IMPACT MODIFICATION FOR PVC EXTRUSION & INJECTION MOLDING

IM-800

PVC IMPACT MODIFIER

TOUGHNESS / PVC COMPATIBILITY / PROCESSING PERFORMANCE

ROSHA POLYMER IM-800 is a graft-polymer impact modifier developed for PVC products requiring a strong balance of toughness, processability and surface quality. Its excellent compatibility with PVC promotes uniform dispersion and a homogeneous melt, supporting efficient impact modification in extrusion and injection molding.

HIGH IMPACT EFFICIENCY

Delivers strong impact performance at room and low temperatures; helps reduce brittle failure in finished PVC products.

EXCELLENT PVC COMPATIBILITY

Disperses readily in the PVC matrix, supporting a uniform distribution of the impact-modifying phase.

FUSION & MELT FLOW

Fusion-promoting behavior and favorable melt flow support smooth processing and consistent melt homogeneity.

SURFACE & WEATHERABILITY

Designed for weatherable PVC applications requiring a smooth finish, good gloss and retention of appearance.

Typical physical properties

PARAMETER	UNIT	TYPICAL VALUE / LIMIT
Appearance	-	**White powder**
Relative density (specific gravity)	-	**1.10**
Bulk density	g/cm³	**0.52**
Sieve residue, 60 mesh	%	**≤ 10.0**
Volatile content	%	**≤ 1.2**

Sieve residue is the fraction retained on the stated mesh. Bulk density refers to the powder bed, including interparticle voids; it is distinct from relative density.

PARTICULAR VALUE IN PVC INJECTION MOLDING

Combines impact modification with favorable flow and fusion behavior for molded fittings and complex parts requiring toughness, surface quality and consistent processing.

PERFORMANCE PROFILE & APPLICATION GUIDANCE

Designed for demanding PVC

IM-800 brings together efficient impact modification, excellent PVC compatibility and favorable fusion behavior. Its processing versatility supports both high-output extrusion and injection molding, with a strong emphasis on finished-part toughness and surface quality.

Performance profile

PERFORMANCE ATTRIBUTE	PRODUCT CONTRIBUTION
Impact-strength efficiency	Strong toughening performance helps resist brittle fracture in finished PVC articles, including filled compounds when properly formulated.
Low-temperature performance	Designed to provide effective impact modification at room and low temperatures for handling and service demands.
Compatibility & dispersion	Excellent affinity for PVC promotes uniform distribution of the modifying phase and consistent melt homogeneity.
Fusion & processing behavior	Fusion-promoting characteristics and favorable melt viscosity support smooth processing, melt flow and a broad processing window.
Surface finish & appearance	Supports smooth extrudate and molded surfaces, good gloss and a consistent finished-product appearance.
Weatherable applications	Suitable for exterior PVC building products where impact retention and appearance are important, with an appropriate stabilization package.

Application focus

APPLICATION	KEY PERFORMANCE PRIORITIES
Injection-molded fittings & parts	Impact resistance, melt flow, cavity filling and surface finish.
Pipe & extruded sections	Toughness, melt homogeneity and smooth extrusion.
Window profiles & siding	Impact performance, dimensional consistency and exterior appearance.

Formulation guidance: Adjust the addition level to the PVC grade, filler loading, processing route and required impact performance. Optimize fusion, lubrication and stabilization together. Confirm the impact, tensile, flexural and dimensional requirements of the finished article in application trials.

Packaging & handling: Supplied in **20 kg bags**. Keep sealed in a cool, dry place, protected from moisture and contamination. Consult the product Safety Data Sheet before use.

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