



ISOKON
INNOVATIVE PLASTICS SOLUTIONS



ISORTHO

Thermoplastic sheet for orthopaedic purposes

Isokon is one of the leading manufacturers of semi-finished plastics used in the field of orthopaedic technology for premium-quality orthoses and prostheses.

**In the field of orthopaedics ISOKON
has had many years of experience.**



The ISORTHO line is well known within the circle of companies engaged in the manufacture of orthopaedic parts.

Thermoplastic PEHD, PP and LDPE sheets are suitable for orthopaedic purposes because of their special properties, such as quick and easy processing, **minimum weight**, **excellent hygienic characteristics** as well as **outstanding strength, stiffness and shape retention**.

Our range of products enables a wide variety of processing methods.

The following technical overview describes treatment applications for thermoplastics and the recommendations for each material.

	ISORTHO 10 HDPE	ISORTHO 20 HDPE	ISORTHO 30 LDPE	ISORTHO 40 PP-C	ISORTHO 50 PP-H	ISORTHO 60 EVA
Density (g/cm ³) ISO 1183	0.948	0.949	0.925	0.910	0.910	0,935
Hardness (Shore D) ISO 868	64	63	48	66	75	40
Tensile Modulus (MPa) ISO 527	1000	1200	200	1100	1600	25
Processing temperature (°C) *oven temperature	165–180	165–180	120–130	185–215	185–215	150–160

**Colours	Natural	Natural	Natural	Natural	Natural	Natural
***Sheet sizes (mm)	1000×2000 1500×3000	1000×2000 1500×3000	1000×2000 1500×3000	1000×2000 1500×3000	1000×2000 1500×3000	1000×2000 1500×3000
Sheet thicknesses (mm)	2 - 8	2 - 8	2 - 8	2 - 8	2 - 8	2 – 8

**The suggested processing temperatures can vary depending on the type and condition of the oven as well as the sheet thickness.
The exact parameters have to be determined by the user.*

****The standard colour is natural. Skin or other colours are available upon request.**

*****Other dimensions are available upon request.**

PRODUCT TYPE	DESCRIPTION	PROPERTIES
ISORTHO 10	High Density Polyethylene with a high molecular weight	<i>Excellent formability, very resistant to stress cracking and abrasion with high strength and good energy absorption properties.</i>
ISORTHO 20	High Density Polyethylene	<i>Excellent formability, tough, flexible and cold resistant.</i>
ISORTHO 30	Low Density Polyethylene	<i>Easy formability, low tensile strength, very good flexibility, offers a soft and comfortable feel.</i>
ISORTHO 40	Polypropylene copolymer	<i>Excellent formability, good resistance to cracking, good stiffness combined with some flexibility. Compared to Isortho 50 it has improved impact strength especially at low temperatures.</i>
ISORTHO 50	Polypropylene homopolymer	<i>Good formability, very rigid and strong material. Overall durability is very good.</i>
ISORTHO 60	Ethylene vinyl acetate	<i>Good formability, very good flexibility, softness and transparency.</i>

Various ISORTHO types of HDPE, PP and LDPE Sheets are available in **Natural** as well as **Skin** colours.

They are used by various **Orthotic & Prosthetic Aids** manufacturing units across the world.

The quality is well established in the market especially in Orthopaedic Aids manufacturing units.

We guarantee the **high quality** of the final product as **we use certified raw materials**.



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