

VAE Redispersible Powder

Vinyl Acetate Ethylene Copolymer

General Description

Riteks VAE-RS powders are water redispersible vinyl acetate-ethylene copolymer powders that are readily dispersible in water and form stable emulsions to impart excellent fluid loss for fluids. These powders give enhanced gas migration control to cement slurries, with a minute effect on extending slurry set times. They help in reducing permeability with improved particle-to-particle bonding, improved cement durability during perforation and increased cement longevity. VAE-RS powders also provide improved adhesion, flexural and tensile strength, abrasion resistance, water retention, plasticity and workability.

Applications

Typical applications for VAE redispersible powders include: concrete repair mortars and self-leveling mortars; joint fillers as well as troweling and smoothing compounds; self-leveling flooring compounds; decorative plasters, construction adhesives, ceramic tile adhesives and wall paper adhesives. In construction products, VAE powders improve adhesion, flexural and tensile strength, abrasion resistance, water retention, plasticity and workability. Recommended use levels are 1-6 % of the VAE powder. For the formulation of dry mortars, adhesives and troweling compounds, the redispersible powders are mixed with the dry additives in a suitable mixer.

Typical Specifications

SPECIFICATION OF VAE REDISPERSIBLE POWDERS

Grade	Polymer Type	Appearance	Protective Colloid	Solid Content* wt%	Ash Content* wt%	Bulk Density g/ml	Average Particle Size um	50% Redispersion		
								Viscosity cP 25° C 10 rpm	pH	Tg* (Onset, °C)
VAE-RS 1100	VAE	White Powder	PVA	99±1	10±2	0.5	90	2000	7	15±3
VAE-RS 1120	VAE	White Powder	PVA	99±1	10±2	0.5	90	----	7	15±3
VAE-RS 1122	VAE	White Powder	PVA	99±1	10±2	0.5	90	----	7	15±3
VAE-RS 1130	VAE	White Powder	PVA	99±1	10±2	0.5	90	----	7	15±3
VAE-RS 1133	VAE	White Powder	PVA	99±1	10±2	0.5	90	----	7	15±3
VAE-RS 1141	VAE	White Powder	PVA	99±1	10±2	0.5	90	500	7	15±5
VAE-RS 1200	VAE	White Powder	PVA	99±1	10±2	0.5	90	2000	7	0±3
VAE-RS 1210	VAE	White Powder	PVA	99±1	10±2	0.5	90	2000	7	0±3
VAE-RS 1220	VAE	White Powder	PVA	99±1	10±2	0.5	90	2000	7	0±3
VAE-RS 1400	VAE	White Powder	PVA	99±1	10±2	0.5	90	2000	7	-15±5
VAE-RS 1410	VAE	White Powder	PVA	99±1	10±2	0.5	90	2000	7	-15±5
VAE-RS 1420	VAE	White Powder	PVA	99±1	10±2	0.5	90	2000	7	-15±5
VAE-RS 1430	VAE	White Powder	PVA	99±1	10±2	0.5	90	2000	7	-15±5
VAE-RS 1450	VAE	White Powder	PVA	99±1	10±2	0.5	90	2000	7	-15±5
VAE-RS 3510	VAE	White Powder	PVA	99±1	10±2	0.45	95	----	10	-15±3

Typical Data

Appearance: White Powder

CAS #: 24937-78-8

Synonym: Vinyl Acetate Ethylene Copolymer Average

Particle Size, µm: 90

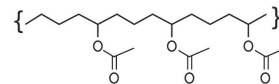
Ash Content, %: 10 + 2

pH: 7.0

Typical properties given do not constitute a supply specification.

There are 15 grades of VAE powders, with differing ratios of vinyl acetate: ethylene monomers to provide glass transition temperatures (Tg) of -15°C to about +15°C (i.e. medium hard to more flexible polymers). Their respective Brookfield viscosities measured at 25°C at 10 rpm are ~2000 cps at 50 % redispersion (some grades are lower). The redispersible powders contain a fine mineral filler as an anti-caking agent.

The generalized chemical structure of the VAE copolymer is:



Packaging / Storage

The redispersible powders are available in 25 Kg. multi-layer paper bags with an inner plastic bag. Jumbo bags are also available. VAE Redispersible Powders can absorb moisture and should be stored under cool and dry conditions to prevent caking.

Health and Environmental Data

Before handling or using this product please refer to the Safety Data Sheet for complete health, safety and environmental information. Dispose of waste in accordance with local, state and federal regulations.

We warrant our products to be of good quality and will replace or, at our discretion, refund the purchase price of any products proved defective. Satisfactory results depend not only upon quality products, but also upon many factors beyond our control. Therefore, except for such replacement or refund, RITEKS MAKES NO WARRANTY OR GUARANTEE, EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE OR MERCHANTABILITY. Riteks shall have no other liability with respect thereto. User shall determine the suitability of the products for the intended use and assume all risks and liability in connection therewith. The information provided herein is based on technical data that Riteks, Inc. believes to be reliable. Riteks, Inc. makes no representation or warranty as to the completeness or accuracy thereof and assumes no liability resulting from its use for any claims, losses, or damages of any third party. Recipients receiving this information must exercise their own judgment as to the appropriateness of its use and it is the user's responsibility to assess the material's suitability (including safety) for a particular purpose prior to such use.