



Dairen Chemical Corporation

VAE Emulsion

PRODUCT SPECIFICATIONS

	Inspection Method	Value
Solids content	DCC method	49-51 %
Viscosity at 25 °C	DCC method	10 - 200 mPa.s
рН	DCC method	5.0- 7.0

TYPICAL PROPERTY

	Inspection Method	Value
Film Appearance	Visual	Clear
Tg	DCC method	18~22 ℃
Stabilizing System		Cellulose/Surfactant

INTRODUCTION

DA-903 is an aqueous milky white terpolymer dispersion based on vinyl chloride, vinyl acetate and ethylene. It can form film with aid of the suitable coalescing solvent at the room temperature.

General speaking, DA-903 is used as general adhesive for best adhesion to a wide range of material. DA-903 also provides the fire retardance property for the effect of vinyl chloride content.

In addition, DA-903 possesses the property of self-crosslinking due to special crosslinkable unit of DA-903. The suggested crosslinking condition is at the temperature $110\sim130^{\circ}$ C for 5 mins. According to different requirement, the crosslinking could be accelerated by addition of AlCl₃ or weak acid such as citric acid.

DA-903 readily accepts high load of fillers, like calcium carbonate, clay, shell- or wood flours. Viscosity can be increased by blending in PVA or HEC solution. Also polyurethane / polyacrylic based associative thickeners can be recommended without negative side effects.

DA-903 is miscible with all others non-ionic and protective colloid stabilized DA-products of our range, but trials should always be carried out. Dry films may become hazy by mixing different polymers with different refractive indices.

RECOMMENDED APPLICATIONS

As mentioned before, DA-903 is used for broad application in the industry. The crosslinking ability of DA-903 provides strong bonding between substrates. It is noticed, furthermore, DA-903 can not form a tough film at room temperature without aid of coalescing agent.

The most popular use of DA-903 emulsions is for fabrics- and textile-related applications, like

- Nonwoven Fabric Binder
- Paper Impregnation
- Car Sheet and Carpet Backing
- Textile Treatment
- PVC Leather

As EVA-VC emulsions are composed of vinyl chloride and possess the self-quenching effect, they are also used in several fire retardance-related industries.

SAFETY & STORAGE

In general, DA-903 is considered safe for its intended use. However, as this class of products always contains minor amount of residual vinyl acetate monomers, adequate ventilation is recommended in rooms where DA-903 is handled. Generally when working with polymer emulsions, protective clothes, gloves and also goggles should be used. Splashes on the skin or in the eyes should immediately be removed by irrigation with clean water.

DA-903 should be stored in sheltered areas at temperatures between 5 and 40 °C; do never store under freezing conditions. Opened containers should be closed soon to prevent skinning. If the product is stored for a longer period, stirring is recommended before use. Shelf life of DA-903 is minimum 6 months, provided the product is stored in original, unopened containers under proper conditions.

DA-903 is adequately preserved to prevent microbial contamination. However, if the product is kept in original containers which have been opened, or is transferred to other tanks, the product should be added with suitable preservative package to protect it against microbial attack. Equipment and facilities used to transfer the product should also be kept adequately clean. Finished products manufactured from polymer emulsions usually also require preservation.



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SAFETY NOTICE

Material Safety Data Sheets are available on request from sales offices or may be printed via web site www.dcc.com.

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