

ALKEGEN

Optimal Performance
Filtration Media Solutions for
**Semiconductor
Manufacturing**

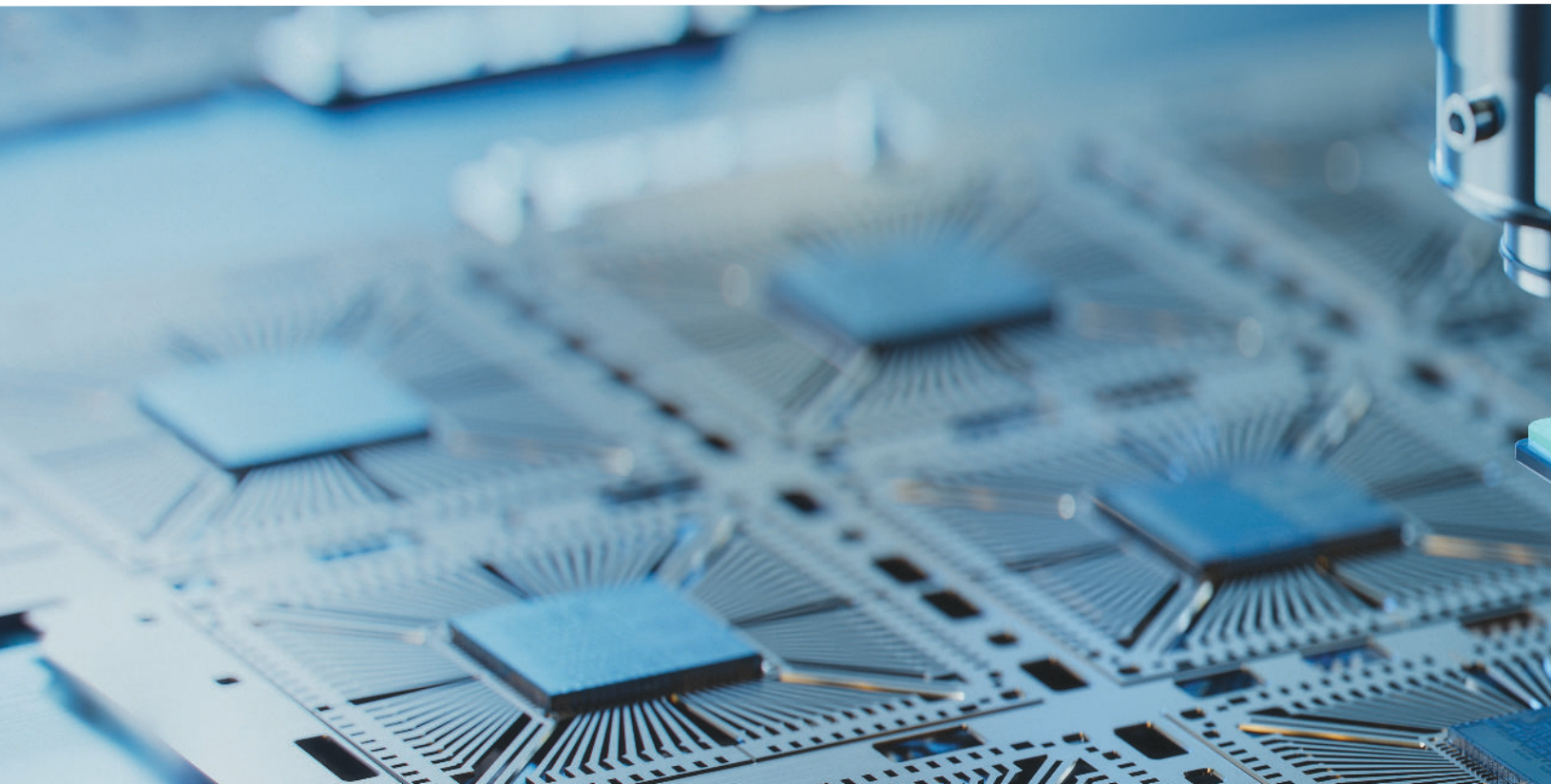


In today's precision-driven, fast-paced industries like semiconductor manufacturing, pharmaceuticals, and high tech, the harmful impact of airborne molecular contaminants (AMC) on production yields cannot be ignored. To address this threat, cleanroom designers and operators turn to advanced molecular filtration media, seamlessly integrating HEPA and UPA particle filtration for optimal production yield, operational efficiency, and product quality.

