

Acrylic Impact Modifier

Acrylic Impact Modifier for Transparent product: AIM6100TP

Revision date: 1st July,2017

Part 1: Introduction

AIM 6100TP is acrylic impact modifier with core/shell structure in which core being moderate cross linked structure is linked with shell by grafting copolymerization. It not only improves impact resistance performance of the product, but also increases the surface gloss, especially PVC outdoor transparent products.

Part 2: Advantages

- Promote fusion
- Excellent weatherability
- Outstanding surface quality
- Improve impact-strength with no influence of transparent

Part 3: Application

AIM 6100TP can be used in outdoor transparent products, such as corrugated sheets, sign boards, building materials and sheets and films.

Part 4: Technical specifications

Specification	Unit	Test standard	AIM 6100TP
Appearance			White powder
Bulk density	g/cm3	GB/T 1636-2008	0.45±0.10
Sieve residue (30 mesh)	%	GB/T 2916	≤2.0

Volatile content	%	ASTM D5668	≤1.3
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Part 5: Performance Comparison

5.1 Formulation for following tests

ixing condition: 110 C Volume: 5.0		3.0
Ingredients	1# W-300	2# AIM 6100TP
PVC (K-57)	100.00	100.00
Lubricant G-60	1.00	1.00
Lubricant W-165	0.50	0.50
Tin stabilizer	0.80	0.80
Processing aid AIP 5510	1.00	1.00
W-300	6.00	
AIM 6100TP		6.00

Mixing equipment type: SHR-5A from Zhang Jiagang Beier Machinery Co., Ltd Mixing condition: 110℃ Volume: 5.0

5.2 Fusion properties comparison

Test equipment type: RM-200C torque rheometer from Harbin Hapro Electrical



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5.3 Optical properties comparison

Test method:

Make sheet with compound on double-roller mill under 185° C for 5min.

According to the following test standards and test conditions, prepare samples and obtain test results.

Туре	Test standard	Transmittance (%)	Haze (%)
1# W-300	GB/T 2410	88.6±0.6	4.62±0.04
2# AIM 6100TP	GB/T 2410	89.3±0.6	4.59±0.03

5.4 Impact strength comparison

Test method:

- 1. Make plate with compound on double-roller mill under $185\,^\circ\!\!\mathbb{C}$ for 5min.
- 2. Then retain 6 min in curing press at 185° C

3. According to the following test standards and test conditions, prepare samples and obtain test results.

Item Specification	Unit	Test standard	1# W-300	2# AIM 6100TP
Impact strength	KJ/m ²	GB/T 1043.1-2008	15.2±0.3	15.7±0.4

Part 6: Packing, transportation and storage

20kg/25 kg bag, 250kg/500 kg super sack

This material is non-dangerous goods for land, air and marine transportation.

Material should be kept from flames, hot pipes, heaters or other sources of heat. Adequate precautions should be taken to keep all dust levels below values that are hazardous to health and safety. The recommended maximum storage temperature for this material is 45 deg.C.

Part 7: Safe Handling

Please consult the MSDS before handling for additional information concerning personal protective equipment, Safety, Health and Environmental information, and always exercise the utmost care in handling.