



DRIVE Marine Services

FILLER POWDERS

Powders are added to liquid Bote-Cote epoxy to thicken it to use it as a gap filling glue, or as a putty for filling holes and depressions or for filleting. It is also used to make a paste which can be smoothed over an uneven surface to allow sanding to a truly smooth finish once it hardens. These filling powders make epoxy more useful by altering its strength, texture, sand-ability, colour and whether it remains where it is put or runs out of the gaps before it goes hard.

Many different powders have been mixed with epoxy, often with less than good results. Some are very heavy, some allow water to wick into the epoxy, some create clouds of health endangering dust and some go soft in the sunshine allowing the underlying surface to "print through". If you mix your own you will run into all these hazards, and every mix is likely to be different to the one before.

Bote-Cote powders are formulated ready for use with bulking agents, thickeners and high strength additives. They are mixed with liquid Bote-Cote until the desired viscosity is obtained for the task being undertaken. All Bote-Cote powders consist of non-organic materials only to avoid temperature sensitivity and to prevent wicking of moisture into the cured epoxy, and can be used with equal safety below the water line or on an exposed deck. They are formulated with dust suppressants to minimise dust rising and so reduce inhalation by users.

Bote-Cote filler powders are provided in three grades, one for each of the main uses for filler powders in boat building. All normally have a brown tint added to reduce finished paint colour variability due to imperfect paint cover and opacity. (White Sanding Filler is also available). All BoatCraft fillers are blended from 6 or more ingredients. This is to make mixing and wetting the filler powder more efficient, to protect our users health and to assist our users to get that "ooh ah" finish to their work.

Glue and Filleting Filler.

The standard for use with Bote-Cote, a low cost blended filler used for most gluing applications and for making fillets. It has medium to high strength and has thixotropic additives that retard it flowing out of gaps in the joints before the epoxy sets hard. It includes a low cost high strength bulking agent to produce economical thixotropic pastes.

High Strength Filler.

A high density glass fibre and spherical particle filler for maximum strength gluing applications such as catamaran beams, mast steps, bulkheads, load carrying transoms, rudder posts etc. This imparts great strength, but once it has cured it is very difficult to work. You can put a coat of sanding filler over the top of it to tidy it up.

Sanding Filler.

A low density, easily sanded microsphere based filler, which spreads like cream to a perfect featheredge. Used for filling and fairing. Sanding filler is never used as a structural adhesive.

Policy Statement: Fillers and Powders.

As a matter of corporate policy, BoatCraft Pacific **does not** make available for sale to the general public a number of raw material filler products, including **aerated silicas, hollow glass spheres, pvc balloons, wood flour or cotton flock**. We are aware that these products are available from, and are advertised under various names, by some other suppliers.

We view the practice of selling these materials with concern.

Our reasons for this policy are twofold.

First and most importantly, some of these products present considerable **dust hazard**. Whilst they are not currently classified as physiologically harmful, the **silica dusts** generated from handling them greatly **exceeds all international regulations for atmospheric dusts**. Certainly it is very unpleasant for the user, both directly, and later whenever the dust is disturbed.

Certain forms of silica cause Silicosis, a disease closely related to Asbestosis and lung cancer.

Secondly, to obtain optimum and predictable properties in filled epoxy resins, carefully controlled mixtures of fillers are required to provide the necessary balance of thickening, stiffness, strength, weight, spread-ability, colour etc. We are concerned that the inconsistent properties of glues made up from uncontrolled mixtures will lead to mechanical failure and loss of the boat or worse.

BoatCraft Pacific manufactures three formulated filler powder mixtures to cover boat building requirements. All contain **dust suppressants**. While they **don't eliminate dust entirely**, these formulated fillers generate far less dust than the raw materials. These fillers contain no organic materials which can lead to moisture absorption or softening under moderate high temperature conditions. They provide complete uniformity of properties throughout the job, rather than changing on a mix to mix basis.

These products, High Strength Filler, Glue and Filleting Filler and Sanding Filler, **are the only filler products which will be sold to general users of the Bote-Cote epoxy system.**

We value our users health and their wellbeing

Manufactured by: BoatCraft Pacific Pty. Ltd. Proudly Distributed by: DRIVE Marine Services

For a Comprehensive Range of Boat Building requirements including

Bote Cote 2:1 Epoxy Resin, Fillers, Pour-on-Gloss Decoupage Coating, COP-R-BOTE Epoxy Antifouling, AQUACOTE Polyurethane Coatings, PURBOND Waterproof Single Pack Glue, TREDGRIP Rubberised non-slip Paint, Fibreglass & Carbon Reinforcing Fabrics, FERONITE Rust converter and Primer, Marine, Proof & Aircraft Plywoods, NIDAPLAST Composites, Silicon Bronze Fasteners, DAVEY Traditional Bronze & Marine Fittings

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POWDERS TO USE

If your plans suggest	We recommend you use	Notes.
Micro-fibres	Glue/Fillet Filler	Glue/Fillet filler is about 1/3 rd of the price. Micro-fibres are actually cotton , and can allow water to wick into the epoxy .
Wood-flour, sawdust, hair, feathers, talc, cotton flock etc. etc. etc.	Glue/Fillet Filler	Wood flour is nothing more than sanding dust . Many other things also thicken epoxy. It has little to recommend it other than costing very little. Organic materials can absorb moisture (cotton up to 8% by weight) expand and cause cracking. None of these are thixotropic, they can and do sag and flow out of the joint before the epoxy sets.
Cab-O-Sil Fumed Silica Colloidal Silica	Glue/Fillet Filler	The silica's are pure thixotropic agents . It does not need very much (1 or 2%) of them to thicken epoxy. Fillets and glue made with them are mainly very expensive pure epoxy . Glue/Fillet filler includes a bulking filler to reduce the cost of fillets and glue with no loss of strength. Glue/fillet filler also includes a dust suppressant . It is tinted brown to reduce finished paint shading problems. These silica products can be very (even dangerously) dusty .
Microspheres	Sanding Filler	Sanding Filler is considerably less expensive , has better dust suppression and is tinted to reduce paint shading problems. (White is also available.)
Q Cells	Sanding Filler	Sanding Filler has a wood coloured pigment to reduce paint shading problems, has a dust suppressant and is much easier to use . (It is also available in white for use when the finish needs a white undercoat.)
Microlight	Sanding Filler	Sanding filler does not have a manufacturers warning not to use it under dark coloured paints or on surfaces subjected to highish temperatures.
Blue Adhesive Blend	High Strength Filler	High Strength Filler has extra strength components blended into it for critical strength situations . Typically used around mast steps, bridge deck beam connections and around rudder posts and tubes.

Epoxy Filler Powder Product Range

Glue/Fillet Filler Powder (Yellow Bucket Tops)

Buckets

120grams (0.8L approx),
400grams (2.2L approx),
700grams (4L approx)

Bags

2.5kg (10 litres approx),
5kg (20litres approx)

Sanding Filler (White Bucket Tops)

Buckets

75grams (0.8L approx),
220grams (2.2L approx),
400grams (4L approx)

Bags

2.5kg (20 litres approx)

High Strength Filler (Red Bucket Tops)

Buckets

100grams (500ml approx),
190grams (0.8L approx),
450grams (2.2L approx),
850grams (4L approx)

Bags

2.5kg (10 litres approx),
5kg (20litres approx)

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BEVERLY HILLS NSW 2209 **DAVEY** Traditional Bronze & Marine Fittings
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