



DA-1450

Dairen Chemical Corporation

VAE Redispersible Powder

PRODUCT SPECIFICATIONS

	Inspection Method	Value
Solids Content	DCC method	98% min
Ash Content	DCC method	10 ± 2%
Appearance	Visual	White Powder
Tg	DCC method	-15±5 °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 μm
Viscosity at 25 °C	DCC method	2000 mPa.s
pH	DCC method	7

Introduction

DA-1450 is a water-redispersible vinyl acetate/ethylene copolymer powder that is readily dispersible in water and forms stable emulsion. This resin is soft and flexible, because of its relatively high ethylene content. Its glass transition temperature is below freezing point.

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-1450 improves adhesion, flexural strength, plasticity, abrasion resistance and workability of modified compounds such as tile adhesives, thermal insulation systems, repair mortars and mineral plasters.

It is therefore compatible with mortar additives used to achieve special processing characteristics.

DA-1450 contains a fine, mineral filler as anti-blocking agent. It is free of solvents, plasticizers and film-forming aids.

Recommended Uses

Tile adhesives

For thin-bed tile adhesives with good frost resistance and prolonged open time, we recommend using 1~5% DA-1450 and about 0.2 - 0.6 % of cellulose ether or other appropriate cellulose derivatives as water retention agent. DA-1450 prolonged its open time on construction adhesives. To obtain adhesives with greater plasticity, the proportion of redispersible powder should be increased, the amount of cement reduced.

Thermal insulation systems

To obtain adhesives with greater plasticity, it is advisable to use 2.5% DA-1450 and 0.1 – 0.3 % of a suitable water retention agent such as cellulose ether.

If the adhesives are required to bond sheets of extruded polystyrene foam, preliminary tests are essential.

Repair mortars

DA-1450 is suited for modifying repair mortars, especially concrete renovation mortars.

DA-1450 improves their adhesion and flexibility. To achieve optimum results, between 1.0 and 6.0% DA-1450 based on the total weight should be added.

Mineral plasters

DA-1450 added to cement and lime-cement finishing plasters improved their adhesion and flexibility. Freshly prepared compounds modified with DA-1450 exhibit excellent non-slump behavior. To achieve optimum results, between 1.0 and 6.0% DA-1450 based on the total weight should be added.



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Processing

For the production of powdered products such as dry mortars, tile adhesives, troweling compound. DA-1450 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-1450 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-1450 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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