

# Diofan® A 297

## polyvinylidene chloride

Diofan® A 297 is a water-based dispersion of a polyvinylidene chloride copolymer with high surface tension for high speed processing, in particular designed for coating

on plastic films, but also suitable to be applied on other substrates.

### General

Material Status	• Commercial: Active	
Availability	• Asia Pacific • Europe	• Latin America • North America
Features	• Moisture Barrier	• Oxygen Barrier
Uses	• Barrier Coatings	• Coating Applications
Agency Ratings	• EC 1907/2006 (REACH) • EU No 10/2011	• FDA Unspecified Rating <sup>1</sup>
Appearance	• Milky White	
Forms	• Liquid	

### Physical

#### Typical Value Unit

Density		
Coated film (dry)	1.65 g/cm <sup>3</sup>	
Dispersion (wet)	1.33 g/cm <sup>3</sup>	
Emulsion Type	Anionic	
Filmability - Film Forming Temperature	8 to 14 °C	
pH	1.5	
Solids Content	60 %	
Surface Tension - Foaming tendency	54 mN/m	

### Mechanical

#### Typical Value Unit

#### Test method

Coefficient of Friction		ASTM D1894
vs. Itself - Dynamic	0.30	

### Films

#### Typical Value Unit

#### Test method

Water Vapor Transmission Rate <sup>2</sup>		ASTM F1249
38°C, 90% RH, 1.0 µm	14 g/m <sup>2</sup> /24 hr	
Oxygen Transmission Rate - (25°C, 85% RH, 1.0 µm) <sup>2</sup>	40 cm <sup>3</sup> /m <sup>2</sup> /bar/24 hr	ASTM D3985
Heat Seal Maximum Resistance - 20 PSI - 1s - 1 heated jaw	2.5 N/cm	
Heat Seal Threshold - 0.4 N/cm; 20 PSI - 1s - 1 heated jaw	111 °C	

### Additional Information

#### Typical Value Unit

Shelf Life (23°C)	10 month	
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### DELIVERY AND STORAGE

- Diofan® A 297 is delivered in bulk or in Intermediate Bulk Containers (IBC). Bulk supplied latex should be stored in reservoirs made of suitable stainless steel, HDPE, rigid PVC or glass fiber-reinforced polyester.
- Contact of anionic Diofan® dispersion with metals like iron, zinc, aluminum and copper as well as alloys such as brass and bronze must be avoided.
- Keep the vessels tightly closed to prevent drying through evaporation. Store the product ideally between 5°C and 25°C (41 °F and 77°F) to avoid degradation.

### PROCESSING - DRYING

- Diofan® A 297 can be processed with different coating techniques, including reverse gravure roll and air knife coating systems.
- When coated on plastic films, Diofan® A 297 should be formulated with wax and silica in order to improve the blocking and slip properties of the finished coating.
- Diofan® coatings requires adequate drying conditions, since in general higher temperatures will contribute to better barrier properties.

### FOOD AND DRUG LEGISLATIONS

- Some agency ratings are listed on page 1. Necessary certification will be provided upon request.

### ISO CERTIFICATION

- The implemented management system for the production, internal transfer and delivery, design and development of Diofan® vinylidene chloride copolymers (PVDC) produced in Tavaux has been assessed and found to meet the requirements of ISO 9001: 2008, ISO 14001: 2004 and OHSAS 18001: 2007.
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### Notes

Typical properties: these are not to be construed as specifications.

<sup>1</sup> Please contact your Account Manager to request an EU food contact and/or FDA letter which provides the specifications for compliance with these regulations.

<sup>2</sup> Coating on BOPP film. Diofan® coating weight dry: 2.7 g/m<sup>2</sup>; used additive package: 20 g/kg wax + 3 g/kg silica



Safety Data Sheets (SDS) are available by emailing us or contacting your sales representative. Always consult the appropriate SDS before using any of our products.

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