

Polyhexamethyleneguanidine Hydrochloride (PHMG)

Cationic polymer ingredient for professionally assessed industrial antimicrobial and preservation formulations.

CAS 57028-96-3	EC 690-927-2	Transport Class 6.1 · UN 2811 · PG III; solid reference
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Product Information

This sheet covers nominal 95% and 99% solid grades only. The pH range is measured in a 2% aqueous solution. Residual constituents and assay-method tolerance are not assigned. The solid-substance reference SDS identifies serious inhalation, organ, reproductive and aquatic hazards; it does not cover liquid grades.

Specifications

Parameter	Specification
Appearance	White to off-white solid powder
PHMG content, solid grade 95	95 % nominal grade designation
PHMG content, solid grade 99	99 % nominal grade designation
pH, 2% aqueous solution	6.5–7.5
Solubility	Water-soluble grade-sheet description

Product Series

Solid grade 95	95% nominal PHMG grade; pH 6.5–7.5 in a 2% aqueous solution. Specify residual constituents before shipment.
Solid grade 99	99% nominal PHMG grade; pH 6.5–7.5 in a 2% aqueous solution. Specify residual constituents before shipment.

Typical Properties

Property	Typical Value
Chemical type	Cationic guanidine polymer
Solubility	Water-soluble; grade-sheet description

Applications

Industrial preservation development: Evaluate the solid polymer as an ingredient in legally permitted industrial preservation systems.

Coatings and polymer formulations: Assess compatible coatings or polymer formulations with controlled mixing and dust management.

Professional formulation trials: Use representative laboratory trials to compare the two solid grade designations.

Packaging / Storage

Item	Information
Packaging	Net weight, compatible sealed inner packaging and outer container are confirmed with the quotation and dangerous-goods shipping requirements.
Storage	Store locked up in original closed containers in a cool, dry, ventilated area. Avoid excessive heat and airborne dust. Prevent entry to waterways; keep separate from food and feed.

Company Contact

Supplier	Hainan Zhongxin Chemical Co., Ltd. (ZXCHEM)
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