

**Product Data Sheet****IROGRAN® A 85 G 4819**

Polyester-based Thermoplastic Polyurethane

PRODUCT DESCRIPTION

IROGRAN® A 85 G 4819 is a polyester-based Thermoplastic Polyurethane (TPU) for injection molding applications. Key features are excellent wear performance, durability and robust processing.

APPLICATIONS

Thin wall technical parts and compounding.

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	34	Shore D
Density	M	ISO 1183-1	1.22	g/cm ³
Tensile strength	M	DIN 53504	40	MPa
Elongation @ break	M	DIN 53504	700	%
Tensile stress @ 100% elongation	M	DIN 53504	6	MPa
Tensile stress @ 300% elongation	M	DIN 53504	10	MPa
Tear strength	M	ISO 34-1	70	N/mm
Abrasion	M	ISO 4649	30	mm ³

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 85 G 4819 is supplied in bags, drums or octabins. Please contact your customer service to confirm this.

IROGRAN® A 85 G 4819 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 G 4819 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 195°C / 8,7kg ISO 1133-1 = 30 cm³/10min

Processing Parameter: Injection Molding

Temperature Profile °C

Feed Zone: 25 - 40

Barrel: 180 - 200

Nozzle: 185 - 205

Mold: 20 - 50

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

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.