



DA-1430

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	-7~ -17 °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	3000 mPa.s
pH	DCC method	7

Introduction

DA-1430 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-1430 improves adhesion, flexural strength, plasticity, abrasion resistance and workability of modified compounds such as tile adhesives, thermal insulation systems, repair mortars, trowelling compounds and mineral plasters.

Combined with cement or gypsum, it exhibits high thixotropy, a property of particular interest for cement and lime-cement mineral plasters.

DA-1430 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, we recommend using 1~5% DA-1430 and about 0.2 - 0.6 % of cellulose ether or other appropriate cellulose derivatives as water retention agent, DA-1430 have good non-slump and non-slip properties to these adhesives. Cellulose ethers and cellulose derivatives with high water retention but without enhanced thixotropy can therefore be used. Tile adhesives containing 5-10 % DA-1430 are also suitable for bonding tiles to tiles or, depending on formulation, of tiles to organic substrates, such as wood and wood products.

Thermal insulation systems

To obtain adhesives with greater plasticity, it is advisable to use 2.5% DA-1430 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-1430 is particularly well suited for modifying repair mortars, especially concrete renovation mortars.

DA-1430 improves the adhesion, flexural strength, abrasion resistance and workability.

We recommend adding 1 – 6 % redispersible powder.

Mineral plasters

DA-1430 added to cement and lime-cement finishing plasters improved their adhesion and flexibility. Freshly prepared compounds modified with DA-1430 exhibit excellent non-slump behavior. To achieve optimum results, between 1.0 and 6.0% DA-1430 based on the total weight should be added.

Trowelling compound

Due to its good thixotropy, DA-1430 is ideal for use in decorative rendering in combination with hydraulic binders such as cement or gypsum. The amount to be added will depend on the formulation and requirements on adhesion, flexibility as well as impact, and ranges from 1 – 5 % DA-1430 based on total weight.

The thixotropic effect of DA-1430 is not so marked in gypsum plasters and gypsum plasters with carbonate fillers as in cementitious compounds.



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Processing

For the production of powdered products such as dry mortars, tile adhesives, trowelling compound. DA-1430 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-1430 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-1430 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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