The heart of filtration lies in the filter media, where composite engineering of sorbent and synthetic non-wovens, coupled with precise chemical affinity and carbon distribution, significantly influences performance, reliability, and filter lifespan in clean spaces. Not all filter media with activated carbon meets stringent cleanroom requirements, with many exhibiting poor performance and short lifespans, leading to increased maintenance costs and

jeopardizing sensitive products. Choosing a filter media with optimal composite engineering, selective sorbent/activated carbon distribution, and carefully calibrated basis weight ensures high filtration efficiency, low pressure drop, and superior pleatability.

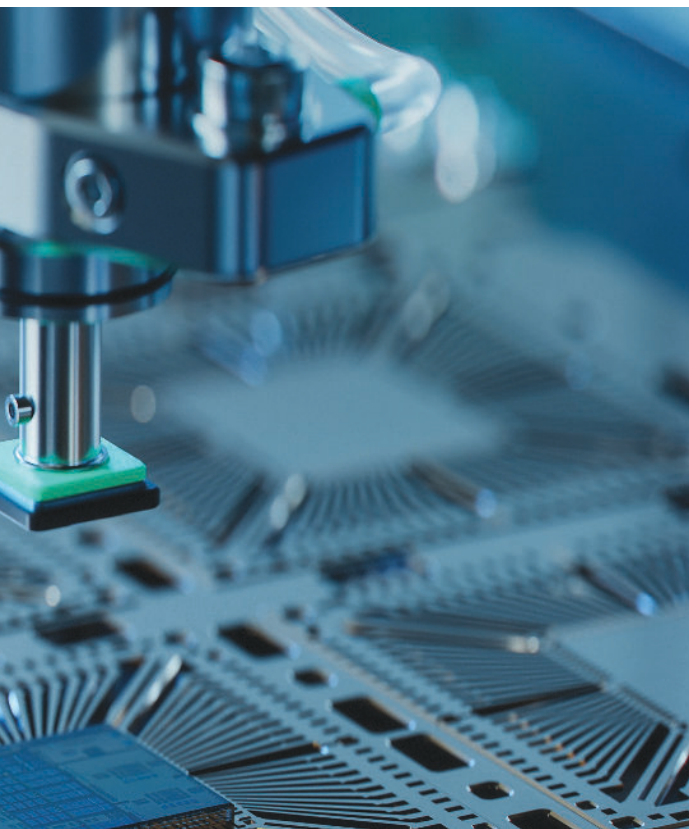
As a global leader in specialty engineered products and composite engineering, Alkegen proudly presents LydAir GP, offering the best media solutions for your cleanroom. Our design expertise ensures the ideal sorbent selection, precise chemical affinity, and basis weight for peak performance, minimal pressure drop, best-in-class pleatability, and exceptional processability. With our global manufacturing footprint and comprehensive product range covering all relevant efficiencies, Alkegen is your ultimate one-stop shop for unmatched, cutting-edge cleanroom filtration solutions.



Alkegen Filter Media Solution:



- **Advanced Composite Engineering:**
Our filters feature state-of-the-art composite engineering, combining sorbent and synthetic non-wovens for superior performance.
- **Optimized Sorbent Selection:**
Alkegen expertise ensures the selection of the best sorbents with the right chemical affinity, enhancing filtration efficiency.
- **Precise Basis Weight:**
Achieve optimum performance with carefully calibrated basis weight, minimizing pressure drop and maximizing product lifespan.
- **Reliability and Longevity:**
Many filter media with activated carbon fall short in cleanroom requirements. Alkegen's filter media guarantees high performance, extended lifespan, and lowered maintenance costs.
- **Global Manufacturing Footprint:**
With a complete product range covering all efficiencies, LydAir GP is your one-stop shop for cleanroom filtration solutions.

