PLASTISTRENGTH[®]

Plastistrength® 552 Acrylic Process Aid/Melt Strength Enhancer

PRODUCT DESCRIPTION

Plastistrength® 552 is a high molecular weight acrylic process aid designed to provide Engineering Plastics and its polymer blends such as PC/styrenic (PC/ASA, PC/SAN or PC/ABS) high homogeneity and stronger compatibility between the polymer phases at low loading levels.

Plastistrength® 552 also improves the melt strength of bioplastics, like polylactic acid (PLA), thereby widening the processing window and enhancing recycling performance of the PLA polymer.

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® 552 process aid:

• Provides strong entanglements and higher melt shear process, thus allowing for more homogenous blends and finer blend morphology.

- Allows polymer blends such as PC/SAN or PC/ABS to have a stable morphology.
- Capable of selectively entangling polymer chains which significantly reduces injection molding anisotropy.

• Controls dimensional melt flow and eliminates gate blush, jetting or any "sharkskin" defects that may be introduced by pigments or other polymeric additives during injection molding

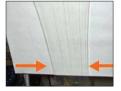
• Is transparent in PLA at typical use levels.

• Increases melt strength of PLA for improved processing during extrusion, calendering, blow molding, thermoforming and injection molding.

• Decreases sagging and necking phenomena of the PLA melt, providing greater ease in processing and higher quality finished articles.

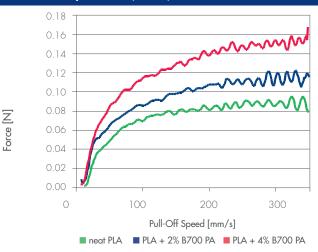
• Can be used to compensate for losses in melt strength when using high levels of regrind PLA or with insufficient drying of PLA.

PLA with 4% Plastistrength® 552 process aid





Rheotens Analysis of PLA (170° C)



SUGGESTIONS FOR USE

Plastistrength® 552 process aid is recommended for PC/Styrenic blends where often stable morphology is obtained only by unique compounding know-how.

Plastistrength® 552 will open processing window and allow compounders to easily achieve high quality blend morphology necessary for high impact performance, high flow behaviour and additives dispersion.

Poor pigment dispersion ~



PC/ABS

PC/ABS + 1.0 P552IM

Plastistrength® 552 process aid is recommended for use in PLA for applications where improvements in melt strength and ease of processability are desired. Typical use levels range from 1% to 5% by weight. Prospective clients should evaluate Plastistrength® 552 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. The Technical Service Team can also provide the current clearances and limitations for use in food packaging applications.

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PACKAGING

Plastistrength® 552 process aid is packaged in 20 kg 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.

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.

FOR MORE INFORMATION CONTACT

Please contact your local account manager or our headquarters:

In Europe:

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www.additives-arkema.com

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