



DA-1420

VAE Redispersible Powder

PRODUCT SPECIFICATIONS

	<u>Inspection Method</u>	<u>Value</u>
Solids Content	DCC method	99 ± 1%
Ash Content	DCC method	10 ± 2%
Appearance	Visual	White Powder
Tg	DCC method	-15±5 °C

TYPICAL PROPERTY

	<u>Inspection Method</u>	<u>Value</u>
Polymer Type		VinylAcetate-Ethylene <u>copolymer</u>
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-1420 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-1420 improves adhesion, flexural strength, plasticity, abrasion resistance and workability of modified compounds such as tile adhesives, repair mortars, thermal insulation systems and mineral plasters.

DA-1420 contains a fine, mineral filler as anti-blocking agent. It is free of solvents, plasticizers and film-forming aids.

Tile adhesives

Recommended Uses

For thin-bed tile adhesives with good frost resistance, we recommend using 1~5% DA-1420 and about 0.2 - 0.6 % of cellulose ether or other appropriate cellulose derivatives as water retention agent, and, if necessary, organic fibers to reduce slump.

Repair mortars

DA-1420 is particularly well suited for modifying repair mortars, especially concrete renovation mortars. DA-1420 improves the adhesion, flexural strength, water retention, abrasion resistance and workability.

We recommend adding 1 – 6 % redispersible powder.

Thermal insulation systems

To obtain adhesives with greater plasticity, it is advisable to use 2.5% DA-1420 and 0.1 – 0.3 % of a suitable water retention agent such as methyl cellulose.

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

Mineral plasters

DA-1420 added to cement and lime-cement finishing plasters improve their adhesion and flexibility. To achieve optimum results, between 1.0 and 6.0% DA-1420 based on the total weight should be added. In addition, 0.1 – 0.5 % cellulose ether or starch ether or a combination of the two should be incorporated.



Dairen Chemical Corporation

Processing

For the production of powdered products such as dry mortars, tile adhesives, trowelling compound. DA-1420 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-1420 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-1420 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)

This information is based on our present state of knowledge and is intended to provide general notes on our products and their uses. It should not therefore be construed as guaranteeing specific properties of the products described or their suitability for a particular application. Any existing industrial property rights must be observed. The quality of products is guaranteed under our General Conditions of Sale. Neither Dairen nor its agents nor its distributors accept liability for damages arising from the use of our product or our recommendation. The recommendations should be evaluated by the customers' different operating conditions and raw materials. It is our customers' responsibility to avoid infringement of the rights of third parties. We reserve the right to modify the document as the technical development.