Ahlstrom Molecular HVAC

Purifying air, protecting personal health and comfort

Quality of air in residential and commercial buildings is a major public health and safety challenge. Ahlstrom filtration media for Heating, Ventilation and Air Conditioning (HVAC) applications, protect people and processes from harmful pollutants in ambient air, reducing the risk of airborne contamination and increasing the comfort of life.

Ahlstrom Molecular HVAC portfolio covers a complete range of gas adsorption from Volatile Organic Compounds (VOCs) to inorganic gases (SO_2, NO_x, NH_3) to be removed from the ambient air:

- **Trinitex® Carbon,** our unique single step 3-layer technology, allowing the incorporation of activated carbon granulates in middle layer.
- Our **new Ahlstrom Molecular platform**, the highest-performance adsorbent materials for premium filtration applications.

Benefits

- **Optimal gas adsorption capacity and reliability –** extending operational filter lifetime.
- **Extensive product offering –** wide range of absorbent type and content to target a great diversity of harmful gases.
- **Good media cohesion and homogeneity**
- **Ability to combine molecular and particulate removal** – delivering unique combi media solutions for the most challenging environments.
- **Proven ability to customize** – using extensive and demonstrated know-how.

Ahlstrom Trinitex® HVAC

Based on our proprietary Trinitex® technology, our 3 layers wetlaid media incorporates granular activated carbon up to 400g/m² and demonstrates excellent pleatability. Intrinsically flame retardant, our range delivers reliable and high adsorption of odors and VOCs, along with durability in most operating conditions.

Trinitex® HVAC is available in a stiff design for pleated panel or compact filters, or in a soft, high permeability design (K936) for bag filters.

Our flexible production platform and our state-of-the-art lamination capabilities, opens up a complete panel of customization including antimicrobial performance, fine-tuned efficiency or grammage, and composite structures.

Key Grade Characteristics

	Basis Weight	Thickness	Carbon Content	Air Permeability	Stiffness MD	Initial Breakthrough Toluene*	Capacity Toluene @95% Breakthrough*	Initial Breakthrough n-Butane*	Capacity n-Butane @95% *
Grades	**g/m²**	**µm**	**g/m²**	**L/m²/s @ 200 Pa**	**mg**	**%**	**g/m²**	**%**	**g/m²**
K816 170	170	1,150	60	2,200	3,400	60	20	70	2.
K981 200	200	1,150	130	2,100	2,200	50	28	60	3.5
K981 250	250	1,250	170	1,900	5,000	37	40	50	5
K1095 300	300	1,450	200	1,550	7,000	30	51	35	7
K1063 400	400	1,800	300	1,300	6,100	10	68	20	10
K1021 500	500	2,200	400	1,200	6,500	6	100	10	17
K936 500	500	2,400	400	1,500	2,300	6	100	10	17

*According to DIN71460-2 with 80ppmv, 10 cm/s, 50%RH

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Our new state-of-the-art dry molecular capability encompasses a wide variety of adsorption solutions. A superior barrier against various gases depending on the absorbent type (ion exchange resin and impregnated activated carbon) and content (up to 1000 g/m²) allowing to target VOCs, alkaline (NH_3) and acid gases (SO_2, NO_x). Molecular media can also be laminated with a complete range of particulate efficiency layer to deliver the best protection against the finest particles.

A premium and flexible choice for panel, bag and compact filters designed to improve indoor air quality in open areas or in close environments through efficient removal of gaseous pollutants.

Key Grade Characteristics

	Basis Weight	Thickness	Carbon Content	Air Permeability	Initial Breakthrough n-Butane*	Capacity n-Butane @95%*	Initial Breakthrough SO_2*	Capacity SO_2* @60'	Initial Breakthrough NH_3*	Capacity NH_3 @95%*
Grades	**g/m²**	**µm**	**g/m²**	**L/m²/s @ 200 Pa**	**%**	**g/m²**	**%**	**g/m²**	**%**	**g/m²**
MA6/700	890	2150	700	640	0.2	21	0.5	27	86	0.1
MAC62/700	885	2250	700	270	1.0	13	1.5	26	0	4.5 (@60')

*According to DIN71460-2 at 10 cm/s (concentrations: 80ppmv for n-Butane, 30ppmv for SO_2 and NH_3)

Tailor-made solutions on demand.

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