



Product Description

Highly pure, very fine 325 mesh irregular copper metal powder suitable for a range of applications including resin-casting (cold casting), decorative coatings and powder metallurgy.

How to use

Use In Cold-Casting / Resin Casting

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

Added to the whole of the resin mix, copper 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.

Mix Ratios

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

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.

Revealing the Appearance

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.

Patinating (Rusting)

After exposing copper particles on the surface of a casting, the copper on the surface will patina (rust) in the same way that a conventional copper product would which means that it will quickly take on the distinctive turquoise colour of patinated copper.

Specification

Particle Size Distribution - Sieve

Mesh	Size (µm)	Min - Max
200	75	0.0%
300	53	5.0

Chemical Analysis

Element	Result (%)
Copper	99.8
Oxygen	0.2

Physical Properties

Property	Unit	Result
Colour	-	Metallic Brown
Format	-	Powder
Particle Size	Mesh	325
Apparent Density	g/cm ³	3.0 - 3.6

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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