



DA-1133

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 | | Vinyl Acetate-Ethylene copolymer |
| Protective Colloid | | Polyvinyl Alcohol |
| Bulk Density | DCC method | 0.4~0.5 g/ml |
| Average Particle Size | DCC method | 80~90 μm |
| Viscosity at 25 °C | DCC method | 2600 mPa.s |
| pH | DCC method | 7~9 |

Introduction

DA-1133 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-1133 improves adhesion, flexural strength, plasticity, abrasion resistance and workability of modified compounds such as construction adhesives, trowelling compounds and finishing plasters.

Combined with cement or gypsum, it exhibits high thixotropy, a property of particular interest for construction adhesives, wall surfacers and cement and lime-cement finishing plasters.

DA-1133 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-1133 and about 0.2 - 0.6 % of cellulose ether or other appropriate cellulose derivatives as water retention agent, DA-1133 have good non-slump and non-slip properties to these adhesives. Cellulose ethers and cellulose derivatives with high water retentivity but without enhanced thixotropy can therefore be used. Tile adhesives containing 5-10 % DA-1133 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 3~6 % DA-1133 and 0.1 – 0.3 % of a suitable water retention agent such as cellulose ether.

Plasters

DA-1133 added to cement and lime-cement finishing plasters improves their adhesion and flexibility. Freshly prepared compounds modified with DA-1133 exhibit excellent non-slump behaviour. To achieve optimum results, between 1.0 and 6.0% DA-1133 based on the total weight should be added.

Trowelling compound

Due to its good thixotropy, DA-1133 is ideal for use in wall surfacers 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 mar resistance, and ranges from 1 – 5 % DA-1133 based on total weight, The thixotropic effect of DA-1133 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, troweling compound . DA-1133 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-1133 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-1133 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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