



Product Description

Highly pure, very fine 250 mesh aluminium metal powder suitable for a range of applications including resin-casting (cold casting), decorative coatings and powder metallurgy. Aluminium powder can also be added to resins and gelcoats to alter their thermal properties.

How to use

A ratio of at least 50% aluminium powder (by weight) would be required to result in a significantly metallic appearance. Higher ratios, up to the limit of pourability, will yield a more impressive metallic appearance and feel.

After casting, the metallic appearance will not be clear or vivid because the metal particles will be obscured behind a thin layer of resin. To reveal the metallic appearance, the casting can be rubbed with an abrasive pad or wire-wool.

When adding metallic powders to polyester or vinylester resin systems it is important to catalyse the resin prior to adding the metal powder so as to avoid any adverse reaction (rapid oxidation) of the metal powder by the catalyst.

Such oxidation or other adverse reactions are unlikely to occur with polyurethane or epoxy resins but it may still be a good idea to mix the resin and hardeners together before adding the metal powder.

Use In Cold-Casting / Resin Casting

Add aluminium powder to castings resins such as polyurethane Fast-Cast resins, polyesters or epoxies for an authentic metallic aluminium appearance and feel.

Added to the whole of the resin mix, aluminium powder will increase the density of a casting (making it feel heavier) as well as its thermal conductivity (making it feel colder). Alternatively, it can be added in higher ratios to only a thin surface layer by slush-casting or rotational-moulding, giving a very metallic surface to a casting that can then be back-filled with unfilled resin.

To Add Temperature Stability

Aluminium powder is very frequently added to resins and gelcoats in order to improve their dimensional stability, particularly for use at elevated temperatures.

Epoxy tooling gelcoats, laminating pastes and casting resins can all be filled with aluminium powder to improve their dimensional stability at high temperature.

Specification

Particle Size Distribution - Sieve

Mesh (BS410)	Size (µm)	Min - Max
+200	+75	0 - 2.0%
-200/+325	-75/+45	Balance
-325	-45	-

Chemical Analysis

Element	Result (%)
Al (difference)	99.7
Fe	0.20
Si	0.15
Other	<0.01

Physical Properties

Property	Unit	Result
Colour	-	Silver
Format	-	Powder
Tapped Density	g/cm ³	0.9 - 1.3
Purity	%	99.7
Particle Size	Mesh	250

Disclaimer

This data is not to be used for specifications. Values listed are for typical properties and should not be considered minimum or maximum.

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