

Polyethylene High-Shrink Binder Fibre - PE

General points:

IFG PE is a melt spun Polyolefine fibre.

This fibre type is mainly used as a binder fibre with several other raw materials. It shows a high thermal shrinkage (> 25 %) becoming fully effective during processing at temperatures above approx. 100 °C. The melting point is approx. 115 °C, for optimized results concerning binding effect we propose a processing temperature of approx. 125°C

Application in needle felts:

IFG PE is used – considering ecological reflections – mainly as a replacement of latex (binder fibre) in a wide range of needle felt applications.

The blending ratio of E 6101 varies in accordance to the requested effects regarding to binding strength and stiffness of the product. Usually it ranges between 25 % down to 10%.

The bonding strength is dependent on the other raw materials, slight variations have to be optimized with specific trials.

Colours:

IFG PE is usually supplied as 1000 Natur. This „shade“ has got no white pigmentation which makes it translucent. It disappears optically from the surface after the according thermal treatment.

Lubrication:

IFG PE is prepared with special lubricants ensuring fully satisfactory processing properties.

Types/Stabilisation:

Indoor

Form of supply:

IFG PE is supplied as staple fibre, packed in bales.

Bale dimension: approx. 115 x 105 x 67 cm

Bale weight: approx. 250 kg

Supply programme:

Titre (dtex)	Staple length (mm)
5,5	60/75/90
7	60/75/90
11	60/75/90
17	60/75/90

details of special dtex and cut length on inquiry

Fibre Characteristics		5.5 dtex	7 dtex	11 dtex	17 dtex
Fibre cross section		round	round	round	round
Specific gravity	g/cm ³	0,92-0,94	0,92-0,94	0,92-0,94	0,92-0,94
Crimp	crimps/cm	4-5	4-5	4-5	4-5
Tear strength	cN/tex	>28	>28	>28	>28
Elongation at break	%	60-120	60-120	60-120	60-120
Thermal shrinkage	°90C/10min	>28	>28	>28	>28
Melting point	°C	approx. 115	approx. 115	approx. 115	approx. 115