



Plastistrength® 551

Acrylic Process Aid

PRODUCT DESCRIPTION

Plastistrength® 551 process aid is a medium molecular weight acrylic process aid that brings enhanced processability at low use levels to most rigid and flexible vinyl compounds such as siding, profile, pipe, calendered sheet, and blow-molded bottles.

TYPICAL PHYSICAL PROPERTIES

Physical Form	White Powder
Specific Gravity	1.17
Bulk Density	0.45 g/cc
Particle Size	2% Max on 40 Mesh
Percent Volatiles	1.2% Max

PRODUCT BENEFITS

1. Plastistrength® 551 process aid imparts good melt strength to vinyl formulations during processing.
2. Plastistrength® 551 process aid generates even control over fusion at reduced use levels for ease of processing and maximum development of physical properties.
3. Plastistrength® 551 process aid has been extensively tested in weatherable applications and is widely used in exterior PVC building products where good weathering performance is critical.

SUGGESTIONS FOR USE

Plastistrength® 551 process aid is recommended for applications such as vinyl siding, profiles, calendaring, pipes and fittings. Plastistrength® 551 is commonly used in PVC formulations for food or pharmaceutical packaging. Dedicated information on formulation and regulatory status is available upon request.

Customers should evaluate Plastistrength® 551 process aid in their own laboratories to establish optimum conditions for use in their processes and applications. Arkema's Technical Service Team is available to discuss your application requirements, provide formulation guidance and laboratory testing as needed.

PACKAGING

Plastistrength® 551 process aid is packaged in 20 kg bags and 500 kg and 1000 lb bulk bags.

STARTING FORMULATION RECOMMENDATIONS

Rigid Bottle	General	
PVC Resin (K-57)	100.0 phr	
Methyl/Octyl Organotin Stabilizer	1.5 - 2.0	
Internal Lubricant	1.5 - 2.0	
External Lubricant	0.1 - 0.2	
Plastistrength® 551 Process Aid	1.5 - 2.0	
Plastistrength® 770 Process Aid	0.5 - 1.0	
Clearstrength® 350 or 320 Impact Modifier	12.0 - 15.0	
Toner	As required	
Rigid Calendered Film and Sheet	General	
PVC Resin (K-60)	100.0 phr	
Methyl/Octyl Organotin Stabilizer	0.6 - 1.5	
Internal Lubricant	1.5 - 2.0	
External Lubricant	0.1 - 0.2	
Plastistrength® 551 Process Aid	1.5 - 2.0	
Plastistrength® 770 Process Aid	0.7 - 1.0	
Clearstrength® 320 Impact Modifier	6.0 - 12.0	
Toner	As required	
Weatherable Profile	NA	Europe
PVC Resin (K65-68)	100 phr	100 phr
Methyl Organotin Stabilizer	1.0 - 1.5	–
Ca/Zn one-pack	–	3.5 - 4.0
Calcium Stearate	1.2 - 1.5	–
Paraffin Wax (165oF)	1.0 - 1.2	–
Plastistrength® 551 Process Aid	0.8 - 1.1	0.5 - 1.1
Plastistrength® 770 Process Aid	0.3 - 0.5	0.0 - 0.5
Durastrength® 200 Impact Modifier	5.0 - 6.0	5.0 - 6.0
Calcium Carbonate (0.7 µm)	0.0 - 5.0	0.0 - 13.0
Titanium Dioxide	9.0 - 10.0	3.5 - 5.5

ENVIRONMENTAL AND SAFETY INFORMATION

BEFORE HANDLING THIS MATERIAL, READ AND UNDERSTAND THE MSDS (MATERIAL SAFETY DATA SHEET) / SDS (SAFETY DATA SHEET) FOR ADDITIONAL INFORMATION ON SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION.

The MSDS/SDS are available on our Website www.arkema.com or upon request at our Customer Service Department at +1(800) 331 7654 in the US, and at +33 (0)1 4900 8837 in Europe. Arkema believes strongly in Responsible Care® as a public commitment.

MORE TECHNICAL INFORMATION AVAILABLE

Ask your Arkema account manager for further information on high quality Arkema additives for use in PVC, PC, PBT, ABS, PLA and other polymer systems. Arkema produces a full line of impact modifiers, processing aids and epoxidized vegetable oils. In addition, Arkema's Technical Service staff is also available to assist compounders and processors with formulation and processing advice.

Durastrength® Impact Modifiers

Durastrength® acrylic impact modifiers deliver outstanding impact characteristics for outdoor durable applications in PVC and Engineering Resins.

Plastistrength® Process Aids

Plastistrength® process aids offer producers a complete line of melt strengtheners and metal release agents for PVC and Engineering Resins. Plastistrength® process aids can improve fusion, surging, and aesthetics.

Clearstrength® Impact Modifiers

Clearstrength® MBS impact modifiers are designed for extreme impact or impact/clarity combination in PVC and Engineering Resins.

Biostrength® Additives

The Biostrength® product line of impact modifiers, melt strengtheners and metal release agents are designed to improve properties and enhance processability of polylactic acid (PLA) and other biopolymers compounds.

Vikoflex® Epoxy Plasticizers

The Vikoflex® line of epoxy plasticizers is derived from renewable resources, like epoxidized linseed oil, soybean and tall oil fatty acid esters for applications such as PVC plasticization, acid and mercaptan scavenging, specialty coatings, adhesives & urethanes, reactive diluents, PU flexible foam and intermediates for surfactants and lube & fuel additives.

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