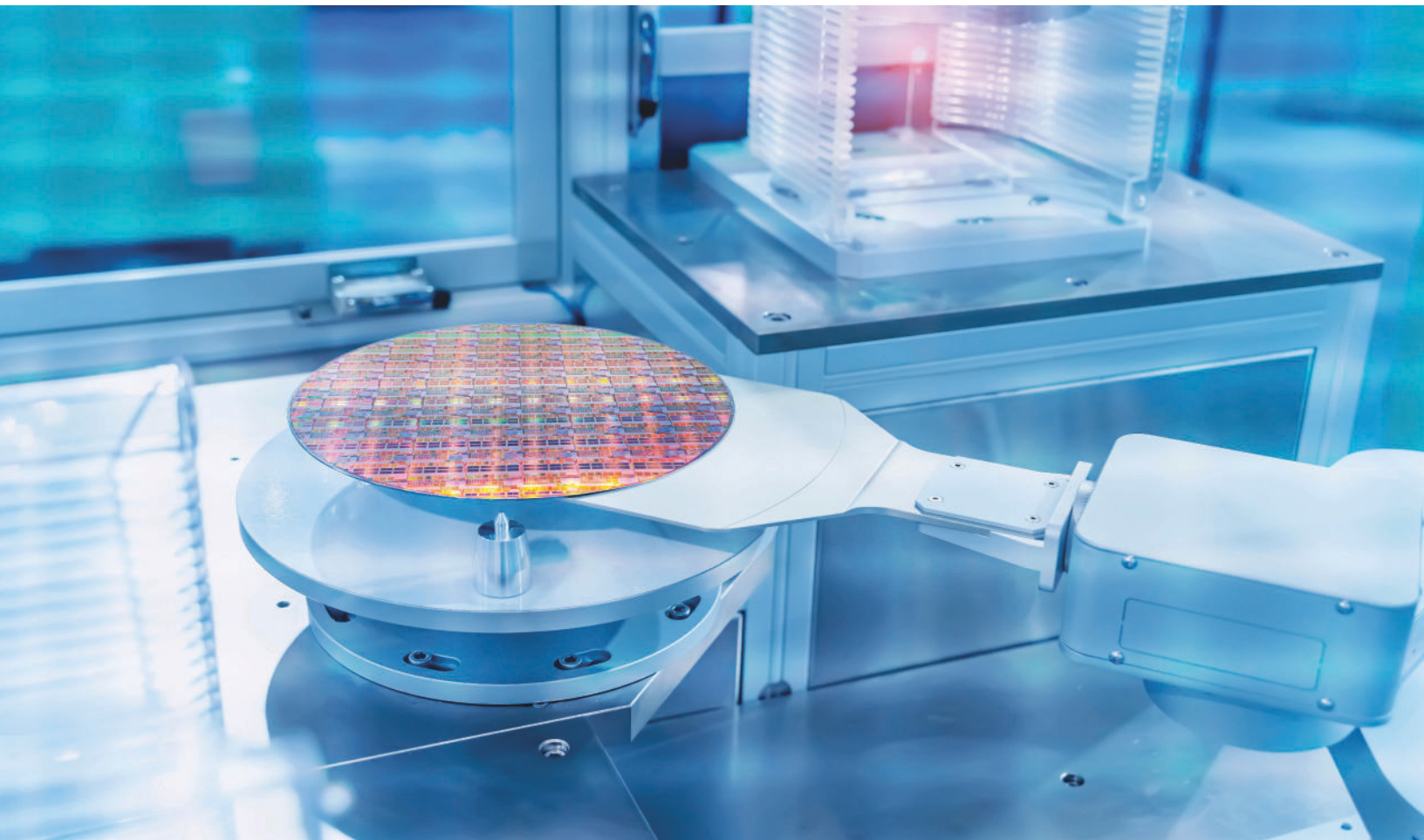
