

PLASTISTRENGTH®

TDS/TECHNICAL DATA SHEET

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.

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	–
Parrafin 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

PACKAGING

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

In Europe

ARKEMA
Arkema Coating Resins
420 Rue d'Estienne d'Orves
92705 COLOMBES Cedex, France
Tel: +33 (0) 149 008 080
plasticadditives.arkema.com/en/contact/

In US

Arkema Inc.
Coating Resins
410 Gregson DrCary, NC 27511
Tel: +1 (877) 331-6696
plasticadditives.arkema.com/en/contact/

In Asia

Arkema Pte Ltd.
10, Science Park Road, #01-01A,
The Alpha Singapore Science
Park II,
Singapore 117684
Tel: +65 6419 9199
plasticadditives.arkema.com/en/contact/

Don't hesitate to visit plasticadditives.arkema.com



ASK QUESTIONS
TO OUR EXPERTS



LIBRARY
DOCS
WEBINARS



WEB SERVICES
TDS
SAMPLING



PRODUCT
SELECTORS
BROCHURES

Clearstrength® and Plastistrength® are registered trademarks of Arkema. Biostrength® and Durastrength® are registered trademarks of Arkema. Responsible Care® is a registered trademark of the American Chemistry Council Inc. © 2022 Arkema Inc. All rights reserved.

Please consult Arkema's disclaimer regarding the use of our products on
<http://www.arkema.com/en/products/product-safety/disclaimer/> (2022/06/23)

plasticadditives.arkema.com

ARKEMA