

PLASTISTRENGTH®

TDS/TECHNICAL DATA SHEET

Plastistrength® 550 Acrylic Process Aid

PRODUCT DESCRIPTION

Plastistrength® 550 process aid is a medium molecular-weight acrylic process aid that brings enhanced processability to most rigid and flexible vinyl compounds such as siding, profile, pipe, calendered sheet, blow-molded bottles, and automotive interior trim parts.

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® 550 process aid is recommended where enhanced fusion and processability are required.
2. Plastistrength® 550 process aid imparts good hot melt strength to vinyl formulations during processing while minimizing die swell.
3. Plastistrength® 550 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® 550 process aid is recommended for all vinyl applications where better processability and physical properties are desired. Typical uses are window profile, siding, injection-molded articles, calendered sheet, and blow-molded bottles.

Customers should evaluate Plastistrength® 550 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. Plastistrength® 550 is commonly used in PVC formulations for food or pharmaceutical packaging. Dedicated information on formulation and regulatory status is available upon request.

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® 550 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® 550 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® 550 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® 550 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 Inc. 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)

ARKEMA

plasticadditives.arkema.com