

Transparent materials

Posted by A. Square - 2013/06/25 20:27

I have a few questions about the various transparent materials that Kraftwurx offers:

Are there any comparison pictures available between the different transparent materials? Something like the picture of Vero Clear over a page of text would be nice, because most of the other clear materials don't really have pictures in front of other objects to show how transparent they are.

Is there any more information about Nano Detail Crystal? The material information page is pretty sparse.

What are the design specs for SLA Plastic Water Clear? The material information page doesn't list minimum wall thickness and detail size.

On the Vero Clear page it says "Items maybe frosted or glossy depending on surface orientations." This is concerning to me: does it mean that some surfaces of the model are clear and some are frosted? For me, the reason to use this material is to have the model be clear, like the image of the tube in the hand, not frosted like the image of the horse. Is there any way to control this?

Thanks!

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Re:Transparent materials

Posted by Marco CM - 2013/06/26 16:34

Hello,

We do not have very much documentation on the clear materials for the time being. However I will try to explain the difference and quality of the materials.

Vero Clear is an Objet brand acrylic that appears like frosted glass right out of the 3d printer. Vero Clear can be sanded / polished to a glossy clear finish.

Water Clear and Dura-Clear are both SLA plastics. They 3d print semi-glossy and are the most optically transparent materials we offer.

Nano-Detail Crystal is also like frosted glass in appearance, but cannot be sanded / polished to become more transparent. Nano-Detail Crystal can produce moving interlocking parts, other clear materials cannot.

Please let me know if I have answered your questions.

THank you,

Marco CM

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Re:Transparent materials

Posted by A. Square - 2013/06/26 19:12

Thanks, that answers most of my questions, but you didn't mention what the minimum wall thickness and detail size are for Water Clear.

What is the difference between Water Clear and Dura-Clear? You say that these are the most optically transparent; are they comparable to the picture of Vero Clear after polishing (where text can be clearly seen through a piece)?

The parts that I'm interested in printing will cost hundreds of dollars, and for that amount of money I don't want to be disappointed with the finish and clarity. Photographs of the same model in different materials place in front of something like text would be very helpful.

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Re:Transparent materials

Posted by Marco CM - 2013/07/02 09:53

The image below is a Water Clear part that has been polished to a high gloss.

http://kraftwurx.com/images/fbfiles/images/content_waterclear.jpg

The image below shows another polished Water Clear part.

http://kraftwurx.com/images/fbfiles/images/content_watershed.jpg

Be aware a part's surface details can keep the part from appearing completely clear. It depends on the part's geometry as to how optically translucent the will be. Water Clear and Dura Clear are identical in appearance, but Dura is suppose to be stronger and more impact resistant. The minimum wall thickness recommended for both is 1.5 mm

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Re:Transparent materials

Posted by A. Square - 2013/07/02 14:06

Thank you for the reply and the pictures, but it appears that you've made an error: your materials page for Water Clear says that the formal name for the material is DSM Somos WaterShed Clear 11122. The manufacturers website for that material shows the fishbowl photo that you posted, but the other photo that you posted, of the bottle, comes from the page for a different material, DSM Somos WaterClear Ultra 10122. I looked to see if you offer this second material, but as far as I can tell you don't.

Am I missing something?

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