

Product Data Sheet**IROGRAN® A 90 D 6012**

Polyester-based Thermoplastic Polyurethane

PRODUCT DESCRIPTION

IROGRAN® A 90 D 6012 is a polyester-based Thermoplastic Polyurethane (TPU) for extrusion applications. Key features are , good oil & solvent resistance, excellent multilayer bonding, excellent wear performance, durability and robust processing.

APPLICATIONS

Thin wall technical parts, film and sheet and barrier layer.

TYPICAL PHYSICAL PROPERTIES

Properties	Key	NORM	Value	Unit
Hardness (after 3 sec.)	M	ISO 7619	91	Shore A
Density	M	ISO 1183-1	1.21	g/cm ³
Bulk Density			670	
Tensile strength	M	DIN 53504	45	MPa
Elongation @ break	M	DIN 53504	550	%
Tear strength	M	ISO 34-1	95	N/mm
Softening range low	E	Huntsman TMA	140	°C
Softening range high	E	Huntsman TMA	170	°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 90 D 6012 is supplied in bags, drums or octabins. Please contact your customer service to confirm this.

IROGRAN® A 90 D 6012 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 90 D 6012 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 100-110°C in circulating air
- 3 hours at 80-90°C in dehumidified air
- Dew point: -30°C

PHYSICAL FORM

Type: Transparent pellets

PROCESSING PARAMETERS

Melt Volume Rate 190°C / 10kg ISO 1133-1 = 25 cm³/10min

Processing Parameter:	Extrusion
Temperature Profile	°C
Feed Zone:	25 - 40
Barrel:	180 - 200
Die Head:	180 - 200
Nozzle:	180 - 200

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

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