Subject: Frosted Detail and Spraypaint (Also, Material Info Wiki?)
Posted by artfulshrapnel on Mon, 23 May 2011 17:08:40 GMT
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So, I took my latest batch of prints, and based them with matte black Krylon spraypaint for painting, as I usually do. Everything is fine, except for those in the new Frosted Detail material.

They never dried. The paint has reacted with the surface of the plastic somehow, and formed a sticky, slightly greasy coating. I'm trying to figure out how they might be saved (Some sort of solvent reaction with the paint might help remove it? Or a hardener? Does anyone know what the hardener/accelerant is in sparaypaint?)

This gave me an idea. Something simple and low-maintenance that could really help improve the community. Perhaps there should be a "user experience" page for each material. Something like a Wiki editable by any user on the site, where we can leave notes for each other about processes that do and do not work, problems we've had and how we fixed them, etc.

Any thoughts on this from the powers that be?

Subject: Re: Frosted Detail and Spraypaint (Also, Material Info Wiki?)
Posted by Jettuh on Mon, 23 May 2011 17:15:48 GMT
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I used a small coat of primer on my model,, dried in just 10minutes (had them laying in the sun)

So no problems here at all?

Subject: Re: Frosted Detail and Spraypaint (Also, Material Info Wiki?)
Posted by CustomBitz on Mon, 23 May 2011 17:23:09 GMT
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Maybe it's just the Krylon brand stuff? What kind of spraypaint do you use, Jettuh?

Subject: Re: Frosted Detail and Spraypaint (Also, Material Info Wiki?)
Posted by artfulshrapnel on Mon, 23 May 2011 17:37:36 GMT

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Point. I shouldn't have been using cheapass spraypaint for my fancy miniatures I guess...

Are you sure that's Frosted Detail, Jettuh? I know I've had success with the other detail materials, and WSF.

Subject: Re: Frosted Detail and Spraypaint (Also, Material Info Wiki?)
Posted by Jettuh on Mon, 23 May 2011 17:47:06 GMT
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mine is a cheap ass primer as well
It's from the brand Gamma (dutch) was a spray can from â‚¬3,-

and no its not Frosted Detail, but Frosted Ultra detail

Subject: Re: Frosted Detail and Spraypaint (Also, Material Info Wiki?)
Posted by artfulshrapnel on Mon, 23 May 2011 18:05:15 GMT
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Ah, okay. Just checking!

Well, I am in a very humid area. Perhaps the water in the air reacted with the paint a bit, made it tacky?

I'll try washing it off with a dessicant like rubbing alcohol, see if that helps it set up.

Subject: Re: Frosted Detail and Spraypaint (Also, Material Info Wiki?)
Posted by Vandil on Mon, 23 May 2011 18:27:31 GMT
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I sprayed my FUD parts with Krylon flat black primer.

No issues.

One guys FD stuff looked yellow and oily was yours like that? the few FD parts I got in were white.

Subject: Re: Frosted Detail and Spraypaint (Also, Material Info Wiki?)
Posted by Jettuh on Mon, 23 May 2011 18:28:51 GMT
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ohhh,, dont forget to wash your models before painting.. some of the wax can still be attached to the surface

and also spray from some longer distance?

Subject: Re: Frosted Detail and Spraypaint (Also, Material Info Wiki?)
Posted by stannum on Mon, 23 May 2011 23:20:10 GMT
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Someone posted this long ago http://www.3dprintcraft.wikispot.org/

BTW, read the spray label... it probably says "surface must be clean". Some people will add "so after washing, use gloves so you don't add finger grease back". ^_^

Subject: Re: Frosted Detail and Spraypaint (Also, Material Info Wiki?)
Posted by Atropos907 on Thu, 26 May 2011 05:40:58 GMT
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I had the same issue
Ive used a lot of detail and flexible materials with no problems ever.
Same proceedure every time, hot soapy water and 400-600 grit wet dry sandpaper, sanded wet.
Then brushed with soapy toothbrush, hard bristles. left to dry in the sun, or using a hot air gun.

Primered with rustolium automotive primer or krylon plastic primer. I had the same problem with the frosted detail yieling a non sticking gunk. I was curious if the problem might have been absorbed water that was very slow to let go. Ill try to clean this off and see if something else works. This batch was done with some detail and the detail turned out just fine.

Subject: Re: Frosted Detail and Spraypaint (Also, Material Info Wiki?)
Posted by ErkDemon on Wed, 15 Jun 2011 18:23:16 GMT
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A technical/materials wiki would be a quite excellent idea, IMO.

(my guess is that the icky gunk might be a reaction between the paint solvent and some residual wax).

Subject: Re: Frosted Detail and Spraypaint (Also, Material Info Wiki?)
Posted by ana on Wed, 15 Jun 2011 19:23:41 GMT
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A community-generated wiki, which would ideally address materials, is something I've wondered about.

Our forum is filled with, I'd wager, some of the best advice about 3D design, and 3D printing in the world. That's pretty exciting, and it would make perfect sense to enable everyone to contribute in one place and use it as a reference for everyone who comes along in the future.

I'm trying to figure out what engagement might be like before embarking on something like this.

Any further thoughts?

Subject: Re: Frosted Detail and Spraypaint (Also, Material Info Wiki?)
Posted by Atropos907 on Wed, 15 Jun 2011 21:19:48 GMT
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Back to the origional topic.
I tried a few more things.

