



Dairen Chemical Corporation

VAE Redispersible Powder

Recommended Uses

PRODUCT SPECIFICATIONS

	Inspection Method	Value
Solids Content	DCC method	99% min
Ash Content	DCC method	10 ± 2%
Appearance	Visual	White Powder
Tg	DCC method	12~18 °C

TYPICAL PROPERTY

	Inspection Method	Value
Polymer Type		VinylAcetate-Ethylene copolymer
Protective Colloid		Polyvinyl Alcohol
Bulk Density	DCC method	0.5 g/ml
Average Particle Size	DCC method	90 μ m
Viscosity at 25 °C	DCC method	500 mPa.s
рН	DCC method	7

Introduction

DA-1141 is a water-redispersible vinyl acetate/ethylene copolymer powder that is readily dispersible in water and forms stable emulsion.

This redispersible powder is especially recommended for blending with inorganic binders such as cement, gypsum and hydrated lime, or as a sole binder for the manufacture of construction adhesives.

Applications

DA-1141 improves adhesion, flexural strength, abrasion resistance, water retention and in the case of self-leveling floor smoothing compounds flow. Combined with casein or synthetic superplasticizers.

DA-1141 is especially useful for the preparation of self-leveling flooring compounds and screeds. It results in extremely smooth surfaces which are free of craters.

DA-1141 contains a fine, mineral filler as anti-blocking agent. It is free of solvents, plasticizers and film-forming aids.

Self-leveling compounds

DA-1141 is highly suitable for modifying self-leveling flooring compounds. It is thoroughly compatible with all commonly-used superplasticizers, such as casein, condensation products of melamine sulphonic acid and naphthaline sulphonic acid or lignin sulphonates. Addition of the dispersion powder improves adhesion, abrasion resistance, flexural strength, water retention, workability and the flow properties of the compounds.

DA-1141 is especially suitable for use in self-leveling flooring compounds which it contain casein. The compounds display very high tolerance towards excess water, have little tendency to slump, and have a very smooth, crater-free surface.

DA-1141 is highly suitable for use with standard inorganic binders such as Portland cement, high-alumina cement, anhydrite, gypsum, lime and mixtures thereof.

Construction adhesives

DA-1141 is suited for the preparation of all kinds of construction adhesives. It particularly improves adhesion, water retention, plasticity and workability of the adhesives.

We recommend the addition of 2-5 % DA-1141.

Modification of gypsum and anhydrite

DA-1141 is also suited for use in self-leveling flooring compounds based on gypsum; very smooth surfaces are obtained. Addition of the redispersible powder improves adhesion, abrasion resistance, flexural strength and workability.

The addition of DA-1141 to trowelling compounds and boards containing gypsum or anhydrite as binder enhances flexural strength, impact strength, plasticity, adhesion and, in particular, the workability of the compounds. A marked improvement in the properties is obtained with systems containing fillers (such as 30 parts gypsum to 70 parts filler). We recommend the addition of $2-5\,\%$ redispersible powder.





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Processing

For the production of powdered products such as dry mortars, tile adhesives, troweling compound . DA-1141 redispersible powder is mixed with the dry, finely divided additives in suitable mixers. Pressure or excessive shear in the mixer and the transferring line should be avoided, since this will raise the temperature, leading to agglomeration of the thermoplastic resin particles. After sufficient water has been added, mortars or trowelling compounds can be mixed by hand or machine.

Since mixing by hand only generates low shear forces, it is best to allow the mixture to mature by leaving it to stand for 5 minutes, and then to stir it again.

Storage

DA-1141 redispersible powder should be stored in cool and dry environment. It is recommended to use within 6 months, preferably be used as soon as possible in summer. Storage in high temperature and humidity conditions will increase the risk of caking. Opened containers should be used as soon as possible, if not, should be resealed to prevent ingress of moisture from the air.

DA-1141 redispersible powder supplied in paper bags should not be stacked. Prolonged heavy pressure may cause caking. Storage under pressure should also be avoided.

Packaging

25 kg paper bags Big Bags (450/550/600 kg)

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