

Diofan® P 520

polyvinylidene chloride

Diofan® P 520 is a one-component, water-based dispersion of a polyvinylidene chloride (PVDC) copolymer. It is free of solvent traces, alkylphenol ethoxylates or any other toxic substances. Due to its low oxygen and water vapor permeabilities along with low water absorption, Diofan® P 520 is an outstanding protective copolymer used in a broad variety of formulations that are specific to end-use requirements.

This material was developed to adhere on metal and to remain flexible when exposed to a broad range of end-use temperatures over time. This makes it an ideal binder for one-component, air drying, waterborne formulated paints

and coatings where long-lasting protection of the substrate is targeted.

Diofan® P 520 also provides excellent chemical resistance and flame-retardant properties. Typical applications are:

- Corrosion-resistant primers and coatings for industrial and heavy duty steel protection
- Automotive primers and underbody coatings
- Rust converter products
- Barrier and sealing coatings
- Flame-retardant coatings
- Fibers and textile coatings

General

Material Status	• Commercial: Active	
Availability	• Asia Pacific • Europe	• Latin America • North America
Features	• Chemical Resistant • Flame Retardant • Good Adhesion • Low VOC	• Moisture Barrier • Non-Toxic • Oxygen Barrier
Uses	• Coating Applications	• Protective Coatings
Agency Ratings	• EC 1907/2006 (REACH)	• EU No 10/2011
Appearance	• Milky White	
Forms	• Liquid	

Physical

	Typical Value	Unit
Density - Dispersion (wet)	1.26	g/cm ³
Emulsion Type	Anionic	
Filmability - Film forming temperature	10	°C
pH	1.5	
Solids Content	56	%
Surface Tension	45	mN/m

Thermal

	Typical Value	Unit
Glass Transition Temperature ¹	14.0	°C

Additional Information

	Typical Value	Unit
Shelf Life	8	month

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DELIVERY AND STORAGE

- Diofan® P 520 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.

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 Glass transition temperature TG measured with a dried Diofan® P 520.



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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