

Product Data Sheet**IROGRAN® A 98 E 6045UV DP**

New development polyester-based Thermoplastic Polyurethane

PRODUCT DESCRIPTION

IROGRAN® A 98 E 6045UV DP is a polyester-based Thermoplastic Polyurethane (TPU) for extrusion applications. Key features are improved UV stability, hydrolytically stabilized, abrasion resistance, durability, robust processing and high melt stability.

APPLICATIONS

Thin wall technical parts, thin wall extrusion profiles and spinning fiber.

TYPICAL PHYSICAL PROPERTIES

Properties	Key	NORM	Value	Unit
Hardness (after 3 sec.)	M	ISO 7619	98	Shore A
Hardness (after 3 sec.)	M	ISO 7619	61	Shore D
Density	M	ISO 1183-1	1.22	g/cm ³
Tensile strength	M	DIN 53504	57	MPa
Elongation @ break	M	DIN 53504	380	%
Tensile stress @ 50% elongation	M	DIN 53504	15	MPa
Tensile stress @ 100% elongation	M	DIN 53504	20	MPa
Tensile stress @ 300% elongation	M	DIN 53504	40	MPa
Softening range low	E	Huntsman TMA	175	°C
Softening range high	E	Huntsman TMA	200	°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 98 E 6045UV DP is supplied in bags, drums or octabins. Please contact your customer service to confirm this.

IROGRAN® A 98 E 6045UV 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 98 E 6045UV 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: Transparent pellets

PROCESSING PARAMETERS

Melt Volume Rate 220°C / 10kg ISO 1133-1 = 80 cm³/10min

Processing Parameter:	Extrusion
Temperature Profile	°C
Feed Zone:	25 - 40
Barrel:	205 - 235
Die Head:	205 - 235
Nozzle:	210 - 240

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

This is a development product. Physical properties and information or data relating to its application are based on our current knowledge and may be subject to change. While the product is in development, no guarantees or assurances can be given about its processing, performance or availability. All metrics, values and figures relating to performance are intended as a guide and should not be considered binding. Development products are not part of Huntsman's standard delivery program. While the information and recommendations in this publication are, to the best of our knowledge, information and belief, accurate at the date of publication, nothing herein is to be construed as a warranty, express or otherwise. In all cases, it is the responsibility of the user to determine the applicability of such information and recommendations and the suitability of any product for its own particular purpose. Nothing in this publication is to be construed as recommending the infringement of any patent or other intellectual property right, and no liability from an such infringement is assumed. Nothing in this publication is to be viewed as a license under any intellectual property right. Except where explicitly agreed otherwise, the sale of products referred to in this publication is subject to the general terms and conditions of Huntsman International LLC or of its affiliated companies. Huntsman Polyurethanes is an international business unit of Huntsman International LLC. Huntsman Polyurethanes trades through Huntsman affiliated companies in different countries such as Huntsman International LLC in the USA and Huntsman Holland BV in Western Europe.