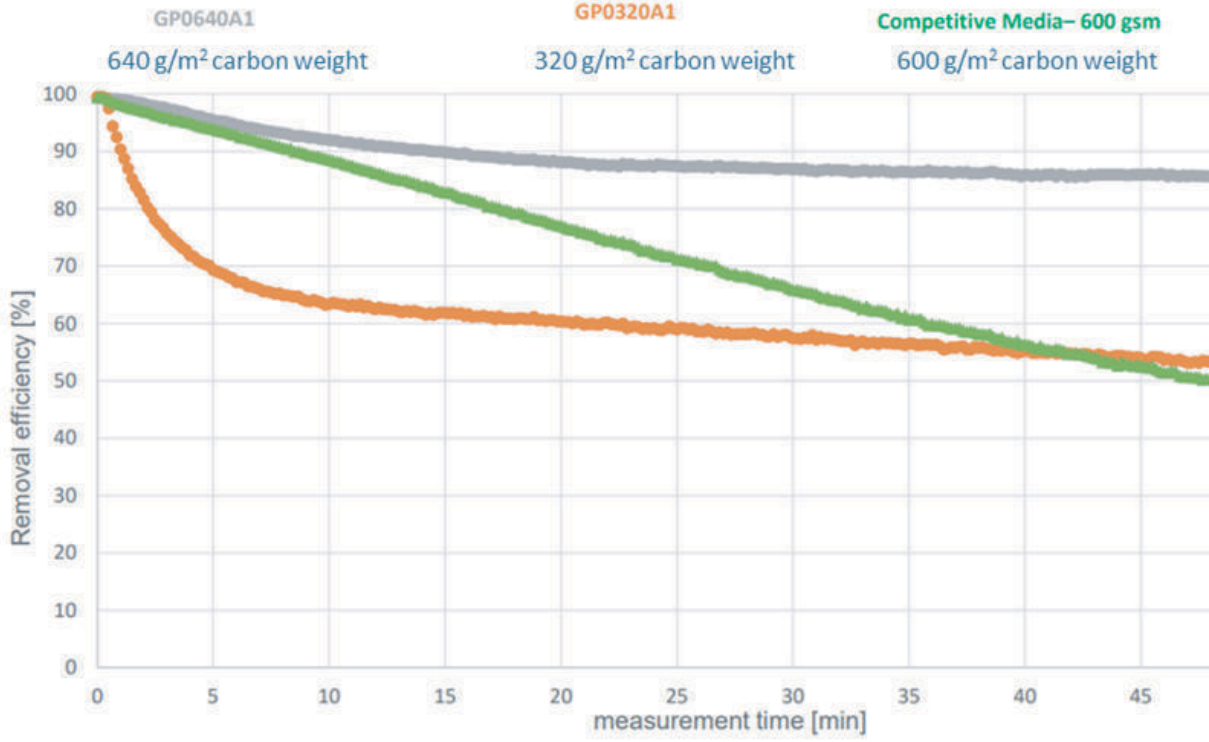


