Diofan® A 050

polyvinylidene chloride

DIOFAN® A 050 is a standard PVDC water-based dispersion grade for coatings on various substrates. It is generally used as a topcoat on paper, cardboard and as a coating on plastic films.

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

Physical	Typical Value	Unit
Density		
Coated film (dry) [2]	1.65	g/cm³
Dispersion (wet)	1.31	g/cm³
Emulsion Type	Anionic	
Filmability - Minimum Film Forming Temperature	18	°C
pH	3.0	
Solids Content - by weight	58	%
Surface Tension - Foaming tendency	38	mN/m
Viscosity (20°C)	10	mPa·s

Mechanical	Typical Value	Unit	Test method
Coefficient of Friction			ASTM D1894
vs. Itself - Dynamic	0.21		

Films	Typical Value	Unit	Test method
Water Vapor Transmission Rate [2]			ASTM F1249
38°C, 90% RH, 1.0 µm	16	g/m²/24 hr	
Oxygen Transmission Rate - (25°C, 85% RH, 1.0 µm) [2]	54	cm³/m²/bar/ 24 hr	ASTM D3985
Heat Seal Maximum Resistance - 20 psi - 1s - 1 heated jaw	2.2	N/cm	
Heat Seal Threshold - 0.4 N/cm; 20 psi - 1s - 1 heated jaw	110	°C	

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

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DELIVERY AND STORAGE

- Diofan® A 050 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 30°C (41 °F and 86°F) to avoid degradation.

PROCESSING - DRYING

- Diofan® A 050 can be processed with different coating techniques, including reverse gravure roll and air knife coating systems.
- When coated on plastic films, Diofan® A 050 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.

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; coating weight : 2.7 g/m²; additive package : 20 g/kg wax + 3 g/kg silica