SPECIALIST STABILIZER FOR INJECTION-MOLDED PVC FITTINGS

FI-100

INJECTION MOLDING STABILIZER

HIGH PROCESSING-AID CONTENT / INTEGRATED ADDITIVE PACKAGE

ROSHA POLYMER FI-100 is a concentrated, white powder lead-based stabilizer engineered specifically for rigid PVC fittings and injection-molded parts. A **high proportion of polymeric processing aids** is combined with **fusion promoters, internal lubricants and antioxidants** to integrate thermal protection and processing functions in one package.

Designed for excellent fusion, very high thermal stability and efficient use at low dosage, FI-100 supports consistent molding and high-quality finished parts while simplifying the additive package.

PROCESSING-AID ENRICHED

A substantial processing-aid contribution supports melt cohesion, uniform plasticization and sound fusion at weld lines.

DEDICATED FUSION PROMOTERS

Promote efficient fusion and gelation to help develop a homogeneous melt before cavity filling.

INTERNAL LUBRICATION

Supports melt flow and consistent filling. Balance screw recovery, injection pressure and release in the actual formulation.

INTEGRATED ANTIOXIDANTS

Complement the stabilizer system in limiting oxidative damage and preserving color and material integrity during processing.

Technical profile

CHARACTERISTIC	FI-100
Physical form / color	Powder / white
Lead content, expressed as Pb	Approximately **47 wt%**
Recommended dosage*	**1.8-3.0 phr**
Moisture content, maximum	0.1 wt%
External lubricant	Normally not required; verify mold release and deposits
Packaging	25 kg net bags

* phr = parts by weight per 100 parts PVC resin. Optimize dosage within this range for resin grade, filler, part geometry and processing conditions.

Storage & handling: Keep sealed, dry and protected from heat and contamination. Contains lead; follow the SDS and applicable end-use requirements.

FORMULATION ECONOMY & FINISHED-PART QUALITY

Engineered for PVC fittings.

An integrated package focused on the cost and quality of the finished fitting: efficient dosing, fewer duplicate additives and consistent molding performance.

FORMULATION ECONOMY

Consolidate functions. Review separately added processing aid, fusion promoter, internal lubricant and antioxidant against the contribution already provided by FI-100.

Remove duplication. Reduce unnecessary overlapping additions through controlled trials while preserving the properties required from the complete compound.

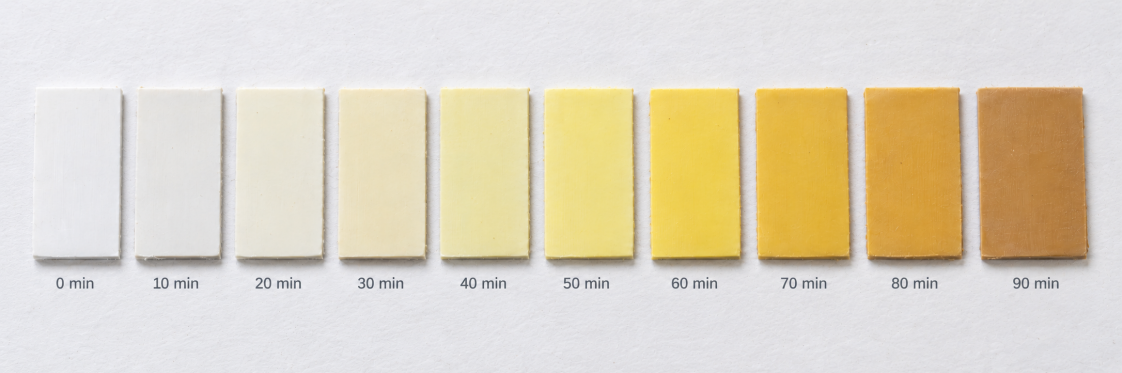
Compare total cost. Assess additive cost at actual dosage, molding consistency and rejected parts per kilogram of accepted fittings.

Finished-part performance

PERFORMANCE AREA	INTENDED BENEFIT IN MOLDED FITTINGS
Fusion & mechanical integrity	Uniform plasticization supports tensile and flexural performance and sound weld-line formation.
Impact performance	Helps preserve toughness by limiting thermal damage and supporting adequate fusion; retain the required impact-modifier package.
Color & surface finish	Strong initial and secondary thermal stability supports color retention, a smooth surface and consistent visual appearance.
Dimensions & repeatability	Consistent melt processing supports cavity filling, dimensional uniformity and repeatable wall sections.

Static heat stability

0-90 min | COLOR SEQUENCE



Illustrative color sequence, not measured FI-100 test results. Actual stability depends on test temperature, formulation and specimen conditions. Finished-part benefits and cost savings depend on the complete formulation and molding conditions.

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