

Plastistrength[®] 576

Acrylic Process Aid

PRODUCT DESCRIPTION

Plastistrength[®] 576 is an advanced high molecular weight acrylic process aid that offers outstanding melt strength, excellent melt elongation and enhanced fusion promotion. It can be used to promote fusion in highly filled compounds, or used in PVC foam applications to allow for lower temperature processing, or used anywhere improved fusion performance is desired. Patents pending.

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

Plastistrength[®] 576 process aid was developed to offer formulators a wider processing window with an added benefit of allowing a reduction in processing temperatures.

The lower melt temperature reduces heat history, which reduces the known effect of core yellowing in thick foam board.

Plastistrength[®] 576 process aid has the ability to operate effectively at lower processing temperatures allows for several potential benefits:

1. Reduced foam core yellowing, improving product quality and possibly expanding applications.
2. Increased stability of PVC compound.
3. Energy cost reduction.
4. Prolonged tooling life.
5. Quicker downstream cooling, offering potential for line-speed increases.
6. Plastistrength[®] 576 process aid can be used with the incumbent chemical foaming agent (CFA), or provide an opportunity for further CFA optimization.

SUGGESTIONS FOR USE

Plastistrength[®] 576 process aid can be used to replace traditional acrylic process aids on a part-for-part basis. Rigid PVC formulations containing Plastistrength[®] 576 process aid can be processed using existing conditions. Further optimization can provide similar-to-improved performance at lower processing temperatures.

Reducing the yellow core can allow for expanded applications in foam - where the core is visible (edges or routed/millwork applications).

Arkema offers full technical service support to handle all of your rigid PVC requirements. Customers should evaluate Plastistrength[®] 576 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.

STARTING FORMULATION RECOMMENDATIONS

Foam Core Pipe

PVC Resin (K-65)	100.0 phr
Methyl Organotin Stabilizer	0.4 – 0.6
Calcium Stearate	0.5 – 0.8
Paraffin Wax (165°F mp)	0.8 – 1.5
Plastistrength[®] 576 Process Aid	2.0 – 5.0
Calcium Carbonate (0.7 µm)	5.0 – 10.0
Titanium Dioxide	0.5 – 1.5
Blowing Agent Package	0.5 – 1.2

Foam Board/Foam Sheet

PVC Resin (K-57-60)	100.0 phr
Methyl Organotin Stabilizer	2.0 – 3.0
Calcium Stearate	0.6 – 0.8
Paraffin Wax (165°F mp)	0.8 – 1.2
Plastistrength[®] 576 Process Aid	6.0 – 12.0
Plastistrength [®] 770 Process Aid	0.5 – 2.5
Calcium Carbonate (0.7 µm)	5.0 – 10.0
Titanium Dioxide	3.0 – 5.0
Blowing Agent Package	0.8 – 1.5

Window Profile

PVC Resin (K-65)	100.0 phr
Methyl Organotin Stabilizer	1.0 – 1.5
Calcium Stearate	1.0 – 1.5
Paraffin Wax (165°F mp)/Ester Lubricant	0.8 – 1.2
Oxidized Polyethylene	0.0 – 0.2
Durastrength [®] 320 Impact Modifier	4.5 – 5.5
Plastistrength[®] 576 Process Aid	0.5 – 1.0
Plastistrength [®] 770 Process Aid	0.0 – 0.5
Calcium Carbonate (0.7µm)	3.0 – 8.0
Titanium Dioxide	9.0 – 10.0

PACKAGING

Plastistrength[®] 576 is packaged in 20 kg bags and 1,000 lbs bulk bags.

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. 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

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.

FOR MORE INFORMATION CONTACT

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