

**Product Data Sheet****IROGRAN® A 90 P 5014FR DP**

New development polyether-based Thermoplastic Polyurethane

PRODUCT DESCRIPTION

IROGRAN® A 90 P 5014FR DP is a high flame-retardant, halogen-free, polyether-based Thermoplastic Polyurethane (TPU) for extrusion and injection molding applications. Key features are excellent hydrolysis and microbial resistance, good oil and solvent resistance and excellent wear performance.

APPLICATIONS

Thick wall technical parts and cable jacketing.

TYPICAL PHYSICAL PROPERTIES

Properties	Key	NORM	Value	Unit
Hardness (after 3 sec.)	M	ISO 7619	91	Shore A
Hardness (after 3 sec.)	M	ISO 7619	40	Shore D
Density	M	ISO 1183-1	1,25	g/cm ³
Tensile strength	M	DIN 53504	35	MPa
Elongation @ break	M	DIN 53504	500	%
Tear strength	M	ISO 34-1	65	N/mm
Abrasion	M	ISO 4649	30	mm ³
Certificates in house tested			UL 94 - V0	

M = Injection molded parts to meet DIN & ASTM requirements. Parts tempered for 20 hrs @ 100 °C 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 P 5014FR DP is supplied in bags, drums or octabins. Please contact your customer service to confirm this.

IROGRAN® A 90 P 5014FR DP 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 P 5014FR DP 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: Opaque pellets

PROCESSING PARAMETERS

Processing Parameter:	Extrusion
Temperature Profile	°C
Feed Zone:	25 - 40
Barrel:	190 - 205
Die Head:	195 - 205
Nozzle:	190 - 200

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

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