

PLASTISTRENGTH®

TDS/TECHNICAL DATA SHEET

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.

PACKAGING

Plastistrength® 576 process aid is packaged in 20 kg bags (500 kg per pallet), and 500 kg bulk bags (1000 kg per pallet).

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 0.8 – 1.2	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 (0.7 µm)	3.0 – 8.0
Titanium Dioxide	9.0 – 10.0

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 Epoxy, (meth)-acrylic and other polymer or thermosetting systems. Arkema produces a full line of impact modifiers and processing aids. 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

Clearstrength® Impact Modifiers are designed for extreme impact or impact/clarity combination in PVC and Engineering Resins. Clearstrength® Impact Modifiers provide superior toughening effect in epoxy and (meth)-acrylic 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

Please contact your local account manager or our headquarters:

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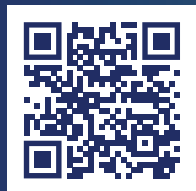
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