



## *Amirkabir Petrochemical Company*

### *Technical Data Sheet*

#### *LDPE 2420F*

#### *Linear Low Density Polyethylene*

##### **1) Product Description:**

Lupolen 2420 F is a non-additivated, low density polyethylene. It is characterized by a good melt strength leading to good bubble stability during blown film extrusion. It is delivered in pellet form.

##### **2) Applications:**

Agriculture Film; Bags & Pouches; Food Packaging Film; Hygiene Film; Liner Film; Shrink Film

##### **3) Features:**

General Purpose; Good Heat Seal; Good Melt Strength; Good Optical Properties; Good Processability; Food Grade

##### **4) Processing Method:**

Blown Film

##### **5) Typical Data**

<b>Property</b>	<b>Unit</b>	<b>Typical Value</b>	<b>Test Method</b>
Melt Flow Rate (190 °C/2.16Kg)	g/10min	0.75	ISO 1133
Density	g/cm <sup>3</sup>	0.923	ISO 1183
Tensile Modulus	MPa	260	ISO527-1;-2
Tensile Stress at yield	MPa	11	ISO 527-1,-2
Tensile Stress at Break MD/TD	MPa	26 / 20	ISO 527-1,-3
Tensile Strain at Break MD/TD	%	300 / 600	ISO 527-1,-3
Dart Drop Impact (50µm)	g	150	ASTM D 1709
Vicat Softening Temperature	°C	96	ISO 306 / A50
Haze (50µ Blown Film)	%	< 8	ASTM D 1003
Gloss (60°,50µm)	---	> 90	ASTM D 2457
Hardness Shore D (3Sec)	---	48	ISO 868

##### **6) Additional Information:**

Test Specimen: Film properties tested using 50 µm thicknesses blown film extruded at a melt temperature of 180 °C and a blow- up ratio of 2.5:1

Notes: These are typical property values not to be construed as specification limits.



## *Amirkabir Petrochemical Company*

### **7) Processing Parameters:**

Extrusion Temperature 170-220°C

### **8) Food Regulations: On going**

### **9) Further Information**

#### ***-Health and Safety:***

The resin is manufactured to the highest standard but special requirements apply to certain applications such as food end-use contact and direct medical use. For specific information on regulatory compliance contact your local representative.

Workers should be protected from the possibility of skin or eye contact with molten polymer. Safety glasses are suggested as a minimal precaution to prevent mechanical or thermal injury to the eyes.

Molten polymer may be degraded if it is exposed to air during any of the processing and off-line operations. The products of degradation have an unpleasant odour. In higher concentration they may cause irritation of the mucus membranes. Fabrication areas should be ventilated to carry away fumes or vapours. Legislation on the control of emissions and pollution prevention must be observed.

The resin will burn when supplied with excess heat and oxygen. It should be handled and stored away from contact with direct flames and/or ignition sources. While burning, the resin contributes high heat and may generate a dense black smoke.

Recycled resins may have previously been used as packaging for, or may have otherwise been in contact with, hazardous goods. Converters are responsible for taking all necessary precautions to ensure that recycled resins are safe for continued use.

For further information about safety in handling and processing please refer to the Safety Data Sheet.

#### ***-Conveying:***

Conveying equipment should be designed to prevent production and accumulation of fines and dust particles that are contained in polymer resins. These particles can under certain conditions pose an explosion hazard. Conveying systems should be grounded, equipped with adequate filters and regularly inspected for leaks.

#### ***-Storage:***

The resin is packed in 25 kg bags, octabins or bulk containers protecting it from contamination. If it is stored under certain conditions, i. e. if there are large fluctuations in



## *Amirkabir Petrochemical Company*

ambient temperature and the atmospheric humidity is high, moisture may condense inside the packaging. Under these circumstances, it is recommended to dry the resin before use. Unfavorable storage conditions may also intensify the resin's slight characteristic odor.

Resin should be protected from direct sunlight, temperatures above 40°C and high atmospheric humidity during storage. Higher storage temperatures may reduce the storage time.

The information submitted is based on our current knowledge and experience. In view of the many factors that may affect processing and application, these data do not relieve processors of the responsibility of carrying out their own tests and experiments; neither do they imply any legally binding assurance of certain properties or of suitability for a specific purpose. This information does not remove the obligation of the customer to inspect the material on arrival and notify us of any faults immediately. It is the responsibility of those to whom we supply our products to ensure that any proprietary rights and existing laws and legislation are observed.