Oil on stock diamond stones... your thoughts?

Posted by razoredgeknives - 20 Jun 2012 23:13

---

so I just noticed that a few sets of my stock diamond stones (400/600, 800/1000) had rust spots on them! didn't think I put them away wet since I always lay them out on a towel to air dry. anyway, i was just wondering what you guys think about putting a very little amount of oil on each stone and rubbing it in? I'm not talking about an abundance of oil like on normal stones... just enough to keep it from rusting. and just to let you know, I already did this to the listed stones (with weapon shield clp oil) ... they look fine but ill try to report back. I. normally just jump right into stuff and it costs me later but oh well lol.

==========

Re: Oil on stock diamond stones... your thoughts?

Posted by BassLakeDan - 21 Jun 2012 21:09

StevenPinson wrote:

I would just clean them with a little 91% ISO Alcohol and throw them in a box with a desiccant pack.

But, anyway, not trying to out chemistry you here ☺, but the problem with that is that water is 100% soluble in alcohols (well except polyvinylalcohol anyhow..) It is also hydroscopic as hell so it just sucks water out of the air. That is why the bottle you have of the ISO you mention is labeled as 91%. It is 91% alcohol and 8% water. The alcohol has a very high vapor pressure but the water does not, so after a short time guess what? The Alcohol is long gone but the water remains. You only get 100% under lab conditions, and then only for a short time..

Anyway the VCI is going to a be a great fix for the issue especially if the storage periods are long and unsupervised. Say for instance, you pack away you WEP kit for a while, take a vacation, Winter over in Mexico, like it so much you hang out for a month or two longer than you planned. During that time your kit is sitting in you garage workroom where the RH is 100% during the season.. The VCI prevents the nasty that might be, otherwise, waiting for you upon your return !

==========

Re: Oil on stock diamond stones... your thoughts?

Posted by mark76 - 22 Jun 2012 05:15

BassLakeDan wrote:

mark76 wrote:

..

So what is the iron in here? ...

yes the steel is from the debris of sharpening but also,the base material of the diamond plates is steel, all of which is an alloy of iron

Have you got any idea what the base of the diamond plates is made of? I usually use a liberal amount of water to clean them, but that might not be the best idea...

And regarding the iron from te sharpening debris, wouldn't it be better to let it rust away? The debris just fills the space between the diamonds, which makes the plates less effective, I'd guess.

==========

Re: Oil on stock diamond stones... your thoughts?

Posted by RalphHoneycutt - 22 Jun 2012 10:31

_____

What do you think about using a product such as Balistol which emulsifies with water and has multiple sportsman applications? I have not yet tried it. I was looking for a chemistry lesson on this before I try it. I use it on firearms as a solvent/lubricant. The Ballistol odor may result in the user being exiled from the house to the garage as it smells like dirty socks.

Ralph

==========

Re: Oil on stock diamond stones... your thoughts?

Posted by wickededge - 22 Jun 2012 10:39

_____

mark76 wrote:

Have you got any idea what the base of the diamond plates is made of? I usually use a liberal amount of water to clean them, but that might not be the best idea...

The base material nickel plated steel. I also use water to wash the stones and haven't had any issues w/ rust but I live in a VERY dry place. With all the pushing and shoving of the diamonds into the base plate, it wouldn't be surprising to have the diamonds puncture through the plating. I imagine that moisture can get into any imperfection in the nickel plating and rust the steel underneath.

==========

Re: Oil on stock diamond stones... your thoughts?
Posted by BassLakeDan - 23 Jun 2012 00:09

---

mark76 wrote:

... wouldn't it be better to let it rust away? The debris just fills the space between the diamonds, which makes the plates less effective, I'd guess.

You might be on to something there, that is an unconventional but very interesting idea. I once made a post in another topic thread about the possibility of cleaning ceramic stones with acids, which is the same methodology, whereby you use reduction chemistry to your favor (eat the 'bad stuff' and leave the good). Such an approach is safe with ceramics but there is danger here with the steel base.

==========

Re: Oil on stock diamond stones... your thoughts?
Posted by mark76 - 24 Jun 2012 12:54

BassLakeDan wrote:

You might be on to something there, that is an unconventional but very interesting idea. I once made a post in another topic thread about the possibility of cleaning ceramic stones with acids, which is the same methodology, whereby you use reduction chemistry to your favor (eat the 'bad stuff' and leave the good). Such an approach is safe with ceramics but there is danger here with the steel base.

Yes, that inspired me. Soon after your post I ordered some oxalic acid (apparently also the/an active ingredient in Bartender's cleaning stuff), which came in the form of crystals that should be dissolved in water. It did... nothing. Then I did a PH test on various solutions and the stuff had a PH of... 7! So apparently not (oxalic) acidic. Then I got into an argument with the supplier of the stuff and after having been called names (my first experience in this with a webshop) I managed to get my money back.

That was my attempt to obtain an acid for cleaning ceramics. Any ideas for other places where I might be able to obtain an acid that may helps in cleaning ceramics? Where I live this is quite restricted and I had no luck at drug stores or pharmacists.

==========