpa	D 882
Yield Strength , MD	12	Mpa	D 882
Yield Strength , TD	11.5	Mpa	D 882

**Main Application:** General purpose

**Product Type:** LLDPE Butene



**Notes:** Film properties are obtained on 25 µ film made on 25 mm blown extruder according to method MA 17313, unless specified.



## HD-52518

### *HDPE for Injection Molding*

#### *Product Description*

52518 is a HDPE copolymer for injection molding for application requiring a good balance between easy of process ability and flow ability and mechanical properties.

**Typical Application:** House wares, high fluidity

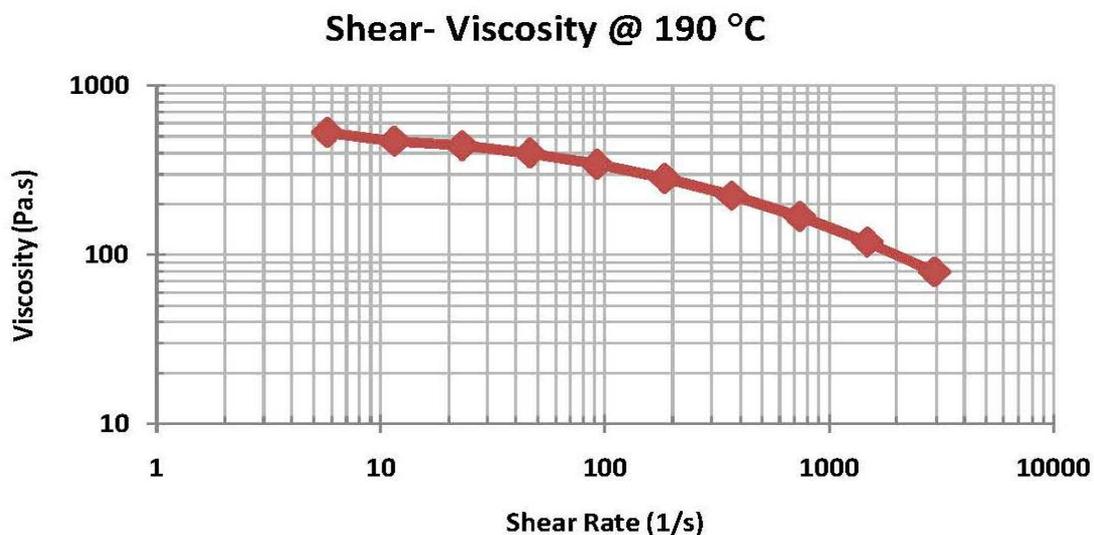
Resin Properties	Unit	Value	Test Method
Melt Index	g/10'	18	D1238
Density	g/cc	0.952	D1505
Thermal Properties	Unit	Value	Test Method
Vicat Softening Point	°C	122	D1525
Molded Properties	Unit	Value	Test Method
Flectural Modulus	Mpa	1350	D790
Notched Izod Impact @ 23 °C	J/m	25	D256/A

- On compression molded according to ASTM D1928C



## *Processing Conditions*

- Recommended barrel temperatures rang between 190 °C and 280 °C



## *Storage and Handling*

Polyethylene products (in pelletized or powder form) should not be stored in direct sunshine and/or heat radiation. The Storage area should be dry and preferably don't exceed 50 °C. JPC would not responsible about quality diminishing such as color change, bad smell or est. which caused by bad storage conditions. It is better to process PE resin within 6 months after delivery.



## HM9450F

*Grade /Product Name: Plant HDPE*

*Grade: THE/THT*

Test/composition	Value	Unit	Method
Density	0.951+0.02	g/cm3	ISO 1183
Fish Eye Note	<=3	note	Internal
FRR 21.6/5	29+2	-	-
MFR190 /21.6	8+2	g/10min	ISO1133
MFR190/5	0.28+0.05	g/10min	ISO1133

*Main Application:* Film

### *Notes:*

- Test specimen from compression moulded sheet at 23c
- FRR values are statistical and calculated by dividing MFR values.
- Notch impact test specimen from compressed moulded sheet 23c and the data quoted are average value





## **HF-4760(BL3)**

### *HDPE for Blow Molding*

#### *Product Description :*

HF- 4760 (BL3) is a blow molding grade resin with high density, stiffness, good ESCR. High rigidity and good flowability which made it proper for usage in bottles and small blow molding goods.

