Diofan® 193DK

polyvinylidene chloride

DIOFAN® 193DK is a PVDC water-based dispersion recommended for use as a functional topcoat over DIOFAN® A736 coated PVC or PVC/PE film structures used for blister applications in pharmaceutical packaging.

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	• DMF 8738 • EC 1907/2006 (REACH)	• EU No 10/2011 • FDA [1]
Appearance	• Milky White	
Forms	• Liquid	

Physical	Typical Value	Unit
Density		
Coating (Dry)	1.65	g/cm³
Dispersion (wet)	1.29	g/cm³
Emulsion Type	Anionic	
Filmability - Minimum Film Forming Temperature	18	°C
pH	Acidic	
Solids Content	55	%
Surface Tension - Foaming tendency	32	mN/m
Viscosity (20°C)	11	mPa·s

Mechanical	Typical Value	Unit	Test method
Coefficient of Friction - vs. Steel - Dynamic [2]	0.20	mN/m	Internal Method

Films	Typical Value	Unit	Test method
Oxygen Transmission Rate			ASTM D3985
25°C, 85% RH, 1.0 µm	54	cm³/m²/24 hr	
Water Vapor Transmission Rate			ASTM F1249
38°C, 90% RH, 1.0 µm	16	g/m²/24 hr	
Heat Seal Maximum Resistance - with Aluminum - 20 psi - 1s - 1 heated jaw [2] (140°C)	5.8	N/cm	

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

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DELIVERY AND STORAGE

- Diofan® 193DK 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.
- IBC should be protected from sunlight exposure.

PROCESSING - DRYING

- Diofan® 193DK can be processed with different coating techniques, including reverse gravure roll and air knife coating systems.
- Diofan® coatings require adequate drying conditions, since, in general, higher temperatures will result in 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] Tested on PVC (250 µm)/Diofan® A736 (32 gsm)/Diofan® 193DK (8 gsm) structure stored at 40°C for 2 days.