

## TECHNICAL DATA SHEET

### Conductive HIPS

#### DESCRIPTION

Polystyrene Virgin is a normal flowing, high impact grade that has a good balance of stiffness und toughness. Due to good impact strength it is used as an excellent all-purpose material. Good thermoforming is one of the key features.

**HIPS conductive** is made for packaging of electronic devices and handling trays that are sensitive to Electro Static Discharge (ESD).

#### KEY FEATURES

- Recycable
- Suitable for routing, sawing, punching, drilling, guillotining, thermoforming or vacuum forming
- Economically friendly

#### APPLICATIONS

- Handling tray
- Packaging for electronic devices

#### PRODUCT AVAILABILITY:

Colour:	black only
Surface:	matt
Thickness:	0,4 – 10 mm <sup>1</sup>
Width:	300 – 1550 mm <sup>1</sup>
Rolls:	available from 0,4 – 3,0 mm

#### Special Information for Conductive Material

Electrically conductive plastics, has a volume and surface resistivity of  $< 10^6$  Ohms (according to IEC **61340-2-3**). If a special volume resistivity need, please refer to our sales team.

The stated values apply to the day of production. The conductivity in particular is influenced by storage conditions and storage duration or further processing.

Depending on the parameters (stretching ratio, re-wall thicknesses, temperatures), thermoforming has a different influence on the conductivity and can lead to a reduction in the conductivity.

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<sup>1</sup> The dimension of the sheet is depending on embossing, thickness, size of order – please ask our sales team

## TECHNICAL DATA SHEET - additional information

### Conductive HIPS

	Test method	Unit	Values
<b>Technical Properties</b>			
Density <sup>2</sup>	ISO 1183	cm <sup>3</sup> /10 min	1,15
Charpy Notched Impact Strength, 23° C	ISO 179/1eA	kJ/m <sup>2</sup>	9
Charpy impact Strength, 23° C	ISO 179/1eU	Kj/m <sup>2</sup>	34
Tensile strength at break, 23 °C	ISO 527/50 mm/min	MPa	20
Tensile Modulus of elasticity (depending on volume resistivity)	ISO 527/ 1mm/min	MPa	>1500
Elongation at break (MD)	ISO 527/50 mm/min	%	24
<b>Thermal Properties</b>			
Vicat Softening Temperature VST/B/50 (50N, 50 °C/h)	ISO 306	°C	85
Heat Deflection Temperature B; HDT B50	ISO 75-2/A	°C	66

### Storage and Drying

The product should be thermoformed ideally directly after extrusion. If material is stored in humid conditions, it is recommended to dry before thermoforming. We recommend drying it at 80°C for appr. 2 hours, for each additional millimeter in thickness add an extra hour of drying. Due to drying, the conductivity will be effected and can change.

### Chemical Resistance

The chemical resistance is depends on different factors therefore we advise you to first test the material. If you have questions – ask our sales team.

If you have any further questions, please do not hesitate to contact us.

Disclaimer:

The data, information and suggestions are provided for guidance purposes only. Eagle Plastics Limited accepts no responsibility for the results obtained there from, as neither for their utilization in infringement of possible patent rights. However the Company will provide the guaranteed values for each product on demand. The information is believed to be good and reliable; however, we do not give any warranties.

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<sup>2</sup> The density is only a guide and depends on pigments and additives used as well of the volume resistivity