#### *Typical Application :*

Containers(up to 10 lit), packing pharmaceuticals & surfactants

Resin Properties	Unit	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 <sup>3</sup>	0.954	ISO 1183
Molded Properties	Unit	Value	Test Method
Notched Impact @ 23 °C	mJ/mm <sup>2</sup>	9	ISO 179/ 1 eA

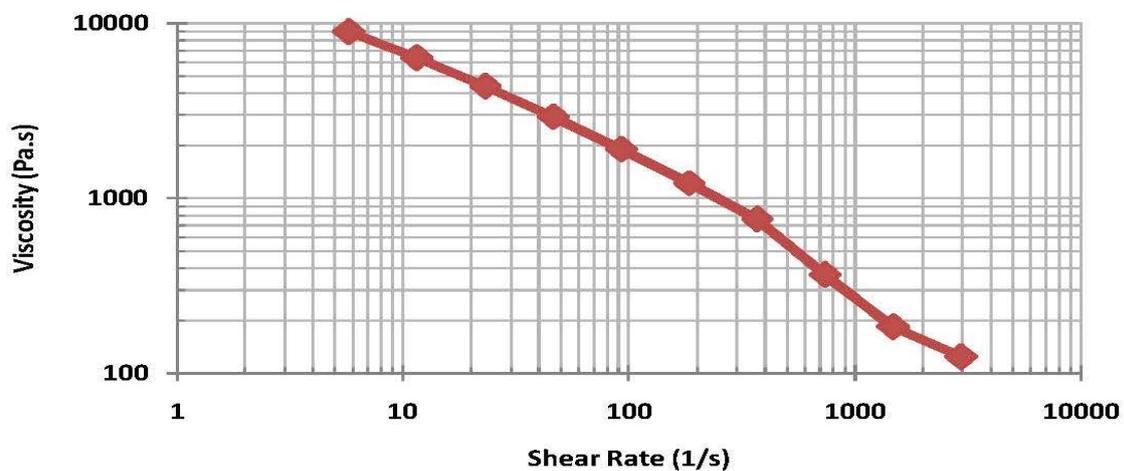
- On compression molded according to ASTM D1928C



## *Processing conditions*

Recommended barrel temperatures rang between 190 °C and 280 °C

### **Shear-Viscosity @ 190 °C**



## *Storage and Handling:*

Polyethylene products (in pelletised or powder form) should not be stored in direct sunshine and/or heat radiation. The Storage area should be dry and preferably don't exceed 50 °C. 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.



## **HM-8355 (BL4)**

### *HDPE for Large Blow Molding*

#### *Product Description :*

HM-8355 (BL4) is a general purpose grade for large containers. It is a high molar mass, easily process able, high stiffness strength, good stress cracking resistance and very good molding surface finish grade resin.

#### *Typical Application:*

Jerry can, General purpose grade for large container, volume aprox. 1-500 lit

Resin Properties	Unit	Value	Test Method
Melt Index(21.6)	g/10 min	9.5 ± 2.0	ISO 1133
Melt Index(5)	g/10 min	0.35 ± 0.06	ISO 1133
FRR (21.6/5)		27 ± 3	
Density	g/cm <sup>3</sup>	0.951 ± 0.002	ISO 1183
Swell Ratio	%	110 ± 15	
Molded Properties	Unit	Value	Test Method
Notched Impact @ 23 °C	mJ/mm <sup>2</sup>	≥ 10	ISO 179/ 1 eA

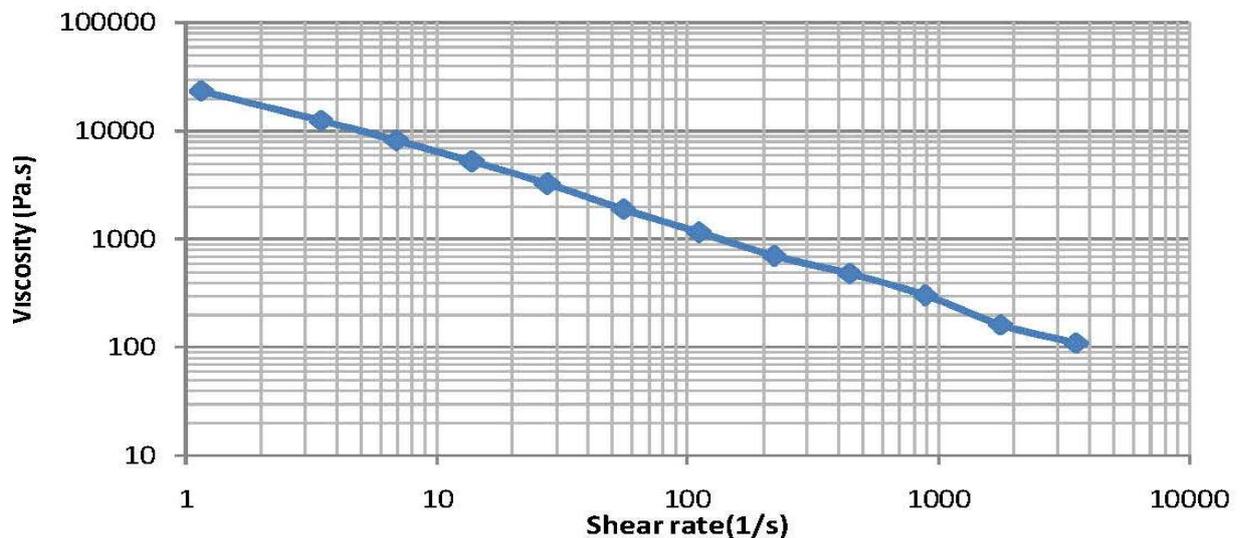
- Test specimen from compression molded sheet according to ASTM D1928C



### *Processing conditions:*

Recommended barrel temperatures rang between 190 °C and 280 °C

### **Shear-Viscosity @ 190 °C**



### *Storage and Handling:*

Polyethylene products (in pelletised or powder form) should not be stored in direct sunshine and/or heat radiation. The Storage area should be dry and preferably don't exceed 50 °C. 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.



