



# DA-1420

## Dairen Chemical Corporation

## VAE Redispersible Powder

### TYPICAL PROPERTIES

Polymer Type.....	Vinyl Acetate-Ethylene copolymer
Appearance.....	White Powder
Protective Colloid.....	Polyvinyl Alcohol
Solids Content*.....	99 ± 1%
Ash Content*.....	10 ± 2%
Bulk Density (g/ml).....	0.5
Average Particle Size ( μ m).....	90

### 50 % Redispersion

Viscosity (cP,25°C,10rpm).....	2000
pH.....	7
Tg *(onset,°C).....	-15±5

\*marked items, are ex-works delivery specification. All other figures are typical physical properties for reference only.

### Introduction

DA-1420 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, wall surfacers and plasters.

### Applications

DA-1420 improves adhesion, flexural strength, plasticity, abrasion resistance and workability of modified compounds such as construction adhesives, trowelling compounds and finishing plasters.

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

DA-1420 contains a fine, mineral filler as antiblocking 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-1420 and about 0.2 - 0.6 % of cellulose ether or other appropriate cellulose derivatives as water retention agent, and, if necessary, organic fibres to reduce slump. To obtain

adhesives with greater plasticity, the proportion of redispersible powder should be increased, the amount of cement reduced.

#### Repair mortars

DA-1420 is particularly well suited for modifying repair mortars, especially concrete renovation mortars. DA-1420 improves the adhesion, flexural strength, water retentivity, abrasion resistance and workability. The rate of carbonation is reduced. We recommend adding 1 – 6 % redispersible powder.

#### Thermal insulation systems

To obtain adhesives with greater plasticity, it is advisable to use no less than 6 % DA-1420 and 0.1 – 0.3 % of a suitable water retention agent such as methyl cellulose.

#### 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 (sizes on request)

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. It is our customers' responsibility to avoid infringement of the rights of third parties.

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