RC-2045

Silicone-Acrylic Core-Shell Impact Modifier

TECHNICAL DATA SHEET **TDS | RC Polymer Solutions**

Product Description

RC-2045 is a core-shell impact modifier for engineering-plastics applications. It has a silicone-acrylic rubber core with an MMA-based grafted shell.

Key feature: Low-temperature impact performance; flame-retardancy synergy. **Applications in source:** PC; ABS (secondary).

Typical PC Application Performance

Reference test formulation: PC / impact modifier / PETS / antioxidant 1010 = 95 / 5 / 0.2 / 0.2 (parts).

Property	Test method / condition	Unit	RC-2045
Notched Izod impact, 23°C	ASTM D256	J/m	767
Notched Izod impact, -30°C	ASTM D256	J/m	668
Notched Izod impact, -40°C	ASTM D256	J/m	632
Tensile strength	ASTM D638, 50 mm/min	MPa	65.2
Elongation at break	ASTM D638, 50 mm/min	%	121.5
Flexural strength	ASTM D790, 2 mm/min	MPa	94.8
Flexural modulus	ASTM D790, 2 mm/min	Not stated	2676
Melt flow rate, 300°C / 1.2 kg	ASTM D1238	g/10 min	10.86
Gloss, 60°	—	GU	99
Natural color L*	—	—	91.58
Natural color a*	—	—	-0.27
Natural color b*	—	—	3.58
Yellowness index	D1925	—	6.58
1% black masterbatch L*	—	—	32.94
1% black masterbatch a*	—	—	-0.31
1% black masterbatch b*	—	—	-1.42

Processing Reference

Twin-screw extrusion	Zones C1–C9: 260–270°C; die: 270°C
Injection molding	Zones T1–T3: 260–280°C

Results are reference measurements from the stated PC formulation and test conditions.

RC Polymer Solutions | China www.mbs-acr.com frank@mbs-acr.com WhatsApp +86 15564372631