



ALMATIS

PREMIUM ALUMINA



Global Product Data

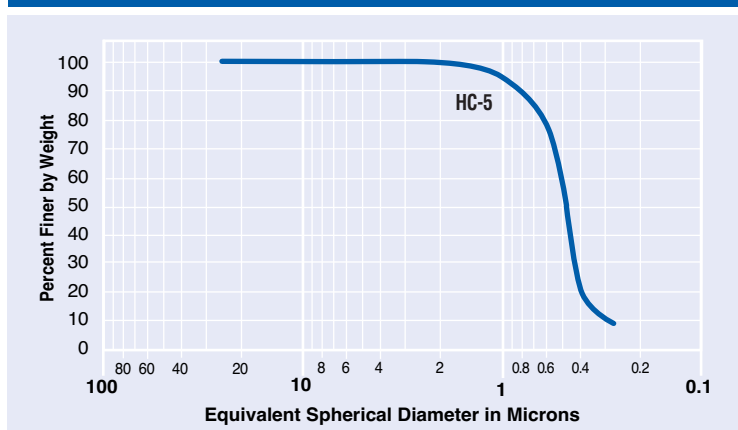
Almatis Hydral[®] Coat 5

Almatis Hydral Coat 5 is a white aluminum trihydroxide $\text{Al}(\text{OH})_3$. It is a specially precipitated high-purity white aluminum trihydroxide powder with a Z percent brightness value of 99+. It has an extra-fine, uniform median particle size of about 0.5 microns in diameter. Hydral Coat 5 powder is a fully deagglomerated powder.

Hydral Coat 5 is halogen-free and finds wide application as a low-smoke, flame-retardent filler in thermoset and thermoplastic materials. It improves arc-track resistance in many plastics used in electrical applications.

As a reinforcing pigment in adhesives and adhesive tapes, Hydral Coat 5 improves cold flow properties, maintains the neutrality or alkalinity of the composition, and increases cohesion.

Typical Particle Size Analysis by Sedigraph



Think alumina, think Almatis.

GP-SH/006/R05/1207/MSDS 839



Almatis Hydral® Coat 5

Product	Hydral Coat 5		
	Average	Shipping ⁽¹⁾	Test Methods
Chemical Composition (%)			
SiO ₂	0.005	-	DC Arc Optical Emissions Spectrometry
Fe ₂ O ₃	0.006	-	DC Arc Optical Emissions Spectrometry
Na ₂ O (total)	0.24	-	DC Arc Optical Emissions Spectrometry
Na ₂ O (soluble)	0.04	0.10	Flame Emission Photometry
Al(OH) ₃	99.6	-	Difference
Moisture	0.20	0.70	Microwave
Physical Properties			
Loose bulk density (g/cm ³)	0.32	-	Modified ASTM B212-89
Packed bulk density (g/cm ³)	0.55	-	Modified ASTM B527-85
Surface area (m ² /g)	13.8	-	Brunauer-Emmett-Teller Nitrogen Adsorption
Brightness (% Z)	99.5	-	Z value of the XYZ Tristimulus divided by 1.18103
Refractive index	1.57	-	
Mohs hardness	2.5-3.5	-	
Electrical conductivity (µS/cm)	<200	-	Modified ISO787-14 (10%)
Particle Size			
% on 325 mesh	0.003	-	Wet Screen
d ₉₅ (µ)	1.2	-	Sedigraph 5100
d ₅₀ (µ)	0.5	0.4-0.6	Sedigraph 5100
d ₁₀ (µ)	0.3	-	Sedigraph 5100

(1) Almatis general shipping specifications

2002 Data

All data are based upon Almatis standard test methods, and all test methods are available upon request. Unless stated otherwise values are typical.



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