

RK-56 Opaque MBS Impact Modifier

Section 1: Description

Opaque MBS impact modifier RK-56 is a copolymer with core-shell structure consisted of Methyl Methacrylate, 1,3-Butadiene and Styrene. Its main function is to improve impact strength of indoor applications, especially for PVC finished products which have higher impact strength needs.

Section 2: Product benefits

- Promote fusion
- Improve impact strength
- Improve toughness

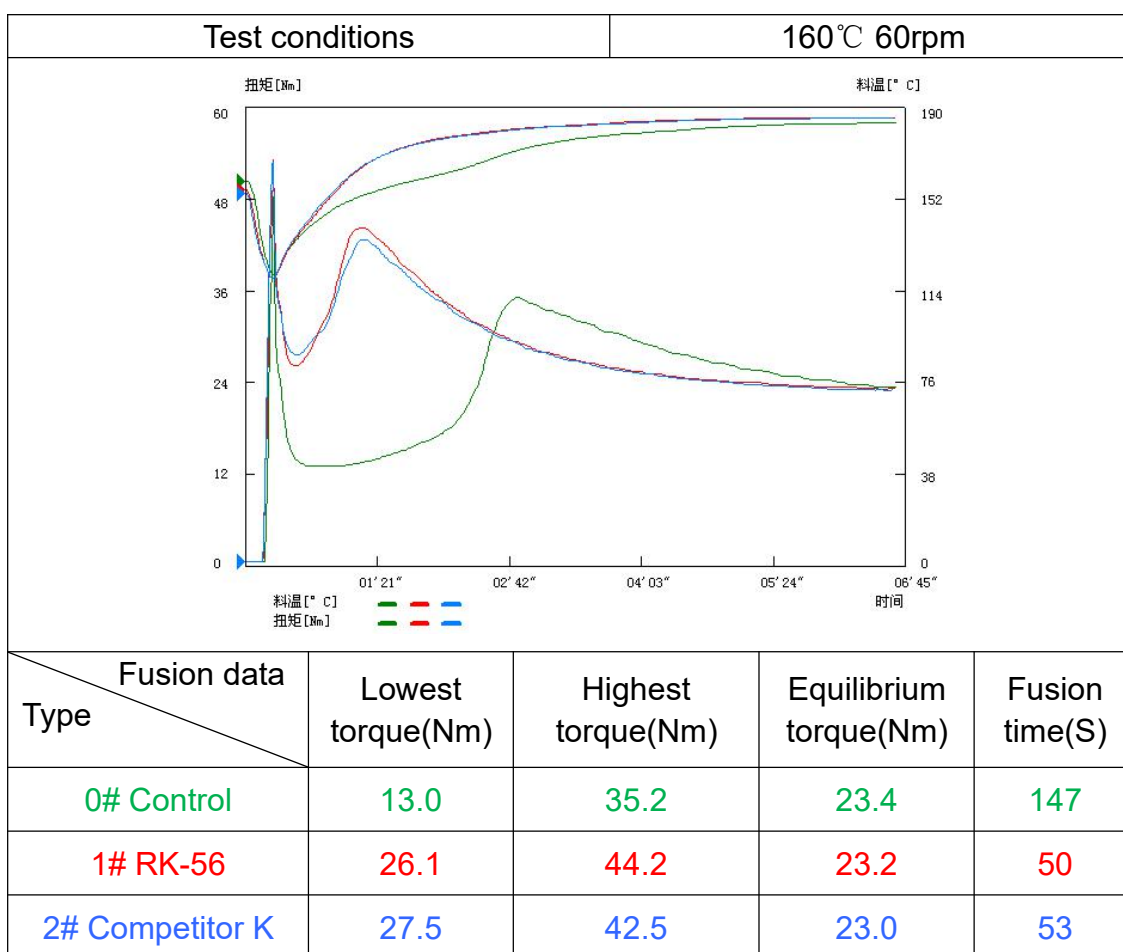
Section 3: Technical specifications

Specification	Unit	Test standard	RK-56	Competitor K
Appearance	--	--	White powder	White powder
Bulk density	g/cm ³	GB/T 1636-2008	0.45±0.10	0.43
Sieve residue (30 mesh)	%	GB/T 2916	≤2.0	1.9
Volatile content	%	ASTM D5668	1.0±0.3	0.8
Glass transition temperature (Tg)	℃	GB/T 19466	-77.9±1.0	76.6

Section 4: Basic formulation for following tests

Ingredients	0# Control	1# RK-56	2# Competitor K
PVC(K-57)	100.00	100.00	100.00
Tin stabilizer	1.40	1.40	1.40
Int.lubricant HG-60	0.70	0.70	0.70
Ext.lubricant HG-74	0.30	0.30	0.30
TiO ₂ (Rutile)	4.00	4.00	4.00
CaCO ₃ (PCC)	8.00	8.00	8.00
Processing aid HPA-220	1.00	1.00	1.00
MBS impact modifier RK-56	--	5.0	--
MBS impact modifier competitor K	--	--	5.0

Section 5: Fusion properties comparison



Section 6: Optical properties comparison

Double-roller mill Temp: 196℃, 3min Test standard: GB/T 2410-2008

Type	YID(%)	WI(%)
0# Control	2.03	91.53
1# RK-56	2.32	90.73
2# Competitor K	2.58	90.82

Section 7: Mechanical properties comparison

Specification	Test standard	0# Control	1# RK-56	2# Competitor K
0℃ Charpy impact strength(KJ/m ²)	GB/T 1043.1-2008	8.4	16.4	16.0
Tensile strength(MPa)	GB/T 1040-92	47.0	44.2	43.8
Elongation at break(%)	GB/T 1040-92	88.7	136.7	130.6

Section 8: Product application

RK-56 is mainly used in opaque injection molding and pressure pipe application, especially for PVC finished products which have higher impact strength needs.

Section 9: Packaging and storage

20kg/bag: PP valve bag with PE liner

500kg/sack: PP bag with PE liner

It should be stored in cool and dry surroundings with shelf life of two years, it can be still used if qualified by inspection after shelf life.

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