
Subject: Material question

Posted by [Sepia100](#) on Tue, 09 Oct 2012 07:43:24 GMT

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Hi everyone,

Wich materials can I use to make a drinking cup from?

Waterproof and what can be the minimal wall tickness

Thank you in advance

Subject: Re: Material question

Posted by [Sepia100](#) on Tue, 09 Oct 2012 07:46:08 GMT

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I think i know already, It got to be ceramics

Subject: Re: Material question

Posted by [virtox](#) on Tue, 09 Oct 2012 07:49:31 GMT

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Correct

You can find all material details here:

<http://www.shapeways.com/materials>

Cheers,

Stijn

Subject: Re: Material question

Posted by [Youknowwho4eva](#) on Tue, 09 Oct 2012 14:31:39 GMT

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To add on to what you found and Virtox added, Ceramics is the only certified food safe material. This is because the glazing process is a certified food safe process. So if you use another material, it would be up to you to use a food safe process to make it work.

Subject: Re: Material question
Posted by [Sepia100](#) on Wed, 10 Oct 2012 21:01:33 GMT
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Okay I Uploaded my model! Do you think 2,5 mm wall thickness also be strong enough?

have any experience with it?

Tnx

Subject: Re: Material question
Posted by [virtox](#) on Thu, 11 Oct 2012 09:01:48 GMT
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The minimum wall thickness for ceramics is 3 mm or more depending on the size:

Min Wall Supported:

If bounding box x+y+z is 120-200mm: 3mm

x+y+z is 200-300mm, min wall should be 4mm

x+y+z is 300-400mm, min wall should be 6mm

And if you want a hollow cavity in a model there needs to be a hole for the "support" material to get out:

Min Escape Hole:

10-15mm diameter

You can read all the details here:

<http://www.shapeways.com/materials/ceramics-design-guidelines>

Subject: Re: Material question
Posted by [Sepia100](#) on Thu, 11 Oct 2012 19:51:38 GMT
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Thanks for your help didn't notice it before I modeled a hole in it.

All of sudden it's way more expensive almost twice as much, and the hole is not showing up in all the pictures

Is this normal?

Subject: Re: Material question
Posted by [mkroeker](#) on Thu, 11 Oct 2012 20:21:20 GMT
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Ceramics is special in that it is priced per surface area, not per volume. (Suggests that the glazing is an order of magnitude more expensive than the clay).
So adding holes can actually make your model more expensive in ceramics.