## **HM-CRP 100 N** *HDPE for Pipe Extrusion*

### *Product Description :*

HM-CRP100 N is a high density polyethylene with 1-Butene as co monomer. It is natural, outstanding ESCR, high impact strength, outstanding hydrostatic strength for PE 100 class.

### *Typical Application :*

Pipe extrusion PE 100 class, industrial and pressure pipe , gas pipe, drinking water pipe, relining , fittings

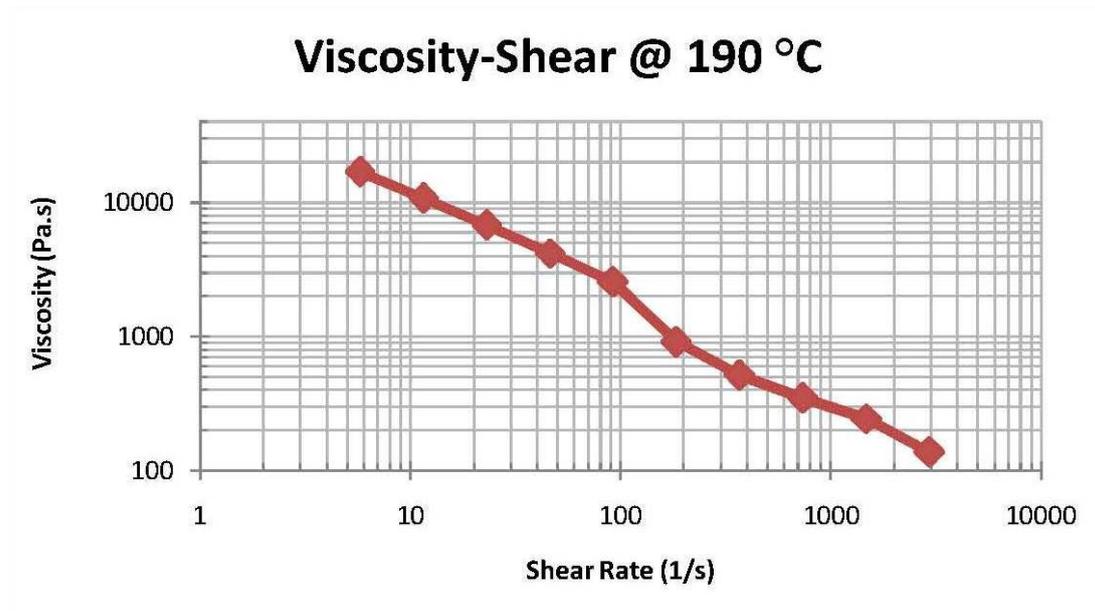
Resin Properties	Unit	Value	Test Method
Melt Index (21.6)	g/10 min	6.2 ± 1.0	ISO 1133
Melt Index (5)	g/10 min	0.22 ± 0.03	ISO 1133
FRR (21.6/5)		28 ± 3	
Density	g/cm <sup>3</sup>	0.948 ± 0.002	ISO 1183
Molded Properties	Unit	Value	Test Method
Notched Impact @ 23 °C	mJ/mm <sup>2</sup>	24	ISO 179/1 eA
Mechanical Properties	Unit	Value	Test Method
Hydrostatic Strength (80 °C)	h	5000(4.5 N/mm <sup>2</sup> )	ISO 1167



## *Processing Conditions:*

Recommended Extrusion temperature: 190-220 °C.

Recommended injection molding temperature: 200-280 °C.



## *Storage and Handling:*

The material is packed in 25 kg bags or in bulk containers protecting it from contamination. Storage times of natural materials longer than 6 months may have a negative influence on the quality of the final product (for example the brightness). It is generally recommended to convert all materials latest within 6 months from the date of delivery.

The material is subjected to degradation by ultra-violet radiation or by high storage temperatures. Therefore the material must be protected from direct sunlight, temperatures above 40°C and high atmospheric humidity during storage. Further unfavorable storage conditions are large fluctuations in ambient temperature and high atmospheric humidity. These conditions may lead to moisture condensing inside the packaging. Under these circumstances, it is recommended to dry the material before use. Unfavorable storage conditions may also intensify the material's slight characteristic odors.



## Polyethylene

Sample ID : 931479

NO.	Property	Unit	Method	Result
1	The First Melting Point	c	ASTM D3418	72.21
2	The Second Melting Point	c	ASTM D3418	87.97
3	The Third Melting Point	c	ASTM D3418	114.07
4	Number of Melting Peaks	-	-	3
5	Volatile	%	In-House Method	28.75