First I tried a desperate superglue then prime. that was pretty tough. But I dont want the fumes of superglue over that surface area.

I have now tried about 5 types of primer all with the same problem.
Im scrubbing the hell out of these with brushes and sandpaper but primer still goes goey or doesnt stick. Ive used solvents such as Dichlormethane and acetone, methanol and IPA. These are solvents I typically use at work to remove waxes or waxy materials. Almost nothing that isnt glass or metal can stand against dichloremethane. Since I didn't want to melt the part I would use a Qtip and scrub it with small amounts of dichlore... again to no avail. I tried soaks in IPA and

methanol. and limited time soaks in Acetone... to remove previous primer attempts since the gouey primer is really annoying to strip mechanically. I ensured the part was degassed and baked in a toaster oven to remove water. What am I doing wrong? Or do I honestly hold too high of a standard for how primer should work. The primers are all substantialy tougher on SWF or TD...

I think Im going to have to go back to using transparent detail for models. I think this stuff has its place as mastering material due to higher resolution and higher temperature endurance. Factor in the fact that nothing seems to want to stick to it very well and you have an excellent master.

has anyone tried a primer that works? Whats your technique for cleaning? And have you actually done a scratch test against other materials with the same primer to see if strength or hardness suffered?

Any help would be appreciated.

Subject: Re: Frosted Detail and Spraypaint (Also, Material Info Wiki?)
Posted by bdeaver on Thu, 21 Jul 2011 12:25:04 GMT
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So, just to clarify things for me, you're saying that TD works well for painting, and FD would work well for an unpainted master model that you might make molds from. Correct?

Thanks.

Subject: Re: Frosted Detail and Spraypaint (Also, Material Info Wiki?)
Posted by Atropos907 on Thu, 21 Jul 2011 15:44:30 GMT
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That is my experience, yes.

The FD does indeed appear to withstand heat better than TD but also seems to keep its wax better, wheras TD uses a gel that seems easier to remove with detergent, mechanical scrubbing, and sanding. That said while ive tried painting both, I have not tried casting FD. I dont know if/how the wax may interact with the particular brand of mold you are using so, as always, test first in a pressure chamber after degassing the mold and then inspect to see if a chemical interaction caused bubbles or some other strange effect in the mold.

I have one more data point since the last post which is, I took a FD model, and baked it several

times in a toaster oven, wrapped in foil so it didnt get directly radiated by the element. I had suspected the model was holding water, it appears it was actually holding wax. I baked with the oven set to "150" F for about 2 minutes and let the assembly cool. I did this three times. WIth each bake I saw trace amounts of wax collect at the base of the model, or at potential minima, even when I thought it was wax free. I believe the tinny pores of the FD (I have not tried any FUD) hold wax amazingly well. Multiple gentle bakes might get the wax out... but they might also destroy the model. I didnt bother continuing this cycle to get rid of the wax, I gave up. THis wax is also resilient which is why I think sand paper didnt do what I expected. I think I was just smearing wax on the model every time I sanded it with a 400 or 600 grit wet dry. I dont know what solvent one might use to remove the wax that wont attack the plastic.

I also dont know what temperature the oven actually got the model to, so if you try this do it gently for short bursts and make sure the model is in a pocket of air protected from direct radiation with 1 layer of foil. I was using oil free foil but I think normal foil will work just as well. dont wrap the model tight with the foil, just make a mostly closed bubble.

Subject: Re: Frosted Detail and Spraypaint (Also, Material Info Wiki?)
Posted by Atso on Sun, 24 Jul 2011 23:29:01 GMT
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HI,

Have you tried an ultrasonic cleaner? I bought one a couple of weeks ago (cheap one off ebay) which works a treat cleaning my models. A couple of cycles through with water and a couple of drops of washing up liquid and the wax is gone!

No problems painting here. I'm using cheap car primer (Halfords own brand in the UK) which goes on a treat and can be rubbed down easily after 24 hours.

Subject: Re: Frosted Detail and Spraypaint (Also, Material Info Wiki?)
Posted by billy57 on Wed, 12 Oct 2011 06:55:15 GMT
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Just to say that I have this problem as well and would be pleased to hear about a method that works. I cleaned the model as thoroughly as I could beforehand.

Strangely, the primer dried just fine, but the next layer is still tacky now, three days later.

Subject: Re: Frosted Detail and Spraypaint (Also, Material Info Wiki?)
Posted by coolbutpointless on Wed, 12 Oct 2011 22:24:26 GMT
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I tend to do 10 "mist" coats of primer(spray a mist from 3-4 feet so it sort of just speckles what you're coating and then wait 1 or 2 minutes, repeat until the model is covered evenly).

Then do 20 coats of paint in the same fashion as the primer. It might be overkill, but I've never had an issue with paint not drying using this method. It just takes forever.

As for cleanup, I've never done it to any of the materials offered here, but I use a non-acetone nail polish remover to clean paint off my fingernails and the surrounding skin. Perhaps that would work to remove paint that's still tacky?

Subject: Re: Frosted Detail and Spraypaint (Also, Material Info Wiki?)
Posted by billy57 on Thu, 13 Oct 2011 05:38:59 GMT
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Thanks Coolbutpointless, will try that next time.