



Three reasons not to thicken epoxy with sawdust – and what to do instead

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By [epoxycraft](#) on February 29, 2016 [Blog](#), [Opinion](#)

Do you ever need to thicken and change the colour of your epoxy – to fill a split or a screw hole perhaps? Adding sawdust or sanding dust to it can seem like a resourceful way to thicken epoxy but that's not actually the case. Technical expert Hamish Cook explains why.

1. The chemistry doesn't work

Adding wood dust to epoxy doesn't make it thicker.

The first reason you shouldn't thicken epoxy with sawdust is down to basic chemistry; adding wood dust to epoxy doesn't make it thicker. The two just mix and the epoxy is in fact free to drain right back out again when it comes into contact with an absorbent surface, such as end grain.

It's best seen to be understood.

Take a look at the photos below. On the left, you have epoxy mixed with sanding dust. On the right is epoxy mixed with [WEST SYSTEM 406 Colloidal Silica®](#). Both were mixed to a peanut butter consistency.

Notice the epoxy draining out of the sanding dust mixture on the left:



Ultimately, if the epoxy drains out it will not bond properly.

2. Sawdust is often dirty

When using such a high-quality epoxy it seems a shame to risk the end result with some dust from the floor!

By the very nature of how it's created sanding dust or sawdust isn't always clean. If it's been on the floor it can be contaminated with dirt, oils or moisture, all of which will ultimately affect how well the epoxy bonds.

That's without mentioning the inconsistent particle size of the dust; even if the epoxy does bond this will affect the finish.

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3. It's a fire risk if not used carefully

WEST SYSTEM® epoxy resin and hardeners are classified as non-flammable, because their flash points are greater than 100°C and they evaporate slowly. That being said, in our safety literature we advise against mixing sawdust with our hardeners alone, as this can be a combustion risk.

Air and atmospheric water react with the amine hardener to generate heat and there is a risk that the sawdust will spontaneously combust if this heat is not dissipated quickly enough.

So how should I thicken and colour my epoxy?

In spite of all of these points above, you can indeed use sawdust to colour your epoxy. The trick is to take a bit of care.

If you're using [WEST SYSTEM 105 Epoxy Resin®](#) and [205 Fast Hardener®](#), your best bet would be to add WEST SYSTEM 406 Colloidal Silica. This will thicken the epoxy. Then if

you want to tint the mixture, you could carefully add some fine sanding dust or wood flour. Just make sure the particles are very fine dry and very clean. Your projects deserve more than dust from the floor!