





AKRELON® PA 400 / Acrylic Processing Aid

DESCRIPTION

AKRELON PA 400 is a medium to high molecular weight and high-performance acrylic processing aid. By means of its high molecular weight and optimized chemistry, it helps the cells in foamed products retain their size and shape during gas expansion to keep low density values desired in such processes. It also imparts excellent melt strength and homogeneity. Best suited for low-thickness foam sheets and foam core pipes.

AKRELON PA 400's ability to impart excellent melt strength and homogeneity also helps improve surface and mechanical properties. This makes it highly suitable for luxury vinyl tiles, rigid sheets (be it transparent or opaque), CPVC pipes/fittings and in window profile. It can be used to increase the gloss of the final profile and give good surface finish.

PHYSICAL PROPERTIES

Chemical Description	Acrylic copolymer	
Physical Form	White free-flowing powder	
Bulk Density (g/cm ³)	0.43 – 0.53	
Volatile Content (wt.%)	1 <u>+</u> 0.2	
Ash Content %	<1.0 %	
Sieve Analysis	20 mesh/850 μm (on %) ~nil	
	325 mesh/45 µm (pass%) – 0.95%	
	450 mesh/32 μm (pass %) - 0.35%	
Molecular Weight	Medium-High Molecular (IV 5.0 -6.4	
Packaging	20 kg PE bag	
Shelf Life	3 years from date of manufacturing	

APPLICATION CHART

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UPVC Pipes & One pack	UPVC Fittings & One pack	CPVC Pipes & Super pack	CPVC Fittings & Super pack	Window Profiles	Rigid PVC Sheet/ Laminates / Marble /Liner	Transparent Rigid Sheet	WPC, SPC and Panels	PVC Edge Band
++	++	+++	+++	+++	++	++	+++	N/A

+++	Strongly Recommended
++	Recommended
N/A	Not Applicable

PERFORMANCE

1. RHEOLOGY COMPARISON

	AKRELON PA 400	Competitor A	Competitor B
Fusion Time (s)	42	53	60
Fusion Torque (Nm)	33.7	34.9	31.3

Faster fusion accompanied by lower processing torque imparts optimum mechanical properties, surface finish and ease of processing at the same time.

2. TRANSPARENCY COMPARISON

	AKRELON PA 400	Competitor A	Competitor B	
	AAAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	
	AAAAAAAAAAA	AAAAAAAAAA	AAAAAAAAA	
	AAAAAAAAAAA	AAAAAAAAAA	AAAAAAAAA	
	AAAAAAAAAAA	AAAAAAAAAA.	AAAAAAAAAA	
	AAAAAAAAAAA	AAAAAAAAAA.	AAAAAAAAAA	
	AAAAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	
	AAAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	
	AAAAAAAAAAA	AAAAAAAAAA	AAAAAAAAA	
Yellowness of sheet on white paper (b value)	-2.7	- 2.6	- 2.2	

Color values of the transparent sheets are measured on white paper. The lower the b value, the higher the transparency. **AKRELON PA 400** shows superior transparency compared to the competitors.