





AKRELON® PA 175NA / Lubricating Processing Aid

DESCRIPTION

AKRELON PA 175NA is a low molecular weight lubricating processing aid which can be used across opaque PVC applications to ensure efficient external lubrication and die release without delaying fusion. Thanks to its polymeric structure and well-balanced molecular weight, it forms a non-sticking lubricating film. This improves surface finish significantly and avoids sticking in the hot die or calendering rolls.

Having a chemistry compatible with PVC resin, AKRELON PA 175NA stays attached to the PVC matrix during processing and does not leave deposits on the tooling. As a result, this product can replace polyethylene or similar waxes to reduce plate-out and prolong tool cleaning period. Apart from lubrication properties, it promotes fusion, improves melt strength and improves melt homogeneity.

PHYSICAL PROPERTIES

Chemical Description	Acrylic copolymer
Physical Form	White free-flowing powder
Bulk Density (g/cm³)	0.43 – 0.53
Volatile Content (wt.%)	1 <u>+</u> 0.2%
Sieve Analysis	20 mesh/850 μm (on %) ~nil
	325 mesh/45 µm (pass%) – 2.61%
	450 mesh/32 μm (pass %) - 0.48%
Molecular Weight	Low molecular weight (IV 1.7-1.9)
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	++	N/A

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

PERFORMANCE

1. RHEOLOGY COMPARISON

	AKRELON PA 175NA	Competitor A	Competitor B	Competitor C	
Fusion Time (s)	81	69	86	79	
Fusion Torque (Nm)	27.2	26	25.3	25.2	

2. TIME TO STICK

	Time (min)						
	5	10	15	20	25	30	Time to Stick
AKRELON PA 175NA					100		29
Competitor A							28
Competitor B							26
Competitor C							27