

KAPPAMID VFH

Compound of formaldehyde-free stiffening agents with oil-resistant and flame-proofing effects

Chemical composition	dispersion of polycarbon acids, polyacrylates, C6 fluorocarbon and organic phosphates
Appearance	transparent to turbid, yellowish dispersion
pH-value 20 °C	3.0 - 5.0 (product)
Ionic charge	weakly cationic

Function

KAPPAMID VFH is a stiffening compound for natural and synthetic fibers. It is based on a polymer blend that includes other components for a water-repellent (ecological C6 fluorocarbon chemistry) and a flame-retardant finish.

KAPPAMID VFH is formaldehyde-free and does not emit formaldehyde during and after application.

KAPPAMID VFH is suitable for stiffening and impregnation of natural fibres such as bast, flax, sisal, jute and other biopolymers as well as nonwovens and woven fabrics of synthetic fibres.

After the application and impregnation, the fibres or the substrate are dried above 160 °C in order to evacuate the water and crosslinked and stiffened by curing at 180 – 200 °C. Thermoplastic properties are before curing. During the curing process above 180 – 200 °C, water repellent and flame retardant properties are achieved. For a high degree of crosslinking and strong thermosetting properties curing temperatures above 200 °C are recommended.

Application

KAPPAMID VFH should be diluted with water before application. The optimum mixing ratios should be determined in preliminary tests, since these are dependent on the impregnation properties of the substrate, the facilities and the achieved degree of stiffening.

It is recommended to prepare a 30 – 40 % pre-diluted aqueous solution.

The addition of other additives can affect the crosslinking properties of the product. The pH of the mixture should not be higher than 6. Alkaline chemicals interfere with the product.

The impregnation is ideally done by padding, other possible applications (spraying, roller application, immersion) are possible. After the impregnation and before curing, the substrate still contains residual moisture.

Recommended application level by padding:

- 5 – 20 % KAPPAMID VFH per weight of fibre

The drying process of the impregnated fibre material should be realized at 160 °C (1 – 5 minutes), the curing process with the appropriate degree of fixation occurs at 180 – 200 °C (1 – 3 minutes) and above 200 °C.

When using the products, the precautionary measures applicable to the handling of chemicals must be observed. For storage and hazard information as well as safety advice, please refer to the relevant safety data sheets. Application solutions and product residues must be disposed of in accordance with official regulations. The listed instructions correspond to our previous experience. However, in view of the different operating conditions, only non-binding information and advice can be given. Therefore, we cannot accept any liability whatsoever, including liability for claims by third parties. Errors, changes and misprints excepted. Non-binding product information, print date Feb 14, 2022, not subject to systematic change.

Contact

KAPP Chemie
info@kapp-chemie.com
 +49 / 6772 / 9311-0



KAPP-CHEMIE GmbH & Co. KG
 Industriestraße 2-4
 56357 Miehlen
www.kapp-chemie.com

Dilution instruction

KAPPAMID VFH can be mixed with water at any ratio and should be applied in diluted form.

Storage

KAPPAMID VFH remains stable for at least 6 months if stored properly between approx. 7 and max. 30 °C in a tightly closed original container.
Protect from frost!