

Plastistrength® L1000

Acrylic Lubricant

PRODUCT DESCRIPTION

Plastistrength® L1000 is a highly-efficient acrylic lubricant that offers excellent benefits to PVC compounders and processors. Plastistrength® L1000 acrylic lubricant provides excellent metal release characteristics because of its unique lubricating properties. Due to its high efficiency at low use levels, Plastistrength® L1000 acrylic lubricant has little effect on clarity, heat stability, chemical resistance, and physical properties. These characteristics combine to make Plastistrength® L1000 acrylic lubricant ideal for calendaring, blow molding and extrusion applications. Plastistrength® L1000 acrylic lubricant is available in powder form, or as a latex emulsion.

TYPICAL PHYSICAL PROPERTIES*

Physical Form	White Powder	White Latex
Specific Gravity	1.13	–
Bulk Density	0.45 g/cc	–
Particle Size	2% on 40 Mesh	–
Percent Volatiles	1.2% Max	–
Percent Solids	–	40%
pH	–	6.0 Min

*Typical properties not to be construed as specifications

PRODUCT BENEFITS

1. The unique chemical composition of Plastistrength® L1000 acrylic lubricant gives excellent lubricity and virtually eliminates sticking to hot metal surfaces at normal and elevated processing temperatures.

2. Plastistrength® L1000 is used at very low levels which allows excellent control over clarity, with no adverse effect on end product weatherability.

SUGGESTIONS FOR USE

Plastistrength® L1000 acrylic lubricant is recommended for applications where process lubricity and elimination of adhesion to hot metal surfaces is desired; it is ideal for use in calendaring, blow molding and extrusion.

Customers should evaluate Plastistrength® L1000 acrylic lubricant 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 CALENDERED FILM AND SHEET	GENERAL PURPOSE	FOOD GRADE
PVC Resin (K-60)	100.0 phr	100.0 phr
Organotin Stabilizer 0– 1.2	0.6 – 1.2	–
Octyl Organotin Stabilizer	–	1.2 – 1.5
Internal Lubricant	1.2 – 1.5	1.2 – 1.5
External Lubricant	0.1 – 0.5	0.1 – 0.5
Plastistrength® 550 Process Aid	1.5 – 2.0	1.5 – 2.0
Plastistrength® L1000 Acrylic Lubricant	0.2 – 0.5	0.2 – 0.5
Clearstrength® 320 or 303H Impact Modifier	6.0 – 12.0	6.0 – 12.0
Toner	As Required	As Required

WEATHERABLE PROFILE

PVC Resin (K-67)	100.0 phr
Methyl Organotin Stabilizer	1.0 – 1.5
Internal Lubricant	1.2 – 1.5
External Lubricant	1.0 – 1.2
Plastistrength® 550 Process Aid	1.0 – 1.2
Plastistrength® L1000 Acrylic Lubricant	0.2 – 0.5
Durastrength® 200 Impact Modifier	5.0 – 6.0
Calcium Carbonate (0.7µm)	0.0 – 5.0
Titanium Dioxide	9.0 – 10.0

TYPICAL PERFORMANCE CHARACTERISTICS

LUBRICITY TEST RESULTS*	STICKING TIME (MINUTES)			
	180°C	190°C	195°C	200°C
Control 0– 0.2	6	–	–	–
Plastistrength® L1000 Acrylic Lubricant	30+	30+	30+	20.5
Montan Wax "A"	10.5	1	–	–
Montan Wax "B"	30+	20.5	–	–
Oxidized Polyethylene Wax	30+	10	–	–

*Tested in a control formulation.

OPTICAL PROPERTIES

	% Transmittance	% Haze
Control	76.0	10.5
Plastistrength® L1000 Acrylic Lubricant	74.5	11.1
Montan Wax "A"	76.3	11.6
Montan Wax "B"	70.2	12.3
Oxidized Polyethylene Wax	74.0	12.2

PACKAGING

Powder: 18kg bags; 1,500 lb bulk bags

Latex: available in totes or bulk tank wagon

ENVIRONMENTAL AND SAFETY INFORMATION

Before handling this material, read and understand the Safety Data Sheet (SDS) for additional information on handling, storage, and disposal of the product to ensure the health of users, the safety of facilities, and the protection of the environment. The SDS is 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, epoxies, (meth)-acrylics, and other thermoplastic 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 recommendations.

Durastrength® Impact Modifiers

Durastrength® acrylic impact modifiers deliver outstanding impact characteristics for outdoor durable applications in PVC, engineering resins and thermosets.

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.

Biostrength® Additives

Biostrength® impact modifiers are designed to improve properties and enhance processability of polylactic acid (PLA) and other biopolymer compounds.

FOR MORE INFORMATION CONTACT

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