Applications:
• Light, medium and heavy-duty on-road diesel engines
• Off-road diesel engines
• Gasoline Direct Injection Engines (GDI)

Superior Performance at Lower Total System Cost
AERIFY® Diesel Particulate Filters (DPF) from Lenacore provide extremely low back pressure for higher engine performance and reduced fuel consumption. AERIFY’s DPF is an advanced ceramic material for use in a wide variety of engine and after-treatment system configurations.

Key benefits
• Low back pressure improves engine performance and fuel efficiency.
  – Allows for smaller filters and lower system costs (coating and canning).
  – Low soot-loaded back pressure due to deep-bed filtration.
  – Linear back pressure profile for improved soot-load predictions and onboard diagnostics control.
• High coatability.
  – Similar back pressure profile whether coated or uncoated.
  – Low pressure drop increases at higher coating concentrations.
  – Potential to integrate multiple after-treatment functions into a single filter.
• Robust mechanical strength for reliable canning and in-use durability.
• Superior chemical and ash resistance.
• Highly efficient particulate filtration (mass and particle number).

Diverse product portfolio
• Choice of monolithic and segmented parts for improved thermal durability.
• Material and part-design characteristics can be tuned to meet application specific requirements.
• High washcoat-capacity filters available for multifunctional and integrated substrate applications.

AERIFY DPF's are available in a variety of shapes and sizes and either as monoliths or segmented parts.

AERIFY® Honeycomb ceramic filter technology exclusively licensed by Dow Chemical Company
Typical physical properties

Honeycomb cell density: 200 cpsi
Honeycomb wall thickness: 14 mil
Substrate density: 0.52 kg/l
Melting temperature: > 1600°C
Elastic modulus of wall material (25°C): ~26 GPa
MOR of wall material (25°C, average max bending strength): 29 MPa
Thermal conductivity (1000°C): 0.73 W/m-k
Coefficient of Thermal Expansion: 3.5

Back Pressure Performance and Downsizing Potential

Coatability

Full-service support from a single-source supplier

Lenacore is a China-based, technology-driven supplier of solutions for mobile and stationary emission control. Our material has science and characterization expertise, combined with design engineering, processing knowledge and program management, enables us to provide customers with solutions that meet or exceed vehicle performance targets at lower cost.

Added-value services include:

- System integration.
- Application engineering.
- Product development, testing, and validation.
- Part manufacturing and program management.

Filtration Efficiency

AERIFY® Honeycomb Ceramic Filters

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