



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 HVAC** – our unique single step 3-layer technology, allowing the incorporation of activated carbon granulates in middle layer.
- **PurXcel™ HVAC** – our new dry molecular platform, engineered with high-performance adsorbent materials for premium HVAC and Cleanroom applications.

Benefits

- ✓ **Optimal gas adsorption capacity and reliability** – extending filter lifetime
- ✓ **Broad 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
- ✓ **Proven customization capabilities** – backed by extensive expertise and a strong track record

Ahlstrom Trinitex® Carbon HVAC

Based on our proprietary Trinitex® technology, **our 3-layered wetlaid media** incorporates granular activated carbon up to **400g/m²** offering excellent pleatability and delivering reliable adsorption of odors and VOCs. Trinitex® HVAC is available in a stiff format for pleated panel or compact filters, as well as a soft, high-permeability version (K936) tailored for bag filters.

Our flexible production platform and our state-of-the-art lamination capabilities, open 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 n-Butane*
Grades	g/m ²	µm	g/m ²	L/m ² /s @ 200 Pa	mg	%
K981 200	200	1,150	130	2,100	2,200	60
K1095 300	300	1,450	200	1,550	7,000	35
K1063 400	400	1,800	300	1,300	6,100	20
K1021 500	500	2,200	400	1,200	6,500	10
K936 500	500	2,400	400	1,500	2,300	10

*According to ISO10121 at 10 cm/s and concentration 80ppmv, 50%RH

Ahlstrom PurXcel™ HVAC

Our new state-of-the-art **dry molecular technology** encompasses a wide variety of adsorption solutions. A superior barrier against various gases depending on the absorbent type (**standard activated carbon, impregnated activated carbon, ion exchange resin,...**) and content (**up to 1000 g/m²**) allowing to target VOCs, alkaline (NH₃) and acid gases (SO₂, NO_x). Molecular media can also be laminated with a complete range of particulate efficiency layers to deliver the best protection against the finest particles.

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

Key Grade Characteristics

Tailor-made solutions are available on demand.

	Basis Weight	Thickness	Carbon Content	Air Permeability	Stiffness MD	Initial Breakthrough n-Butane*
Grades	g/m ²	µm	g/m ²	L/m ² /s @ 200 Pa	mg	%
A300	450	1,700	300	2,000	1,700	11
A500	650	1,900	500	1,000	3,000	4
A700	900	2,000	700	720	8,600	2

*According to ISO10121 at 10 cm/s and concentration 80ppmv, 50%RH

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