



**PRODUCT SPECIFICATIONS**

	Inspection Method	Value
Solids content	DCC method	55 %min.
Viscosity at 25 °C	DCC method	1500 – 2500 mPa.s
pH	DCC method	4.5- 6.5

**TYPICAL PROPERTY**

	Inspection Method	Value
Film Appearance	DCC method	Cloudy
Tg	DCC method	12-18 °C
Stabilizing System	DCC method	Polyvinyl Alcohol

**INTRODUCTION**

DA-511 is a non-plasticized aqueous milky white copolymer dispersion based on vinyl acetate and ethylene. After evaporation of its water content, DA-511 forms a tough but still flexible film with best adhesive properties for broad applications.

It is a preferred raw material for the formulation of high speed packaging adhesives with increased water stability, also especially because it shows best adhesive properties to difficult to bond substrates, such as lacquered surfaces and plastic films in the packaging and paper industry.

DA-511 is also an excellent base emulsion for floor-, wall- or ceiling adhesives.

It shows good resistance against aging, light or saponification. As a result, the durability of your products could be enhanced with usage of DA-511 and suitable applicative industrial formulations. Besides, DA-511 is very friendly product for our environment.

From the viewpoint of industrial applications, the compatibility of raw materials is considered important to manufacturers.

Solutions of not only partly but also of fully hydrolyzed Polyvinyl Alcohols can be added without separation problems, an advantage for some applications where increased water stability is necessary.

If advantageous, the emulsion can be modified with plasticizers showing low thickening response.

DA-511 also the use as base for EPI wood glue systems by blending with fully hydrolyzed Polyvinyl Alcohol.

**RECOMMENDED APPLICATIONS**

The DA-511 exhibits excellent mechanical stability, and shows good wet tack and fast setting speed, so it can be ideally applied by a variety of techniques, including roller blade, spray gun or extrusion. The excellent adhesion property to a wide variety of even difficult to bond materials used in the packaging industry makes the emulsion an ideal raw material for the paper and film industry.

Again the increased water resistance should be stressed, and some specialities should be outlined in the following:

- book binding
- envelopes, specially back seams and glue laps of all kinds
- clay coated paper board
- padding
- cigarette packaging
- cups, composite cans, generally: glue laps
- multi wall bags, beverage cases
- water-resistant Kraft paper in general
- base for EPI wood glue systems
- plastic- (PVC-) or metal foil bonding.

**SAFETY & STORAGE**

In general, DA-511 is considered safe for its intended use. However, as this class of products always contains minor amount of residual vinyl acetate monomer, adequate ventilation is recommended in rooms where DA-511 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-511 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. It is recommended to use the emulsion within 6 months. Finished products manufactured from polymer emulsions usually also require preservation.



**DA-511**

**Dairen Chemical Corporation**

**VAE Emulsion**

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### **ADDITIONAL INFORMATION**

When DA-511 is used in application we do not mention, the usage of DA-511 is the responsibility of purchaser.

The usage and processing must be complied with related legal regulations.

Our product conforms to the food contact clearance:

FDA 175.105

FDA 176.170

FDA 176.180

BfR XIV

### **SAFETY NOTICE**

Material Safety Data Sheets are available on request from sales offices or may be printed via web site [www.dcc.com](http://www.dcc.com).

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. The recommendations should be evaluated by the customers' different operating conditions and raw materials. It is our customers' responsibility to avoid infringement of the rights of third parties. We reserve the right to modify the document as the technical development.