



FILTRATION APPLICATIONS

ENHANCING FILTRATION PAPER PERFORMANCE

Advanced Polymer Technology – Lubrizol offers a wide variety of polymers that can be applied to filter media to enhance performance in applications such as food grade, engine oil, HVAC and cabin air filtration systems. Product choices vary depending upon the desired performance and application needed.

Features

- Formaldehyde-free technologies
- Halogen-free technologies
- Food contact compliance
- Flame retardant capabilities
- Liquid and air applications
- Hydrophobic and Hydrophilic options
- Range of Tg values to meet stiffness requirements

Some common factors to consider when designing filter media include:

- *Is the filter media for air or liquid applications?*
- *Water or oil?*
- *Is flame retardance a need?*
- *Are food contact approvals required?*
- *Is a formaldehyde-free technology required?*
- *What level of water resistance must the filter media maintain?*
- *Is a boost in stiffness valuable?*
- *Does the ideal polymer need stability to cationic additives?*
- *Would a dry tack polymer that increases dust holding capacity be beneficial?*

This literature showcases a portfolio of polymers that can help solve common filtration design challenges, but Lubrizol also collaborates with customers to address unique filter media demands.

Contact your Lubrizol account manager or visit lubrizol.com/coatings for additional information.



Polymers for Filtrations Applications

Products	Tg °C	Solids (%)	Contains Formaldehyde	Flame Retardant	Food Contact Compliance	Liquid	Air	Description
Hycar® 26120	-11	50	Yes	No		•	•	Flexible, glass binder, colloiddally stable to cationic additives
Hycar® 26996	8	49	Yes	No	•	•		Tough, heat sealable, food contact polymer for general purpose applications
Hycar® 26907	32	49	No	No			•	Formaldehyde-free, multi-use
Hycar® 26450	32	46	Yes	No	•	•	•	Rewetting binder good for foods - both oil and water
Vycar™ VA450	32	45	Yes	No		•	•	Self-crosslinking vinyl acetate polymer for general purpose use
Hycar® 26391	36	49	Yes	No		•	•	Very hydrophobic, multi-use
Vycar™ 460x119	37	48	No	Yes			•	High loft binder for dielectrically sealable applications
Vycar™ 460x58	40	50	Yes	Yes			•	High chlorine content, high loft and paper media binder
Vycar™ 460x122	40	51	Yes	Yes			•	High chlorine content, high loft and paper media binder
Hycar® 26599	42	45	No	No	•	•		Tea bag, coffee filter, pleatable, formaldehyde-free
Hycar® 27005	53	48	No	No		•	•	Formaldehyde-free, methanol stable, hydrophobic
Vycar™ TN-810	55	52	No	Yes			•	Stiff, formaldehyde-free, dielectrically sealable, high loft binder
Hycar® 26315	55	49	Yes	No	•	•	•	Food contact compliant, stiff
Hycar® 26968	59	47	Low	No			•	Hydrophobic, fast-curing
Hycar® 26973	67	49	Yes	No		•	•	Stiff, fast-curing, oil resistant phenolic replacement or modifier, excellent wet strength, B-Stage curable
Vycar™ 460x104	70	55	No	Yes			•	Stiff, formaldehyde-free, dielectrically sealable, high loft binder
Carboset® 3076	<100	46	No	No		•	•	Unique formaldehyde-free thermosetting solution polymer used on glass, synthetic with a high level of renewable content, B-Stage Curable

Additives for Air Filtration Applications

Products	Tg °C	Solids (%)	Wax Melting Point (°C)	Typical Use Level	Description
Aquaslip® 677	N/A	55	64	1-2%	Additive for improved Cobb values and water resistance
Aquaslip® 678	N/A	30	120	1-2%	Additive for improved Cobb values, water resistance and blocking resistance
Hystretch® V-60	-60	49	-	Top spray on one side of media	Formaldehyde containing dry tack polymer for high loft filter media, non-blocking when cured. Improves dust holding.



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