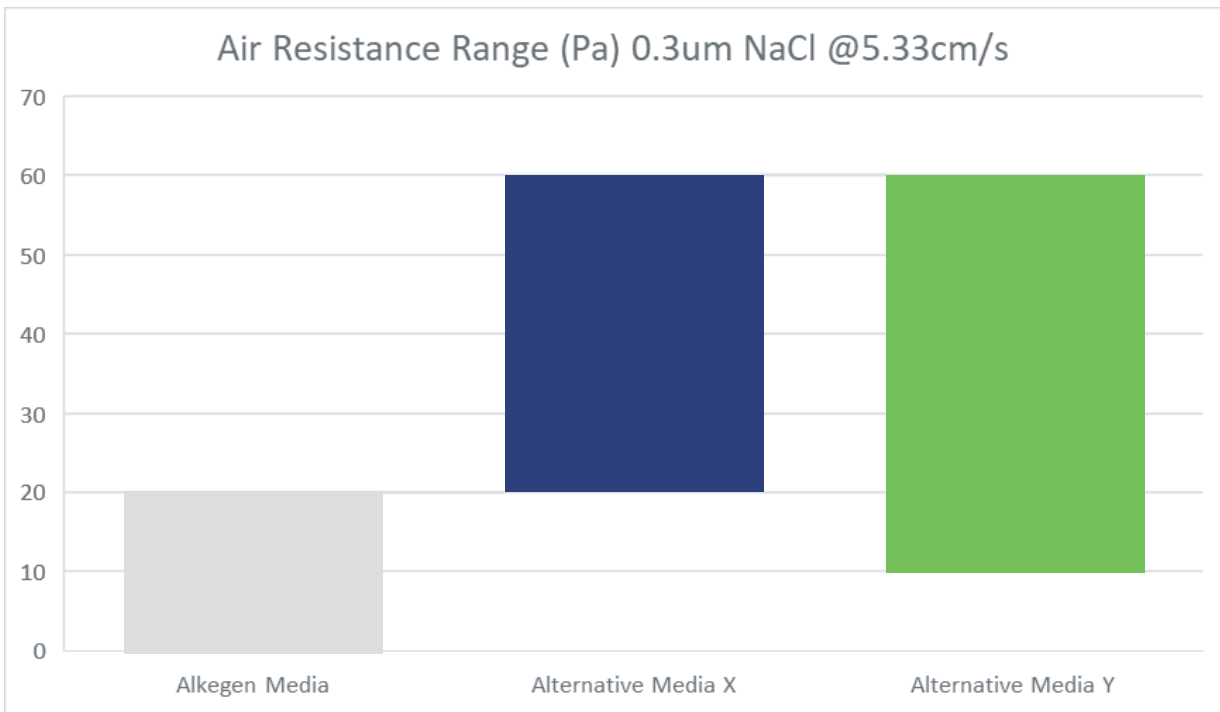
High-Performance Air Filtration Media for Cleanroom

