

Algoflon® D 3511 F polytetrafluoroethylene

Algoflon® D 3511 F is a white aqueous PTFE dispersion and is produced without any intentional use or addition of PFOA. It is designed mainly for coating processes but can also be used for impregnation.

Algoflon® D 3511 F has superior film forming behavior and is well-suited to produce final items with excellent gloss. Algoflon® D 3511 F exhibits good wetting properties and high shear stability.

Main features of Algoflon® D 3511 F PTFE dispersion are:

- NO polyethoxylated alkylphenols
- Superior film building behavior
- Excellent surface finishing and gloss
- High shear stability

General

Material Status	• Commercial: Active	
Availability	• Asia Pacific • Europe	• North America
Features	• Chemical Resistant • High Heat Resistance	• Low Friction
Uses	• Coating Applications	• Impregnation Applications
Appearance	• White	
Forms	• Latex	

Physical

	Typical Value	Unit	Test method
Average Particle Size	240	nm	Internal Method
Density	1.50	g/cm³	ASTM D4441
pH	> 9.0		ASTM D4441

Fill Analysis

	Typical Value	Unit	Test method
Brookfield Viscosity - (20°)	20	mPa·s	ASTM D2196

Additional Information

	Typical Value	Unit	Test method
Non Ionic Surfactant - (on the mixture)	3.5	wt%	ASTM D4441
PTFE Content - (on the mixture)	59.0	wt%	ASTM D4441

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Processing

- Algoflon® D 3511 F is processed according to conventional coating methods. Generally the procedure involves application (e.g. by spraying) on a pre-treated substrate or on a base coat and then heating to remove water and surfactant from the coated item. Sintering above the crystalline melting point of the coated resin is then required to obtain the finished coated article.
- Algoflon® D 3511 F can be processed neat or appropriately formulated. Also, it can be used diluted using distilled or deionized water. Formulation, line speed and oven temperature must all be well controlled for optimized features of the coated substrates.

Storage and Handling

- Algoflon® PTFE dispersions must be stored under suitable temperature conditions to ensure prolonged stability. Temperatures lower than 5°C must be avoided to prevent irreversible settling. Also, some settling may occur on prolonged standing and/or heat exposure. It is therefore strongly recommended that the product is always kept at temperatures below 35°C. The optimum storage temperature range is 10-25°C. It is also advisable that the product is homogenized by gentle rolling or stirring once per month and prior to use.
- Prolonged exposure of the liquid to air could lead to some coagulation at the surface due to water evaporation. For this reason and also to avoid contamination, it is recommended to keep the containers closed when not in use.

Safety and Toxicology

- Before using Algoflon® PTFE dispersions consult the product Material Safety Data Sheet and follow all label directions and handling precautions.
- As with all PTFE materials, handling and processing should only be carried out in well ventilated areas. Venting units should be installed above processing equipment. Fumes must not be inhaled and eye and skin contact ought to be avoided. In case of skin contact wash with soap and water. In case of eye contact flush with water immediately and seek medical help. Do not smoke in areas contaminated with powder, vapor or fumes.
- See Material Safety Data Sheet for detailed advice on waste disposal methods.

Packaging

- Algoflon® D 3511 F is packaged in either 30 kg drums or 1500 kg IBC's.

Additional Technical Information

- For Material Safety Data Sheet or additional technical information consult your Solvay Specialty Polymers sales representative, or contact us by e-mail.

Notes

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