

TECHNICAL DATA SHEET

Penta-Prime

Granulate for low-temperature shot-blasting

Penta-Prime is a further developed product of polycarbonate which – due to the combination with silicone polymers – offers a considerably longer service life than comparable polycarbonates.

Due to its low absorption of moisture and exact cutting, Penta-Prime has a greater resistance on impact and is optimally suited for cryogenic deflashing of highly sensitive rubber or caoutchouc products even at extreme temperatures.

By adding an antistatic agent already before the extrusion, the addition of other additives is no longer necessary even for older equipment.

Standard polycarbonate plastics disintegrate at approx. -80°C . Penta-Prime retains its structure and integrity in the shot-blasting process down to -190°C .

Chemical characterization : Cross linked polycarbonate (PC)
Antistatic additive : Amine

Specific weight : $1,2 \text{ g/cm}^3$ on ISO 1183
Powder density⁽¹⁾ : ca. 700 – 800 g/Litre
Hardness (ball pressure H358/30) : 110 on ISO 2039-1

Grain shape : cylindrical

Colour : crystal clear

Size⁽²⁾ : 0,75 mm
: 1,00 mm
: 1,50 mm
: 2,00 mm

IZOD impact strength 23°C : $85,0 \text{ kJ/m}^2$ on ISO 180/1A
IZOD impact strength -30°C : $20,0 \text{ kJ/m}^2$ on ISO 180/1A

dimensional stability : $+140^{\circ}\text{C}$ to -190°C

Water absorption Sat/23C : 0,30% on ISO 62
Water absorption 23C/50RH : 0,12% on ISO 62

Specific resistance : $>10^{14} \text{ Ohm}\cdot\text{m}$ on IEC 60093
Surface resistance : 10^{16} Ohm on IEC 60093

Packing : 25 kg box with PE- inlay
: 125 kg fibre drum with PE- inlay

Other grain sizes and colour preference on request.

(1) depend by grain size
(2) +/- 20%

