

Diofan® A 299

polyvinylidene chloride

Diofan® A 299 is a PVDC latex recommended for coatings requiring the best balance of barrier and low sealing temperature properties.

General

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

Physical

	Typical Value	Unit
Density		
Coated film (dry)	1.65	g/cm ³
Dispersion (wet)	1.26	g/cm ³
Emulsion Type	Anionic	
Filmability - Film Forming Temperature	16	°C
pH	2.0	
Solids Content	52	%
Surface Tension - Foaming tendency	40	mN/m
Viscosity - Dynamic (20°C)	8	mPa·s

Mechanical

	Typical Value	Unit	Test method
Coefficient of Friction vs. Itself - Dynamic	0.35		ASTM D1894

Films

	Typical Value	Unit	Test method
Oxygen Transmission Rate - (25°C, 85% RH, 1 µm) ²	40	cm ³ /m ² /bar/24 hr	ASTM D3985
Heat Seal Maximum Resistance - 20 PSI - 1s - 1 heated jaw	1.2	N/cm	
Heat Seal Threshold - 0.4 N/cm; 20 PSI - 1s - 1 heated jaw	100	°C	

Thermal

	Typical Value	Unit	Test method
Glass Transition Temperature ³	19.0	°C	ISO 11357-2

Additional Information

	Typical Value	Unit
Shelf Life (23°C)	12	month

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DELIVERY AND STORAGE

- Diofan® A 299 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 299 can be processed with different coating techniques, including reverse gravure roll and air knife coating systems.
- When coated on plastic films, Diofan® A 299 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.

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

² Coating on BOPP film. Diofan® A 299 coating weight dry: 2.7 g/m²; used additive package: 20 g/kg wax + 3 g/kg silica

³ Measured by DSC on dried polymer, after the second heating cycle, at 20°C/min



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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