



Product Information

novex 21 D 430

LDPE film products

Applications

21 D 430 is particularly suitable for heavy duty film applications such as sacks and pallet shrink film.

Characteristics

21 D 430 is an easily extrudable LDPE homopolymer. It offers the following properties:

- very high impact strength
- excellent bubble stability
- low slip film

If corona treatment is necessary, the level should normally be in the range 38-48N/m.

We recommend that you consult your BP technical representative for further advice on the use of 21 D 430.

Physical properties

		Units	Typical value	Test method
Resin				
Melt flow rate		g/10 min	0.26	ISO 1133
Density		kg/m ³	923	ISO 1872/1
Vicat softening temperature		°C	97	ISO 306 Method A
Film*				
Dart drop impact		g	410	ASTM D1709
Tensile stress at yield	MD/TD	MPa	12/11	ISO 1184
Tensile stress at break	MD/TD	MPa	21/19	ISO 1184
Elongation at break	MD/TD	%	300/500	ISO 1184
1% Secant modulus	MD/TD	MPa	200/230	ISO 1184
Coefficient of friction		-	> 0.5	ASTM D1894
Haze		%	15	ASTM D1003
Gloss (45°)		%	40	ASTM D2457

* 100 µm film, 2:1 blow-up ratio, 200°C melt temperature.

MD = machine direction TD = transverse direction

Extrusion conditions

21 D 430 can be processed on all commercial extruders over the melt temperature range of 170 - 220°C. Film can be drawn down to approximately 75 µm under ideal extrusion conditions.

Storage

Novex 21 D 430 should be stored in a dry and dust free environment at temperatures below 50°C. Exposure to direct sunlight should be avoided, as this may lead to product deterioration.

Food contact applications

As dispatched from our plants BP's Innovex and Novex grades meet the requirements of most European countries in respect of their usage in food contact applications. Official confirmation of compliance with current requirements in the individual countries will be provided on request. No liability can be accepted for any damage, loss, or injury arising out of failure to obtain such confirmation, or failure to observe any recommendations given.

Polyethylene and the environment

"BP will act responsibly and caringly towards those who work for us, the community whom we serve and the environment in which we live."

Natural Innovex and Novex polymers, as supplied, can be recycled, incinerated or disposed of in landfill without detriment to the environment in accordance with local or national regulations.

With recycling, clean waste can be re-used for many less demanding applications.

Alternatively, with properly controlled and efficient incineration, preferably linked to heat or other energy recovery systems, polyethylene's high calorific value will assist the combustion of municipal solid waste.

In landfill sites, Innovex and Novex grades do not degrade to produce voids, and do not emit dangerous gases or contribute to ground water pollution.

Natural Innovex and Novex polymers, as manufactured, comply with the limit for heavy metals (100 ppm total of lead, cadmium, mercury and hexavalent chromium) in packaging materials as defined in the European Union Directive 94/62/EC on packaging and packaging waste and the corresponding US CONEG regulations.

If pigments or other additives are incorporated into the Innovex and Novex polymers at the processing stage, the above statements may not be fully valid. BP will be pleased to offer advice in specific cases.

Health and safety

Material Safety Data Sheets for Innovex and Novex grades are available, and should be consulted before handling and using Innovex and Novex grades.

Exclusion of Liability

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