

Technical data

KEBABLEND / RS 170701/1

KEBABLEND / RS are special compounds based on different polymers for applications through which radiation is to be shielded. KEBABLEND / RS 170701/1 was developed for applications that need to shield soft and hard X-ray radiation.

Polymer: TPE-S

ISO designation: TPS-SEBS-X

Productgroup: Shielding compounds, Functionalized compounds

Brief description of the product family:

KEBABLEND is a wide range of functional compounds, often tailor-made to customer requirements. Under the trade name KEBABLEND, we market magnetizable, thermally or electrically conductive compounds, high-density injection molding materials, compounds for radiation protection applications, detectable plastics and much more.

Properties:

flexible, semi-crystalline, soft

Typical areas of application:

Radiation protection/ lead replacement in X-ray equipment

Industries:

Electrical and electronics industry, Industry, Mechanical Engineering, Medical Technology

Physical properties

| | |
|-------------------------------------------|------|
| Density in kg/m ³ ISO 1183-1 | 4710 |
|-------------------------------------------|------|

Mechanical properties

| | |
|-----------------------------------------------------------------------------|-------|
| Elongation at yield in % ISO 527-1 | 5.5 |
| Breaking stress in MPa ISO 527-1 | 0.9 |
| Elongation at break in % ISO 527-1 | 130.0 |
| Impact strength (Charpy) at 23°C in kJ/m ² ISO 179-1eU | 100.0 |
| Notched impact strength (Charpy) at 23°C in kJ/m ² ISO 179-1eA | 100.0 |
| Stress at 10% elongation in MPa DIN EN ISO 527-1 | 0.80 |
| Stress at 100% elongation in MPa DIN EN ISO 527-1 | 0.90 |

Rheological properties

| | |
|-------------------------------------------------------------|------|
| Shrinkage in flow direction in % ISO 294-4 | 0.50 |
| Shrinkage transverse to the flow direction in % ISO 294-4 | 0.50 |

Thermal properties

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|---------------------------------------------------------|----|
| Fire behavior (0.4 mm wall thickness) IEC 60695-11-10 | HB |
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Thermal properties

| | |
|---------------------------------------------------------|----|
| Fire behavior (0.8 mm wall thickness) IEC 60695-11-10 | HB |
| Fire behavior (1.6 mm wall thickness) IEC 60695-11-10 | HB |
| Fire behavior (3.2 mm wall thickness) IEC 60695-11-10 | HB |

Processing instructions:**Recommended basic settings:**

Melt temperature: 240 – 255°C

Mold temperature: 30 – 50 °C

Injection speed: medium – high

Machine selection:

Screw: Wear-protected 3-zone screw with non-return valve

Nozzle: Open nozzle

Injection unit: The selected barrel capacity should not exceed 2 – 3 shots to avoid thermal material damage.

Legal notices:

The information in this data sheet is based on our current knowledge and experience. Due to the wide range of possible influences during processing and application of our products, they do not exempt the processor from carrying out his own tests and trials. A legally binding assurance of certain properties or suitability for a specific application cannot be derived from our information.

* FE products are development products which are still in the trial phase. Technical data may still change in the course of product and process development. No final decision has yet been made on the commercialization of FE products. We reserve the right to discontinue the manufacture of FE products without giving further reasons.

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