

# **DA-1120**

# **Dairen Chemical Corporation**

## **PRODUCT SPECIFICATIONS**

	Inspection Method	Value
Solids Content	DCC method	$99 \pm 1\%$
Ash Content	DCC method	10 ± 2%
Appearance	Visual	White Powder
Tg	DCC method	15±5 ℃

# **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	2000 mPa.s
pН	DCC method	7

#### Introduction

DA-1120 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-1120 improves adhesion, flexural strength, abrasion resistance and workability of modified compounds such as tile adhesives, repair mortars, trowelling compounds, mineral plasters and gypsum based compounds.

DA-1120 contains a fine, mineral filler as anti-blocking agent. It is free of solvents, plasticizers and film-forming aids.

# VAE Redispersible Powder

### **Recommended Uses**

#### Tile adhesives

For thin-bed tile adhesives with good frost resistance, we recommend using  $1\sim5\%$  DA-1120 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.

#### **Repair mortars**

DA-1120 is particularly well suited for modifying repair mortars, especially concrete renovation mortars. DA-1120 improves the adhesion, flexural strength, abrasion resistance and workability.

We recommend adding 1 - 6 % redispersible powder.

#### **Mineral plasters**

DA-1120 added to cement and lime-cement finishing plasters improves their adhesion and flexibility. To achieve optimum results, between 1% and 6% DA-1120 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.

#### **Trowelling compound**

DA-1120 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 and ranges from 1 - 5 % DA-1120 based on total weight.

The thixotropic effect of DA-1120 is not so marked in gypsum plasters and gypsum plasters with carbonate fillers as in cementitious compounds.

#### Gypsum based compounds

The addition of DA-1120 to trowelling compounds and boards containing gypsum as binder increases flexural strength, impact resistance and adhesion. To improve water retention, cellulose ether should be added.



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## Processing

For the production of powdered products such as dry mortars, tile adhesives, troweling compound . DA-1120 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-1120 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-1120 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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