- Superior Efficiency: Achieve 20-30% higher performance per gram of media.
- Reduced Pressure Drop: Benefit from a 15-30% lower pressure drop at equivalent basis weight.
- Exceptional Pleatability: Designed for ease of use in manufacturing processes.
- Optimal Distribution: Ensures a well-distributed sorbent on nonwoven materials.

Higher Performance, Superior Efficiency for SO₂ and VOC Removal

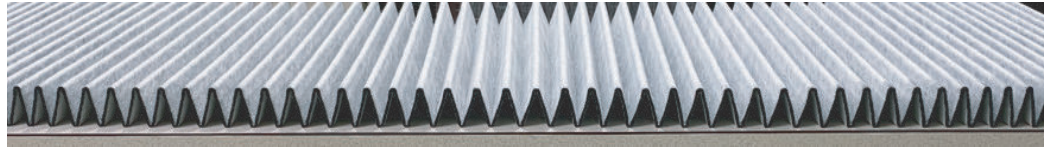
carbon media test - tracer gas SO₂
concentration: 30ppm 10 cm/s conditions: 23°C, 50% rF



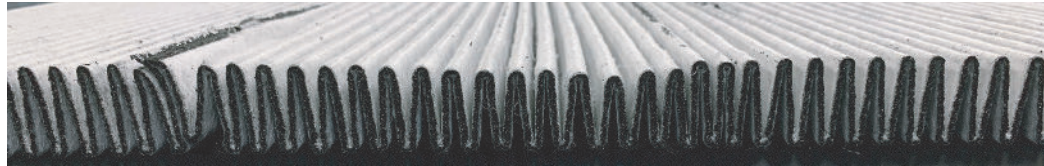


Exceptional Pleatability

Alkegen



Other Media



Product Offering

Target Gases	Grades	Carbon weight g/m ²	Total Basis Weight g/m ²	Particulate Filtration Layer
VOC	GP0480C1-9/6	480	649	-
	GP0480C1-9/S1	480	667	Merv 15 ISO ePM10 80%
	GP0640C1-9/6	640	839	-
	GP0640C1-9/S1	640	855	Merv 15 ISO ePM10 80%
Acids (SO ₂ , H ₂ S)	GP0480A1-9/6	480	649	-
	GP0480A1-9/S1	480	665	Merv 15 ISO ePM10 80%
	GP0640A1-9/6	640	839	-
	GP0640A1-9/S1	640	855	Merv 15 ISO ePM10 80%
	GP0640A1-9/S2	640	871	Merv 16 ISO ePM1 75%
Multiple Fugitive Gases	Advanced & Multi Sorbents	Please consult with our sales representatives for advanced grades: dual, triple sorbents & high CTC adsorbents with higher performance in equivalent basis weights		

Industries We Serve



FILTRATION
& CATALYSIS



INSULATION



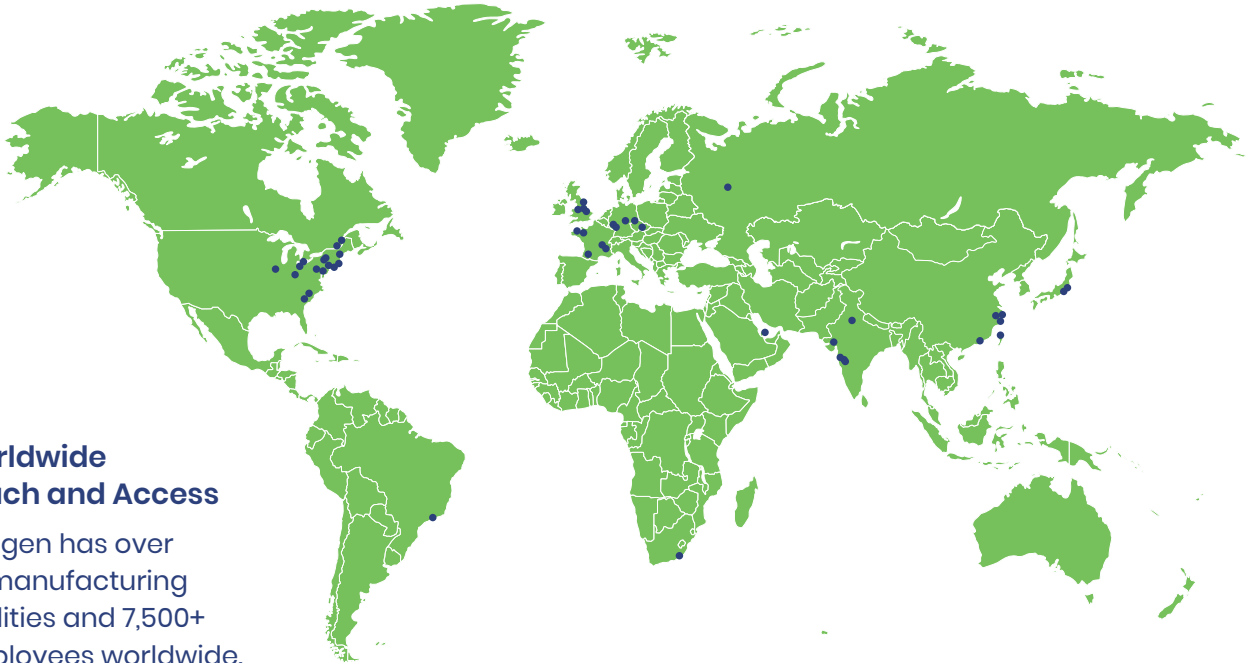
TRANSPORTATION
& OFF-ROAD
EQUIPMENT



BATTERY



CONSTRUCTION &
FIRE PROTECTION



Worldwide Reach and Access

Alkegen has over 60 manufacturing facilities and 7,500+ employees worldwide.

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alkegen.com

ALKEGEN

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ALKEGEN

The logo for ALKEGEN features the word "ALKEGEN" in a bold, white, sans-serif font. A thick, light green arc is positioned behind the letters "A", "L", and "K", curving over them. The background is a solid dark blue with a subtle gradient and a large, thick, light green curved shape at the bottom right.