

ZINC ALUMINATE SPINEL ($ZnAl_2O_4$) POWDERS

- APPLICATIONS:**
- ◆ Transesterification catalysts
 - ◆ Catalytic supports/carriers
 - ◆ Powder for sintering

Properties of hydrothermally synthesized zinc aluminate spinel ($ZnAl_2O_4$) powders*

Property	Product No.			
	ZMAS-5-PP	ZMAS-4	ZMAS-3	ZMAS-2
Crystal form	100% $ZnAl_2O_4$ spinel			
Chemical purity (%)	99.9+	99.9+	99.9+	99.9+
Morphology of crystallites	equiaxed	spherical	spherical	octahedral
Crystallite size range	5-15 nm	100-600 nm	200-900	1-4 μm
BET surface area (m^2/g)	150-300	10	6	1

*Powders with other sizes, purity levels, and dopants may be available upon request.
 Dispersions may be available upon request

Hydrothermal method is very useful to produce variety of zinc aluminate spinel powders ($ZnAl_2O_4$), including nanosized powders with very narrow crystallite size distributions. Sawyer's $ZnAl_2O_4$ powders exhibit much more uniform crystallite size distributions, significantly higher chemical purity, and level of lattice perfection than the commercially available powders. Their catalytic performance is superior to the commercial $ZnAl_2O_4$ powders, making them attractive biodiesel catalysts.

