



# Innovative PET Medical Solutions

TRANSPARENCY, SAFETY AND QUALITY FOR MEDICAL APPLICATIONS.



## THE CLEAR STANDARD FOR MEDICAL TECHNOLOGY.

HIPEX® G sheets are innovative, safe and versatile PET-G sheets which have been specially developed for demanding medical applications. Our material combines transparency, biocompatibility and regulatory safety compliance for products where precision, trust and confidence are crucial factors.

As part of the 3A Composites Group, we offer extruded thermoplastic PET-G sheets which comply with the most stringent quality standards – for applications ranging from orthotics and dental solutions to equipment casing and sterile packaging.

Leading manufacturers in the sectors of medical and orthopaedic technology and in the dental and packaging industries put their trust in HIPEX® G when safety, transparency and long durability are key concerns.

### HIPEX® G YOUR ADVANTAGES

Easy to form and high impact resistance

Excellent resistance to chemicals and easy cleaning

Biocompatible in accordance with ISO 10993-5/-10

EU/FDA Food Contact and RoHS/REACH compliant

Fire classification B-s1, d0

BPA- and phthalate-free

Very good resistance to stress cracking

Outstanding transparency



Image: AI-generated

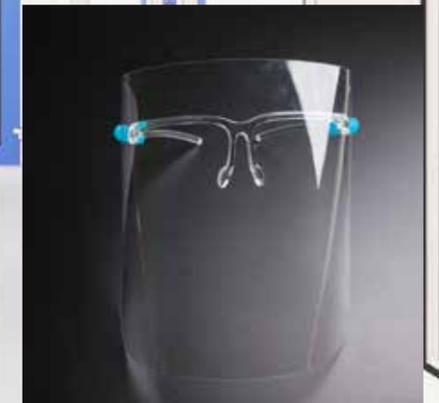
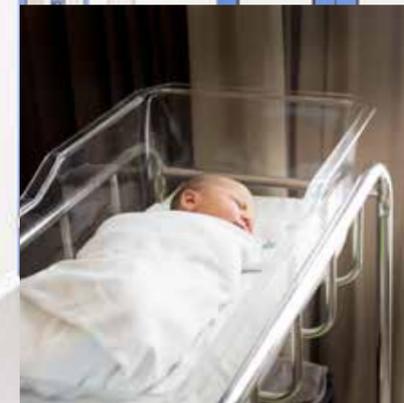
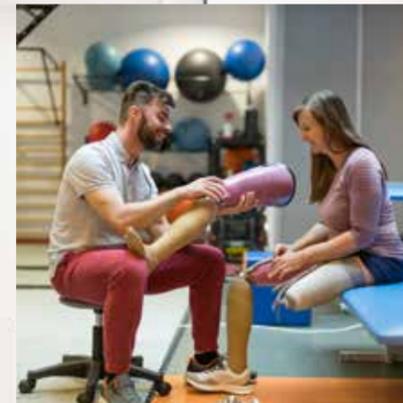
## AREA OF APPLICATION

**ORTHOTICS, ALIGNERS, MASKS**  
Individually mouldable solutions for orthopaedic and orthodontic technology.

**MEDICAL EQUIPMENT & COMPONENTS**  
Equipment casing, trays for diagnostics, instrument parts.

**PACKAGING**  
Sterile kits, blister packs and trays for medical products.

**WALL CLADDING & FURNITURE**  
Robust, hygienic surfaces for clinics and laboratories.



VERSATILE –  
FULFILLING THE HIGHEST REQUIREMENTS.

## TECHNICAL SPECIFICATIONS

### GENERAL

Density	ISO 1183-1	kg/m <sup>3</sup>	1270
Moisture absorption (23°C saturation in water)	ISO 62-1	%	0.6
Biocompatibility (skin contact)	ISO 10993-5	Class	not cytotoxic

### MECHANICAL

Tensile modulus	ISO 527-2	MPa	2000
Tensile strength	ISO 527-2	MPa	50
Elongation at break	ISO 527-2	%	> 35
Flexural modulus	ISO 178	MPa	2000
Flexural strength	ISO 178	MPa	75
Charpy impact strength, unnotched	ISO 179-1/1eU	kJ/m <sup>2</sup>	no break
Charpy impact strength, notched	ISO 179-1/1eA	kJ/m <sup>2</sup>	7
Surface hardness	ISO 868	Shore D	40

### OPTICAL

Light transmission (3 mm)	ISO 13468-1	%	88
Refractive index	ISO 489	–	1.57
Haze	ISO 14782	%	< 1
Solar heat gain coefficient, g value (3 mm)	DIN EN 410	%	82

### THERMAL

Temperature of deflection under load (method A / B)	ISO 75-2	°C	72 / 68
Vicat softening temperature (method B50)	ISO 306	°C	70
Coefficient of linear thermal expansion	ISO 11359-2	mm/(m*K)	0.05
Service temperature continuous use	–	°C	65
Max. temperature short term use	–	°C	70
Degradation temperature	–	°C	> 280
Forming temperature	–	°C	110 – 150
Specific heat capacity	ISO 11357-4	J/gK	1.1
Thermal conductivity	ISO 22007-1	W/mK	0.20
Fire behavior	EN 13501-1	Class	B-s1, d0 (clear 0.8 – 10 mm, opal 1.5 – 6 mm)

### ELECTRICAL

Electric strength	IEC 60243-1	kV/mm	16
Volume resistivity	IEC 62631-3-1	Ω m	10 <sup>15</sup>
Surface resistivity	IEC 62631-3-2	Ω	10 <sup>16</sup>
Dielectric constant (100 Hz)	IEC 60250	–	2.6
Dissipation factor (50 Hz)	IEC 60250	–	0.01

## FLEXIBLE. PRECISE. MADE IN GERMANY.

Our HIPEX® G sheets are manufactured at our site in Nischwitz, Germany, with the utmost care and using state-of-the-art extrusion technology. This ensures consistent quality, short delivery routes and reliable availability.



### CERTIFIED SAFETY

#### BIOCOMPATIBILITY

Tested in accordance with ISO 10993-5/-10 – does not cause skin irritation or cytotoxicity

#### FOOD CONTACT

EU 1935/2004/EC & FDA 21 CFR 177.1315 compliant

#### RoHS & REACH

Free from hazardous substances, BPA and phthalate-free

#### FIRE SAFETY

B-s1, d0 in accordance with DIN EN 13501-1

### DELIVERY OPTIONS

Thicknesses: 0.8 to 20 mm

Standard formats and precision cutting to suit customer requirements

Optional neutral protective film

Custom-made products and project-related solutions on request

### CONTACT & ADVICE

YOUR CONTACT FOR SAFE MEDICAL SOLUTIONS IN PET-G.

Contact us for product advice, technical specifications or sample requests, we offer personal assistance in finding the right solution for your application.

CONTACT US.

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