

**Product Data Sheet****IROGRAN® A 85 P 6028UV**

Polyether-based Thermoplastic Polyurethane

PRODUCT DESCRIPTION

IROGRAN® A 85 P 6028UV is a polyether-based Thermoplastic Polyurethane (TPU) for extrusion and injection molding applications. Key features are excellent hydrolysis and microbial resistance, improved UV stability, excellent wear performance and glossy surface.

APPLICATIONS

, thick wall technical parts, thick wall extrusion profiles, spiral hoses, cable jacketing and film and sheet.

TYPICAL PHYSICAL PROPERTIES

Properties	Key	NORM	Value	Unit
Hardness (after 3 sec.)	M	ISO 7619	85	Shore A
Hardness (after 3 sec.)	M	ISO 7619	40	Shore D
Density	M	ISO 1183-1	1.12	g/cm ³
Bulk Density			673	
Tensile strength	M	DIN 53504	35	MPa
Elongation @ break	M	DIN 53504	650	%
Tear strength	M	ISO 34-1	55	N/mm
Abrasion	M	ISO 4649	34	mm ³
Bayshore rebound resilience	M	ASTM D 2632	41	%
Softening range low	E	Huntsman TMA	159	°C
Softening range high	E	Huntsman TMA	171	°C

M = Injection molded parts to meet DIN & ASTM requirements. Parts tempered for 20 hrs @ 100 °C prior to testing

E = Extruded film cut to ASTM requirements. Parts at room temperature aged prior to testing.



HEALTH & SAFETY ADVICE

Before undertaking any trials with this product it is essential that all personnel are aware of the necessary precautions that must be taken. These are detailed in the relevant Material Safety Data Sheet (MSDS), which will be provided by Huntsman.

SUPPLY & STORAGE

IROGRAN® A 85 P 6028UV is supplied in bags, drums or octabins. Please contact your customer service to confirm this.

IROGRAN® A 85 P 6028UV has a minimum expected shelf life of 12 months after shipment date. The product should be stored in a dry and cool place in the manufacturer's original packaging.

MATERIAL PREPARATION

IROGRAN® A 85 P 6028UV is supplied pre-dried, however to ensure trouble-free processing it is preferable to dry before use. The recommended drying conditions are:

- 3 hours at 80-90°C in circulating air
- 3 hours at 70-80°C in dehumidified air
- Dew point: -30°C

PHYSICAL FORM

Type: Transparent pellets

PROCESSING PARAMETERS

Melt Volume Rate 190°C / 21.6 kg ISO 1133-1 = 65 cm³/10 min

Processing Parameter:	Extrusion	Injection Molding
Temperature Profile	°C	°C
Feed:	25 - 40	25 - 40
Barrel:	165 - 200	170 - 210
Adapter/Nozzle:	175 - 205	170 - 200
Die/Mold:	175 - 205	20 - 70

For further information, please contact your nearest sales office: http://www.huntsman.com/PU_customer_service

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