

FILTER BINDERS

- **Water-based emulsion polymers**
- **Varied stiffness in finished media**
- **Easily pleatable**
- **Synthetic or cellulosic fibers**

To deliver optimum end-use performance, highly engineered nonwoven and wood pulp filter products require a properly selected binder. **SEQUABOND®** products offer a filter designer the flexibility to select a binder compatible with specific performance needs.

	SEQUABOND® FVAC	SEQUABOND® FGS	SUNBOND® FN	SUNBOND® FS	SUNBOND® FW
Solids	42%	41%	45%	45%	45%
pH	4	4	4	4	3
Viscosity (cps)	100	75	100	150	100
Polymer Type	Poly (vinyl acetate acrylic)	Poly (vinyl acetate acrylic)	Poly (vinyl acetate acrylic)	Poly (styrene vinyl acetate)	Poly (styrene acrylic)
Tg (°C)	+15	+25	+30	+45	+35
Recommended Use	Paper saturants, vacuum bags	Paper saturants, vacuum bags, high temp and humidity resistance	General purpose and auto air	Heavy duty, highest stiffness	Washable and/or humid environments
Pleatable	Yes	Yes	Yes	Yes (requires high temperature)	Yes (requires high temperature)

Rapid curing at 250°F assures that filters employing **SUNBOND®** binders achieve their ultimate solvent resistance and maximum strength when delivered from the bonding line. The all-aqueous base assures base sheet manufacturers of EPA compliant drying and curing. Complete latex cure in the bonding stage also avoids problems with fumes and emissions in “B” stage curing and assembly operations. No VOC emissions or residual phenol compounds are present with SEQUABOND or SUNBOND binders.

All SEQUABOND and SUNBOND binders provide for easily adjusted pleat and crimp set in filter media. In most cases, a simple temperature adjustment on the pleater will expand or contract the crimp angle and assure uniform and easy assembly of filter cartridges. SUNBOND FS and SUNBOND FW binders may require higher temperatures than SEQUABOND FVAC, SEQUABOND FGS, and SUNBOND FN binders to set permanent pleats.

Economical Filter Media Binder

SUNBOND FN binder is a non-foaming version for padding or vacuum slot applications. This product wets and bonds both synthetic and cellulosic fibers. SUNBOND FN polymer will cure in less than 3 seconds at 330°F (30 seconds at 250°F) but retain fully pleatable character after curing. This product is recommended for pleated air filter media, principally for traditional automotive applications. This binder is also used for flat filters – like furnace filters.

High Temperature Stiffness Media

SUNBOND FS binder offers improved water resistance and high temperature stiffness for resilient and heavy-duty machinery applications. The high binder modulus at elevated temperatures maintains the stiffness of the filter media over 250°F. SUNBOND FS binder is most useful when high temperature and/or water resistance is needed. For example, heavy-duty air filters and fuel injected engine filters may require this enhanced performance. SEQUABOND FVAC and SEQUABOND FGS binders provide high temperature resistance with excellent tensile/tear balance as required in such applications as vacuum bags.

Aqueous Fluid Filtration Media

SUNBOND FW binder offers maximum water and humidity resistance. Pad or vacuum slot processes can be used to apply product. SUNBOND FW emulsion can then be dried and cured for a totally water insensitive binder. Samples of SUNBOND FW binder have been immersed in aqueous fluids for over 2 years without any appreciable softening. Applications for SUNBOND FW binder include:

- 1) Washable heavy duty air filters
- 2) Aqueous fluid filtration media
- 3) Humidifier media
- 4) Swimming pool media

SUNBOND FW binders can be pleated but require higher pleater temperature than the other SUNBOND products listed here. SUNBOND FW binder is not recommended for aromatic or oxygenated solvent filtration applications.

Additionally, OMNOVA Solutions offers other nonwoven and pulp binding and treating chemicals that can be utilized neat or in conjunction with its SEQUABOND and SUNBOND products:

Norane [®]	Water repellent
Sunsize [®]	Pulp sizing agents
Sunrez [®]	Cellulose insolubilizers
Permafresh [®]	Cellulose and latex crosslinkers
Sequapel [®]	Fluid repellents

NOTE:

Although data supplied above are believed to be accurate, each user is advised to make his or her own determination as to whether the described product(s) is/are appropriate for a particular use or application, whether such a use will comply with all applicable laws or regulations, or whether such a use will not infringe the intellectual property rights of third parties.



OMNOVA Solutions Inc. · 1476 J.A. Cochran ByPass · Chester, SC 29706
Telephone 803-385-5181 · www.omnova.com

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