Found an easy way to clean your Diamond Stones

Posted by DanClement - 11 Aug 2012 13:29

Some weeks back I had issues with my diamond stone rusting after I would scrub them with soap and water and let air dry. Someone suggested that I put a light layer of oil on the diamond stones. I use Ballistol since it is non-toxic and noticed even after what I thought was a through cleaning, the ballistol was lifting metal shavings out of the pores of the stones.

Long story not so short, dont bother with soap and water as there is no need. Put some ballistol on your diamond stones, lightly rub it with your finger for about five to ten seconds and a wipe with a clean cloth. All of the crud in your diamond stones will simply be gone and you are left with pristine diamond stones which also will not rust.

Have not tried to use another gun oil, they may work also. The ballistol is non-toxic and works so great. Try it, you will not be disappointed.

==========

Re: Found an easy way to clean your Diamond Stones

Posted by WayneReimer - 17 Sep 2012 02:09

Good tip. The one thing that I might have a concern with since you said it's a gun oil is

whether it has any solvents of any sort in it, and if so how might it interact with the medium holding the stone itself together in the long term.

I would think almost any light oil...perhaps even a light vegatble oil, may have a similar effect. I know we have a bottle of sunflower oil at home...I may give it a try, and tell my wife I made a salad for lunch when she notices the oil in the bottle is depleted :^)

==========

Re: Found an easy way to clean your Diamond Stones

Posted by ApexGS - 17 Sep 2012 15:01

I use Breakfree CLP because it's one of my go-to cleaning agents here in the shop. It lifts dirt very well, which is a main reason I keep coming back to it for gun cleaning... after a thorough degrease on all the parts, oiling it with CLP and wiping it down continues to pull dirt out of the pores of the metal. I'm fairly sure that it won't weaken the bonding agent for the stones, but I have a large bottle of Gunzilla (which is all natural and solvent free) if it would happen to.

On very loaded up stones, like my 100 stone after reprofiling a kukri recently, I use aerosol and blast it clean. Leaves a heck of a smudge of nasty dull gray filings in the bottom of the catch pan too!

==========

Re: Found an easy way to clean your Diamond Stones

Posted by DanClement - 17 Sep 2012 20:20

_____

The reason I use Ballistol is because it is not toxic. As such, I do not believe that it has the traditional solvents that other gun cleaners do. Ballistol while used for cleaning guns is really a multipurpose cleaner and lubricant. It can be used on guns, knives, wood, plastic and just about anything else.

I have had no issues with the diamond stones and I use liberal amounts of the ballistol. It sure beats having to clean using soap and hot water which caused rust issues on the diamond stones.

==========

Re: Found an easy way to clean your Diamond Stones

Posted by AnthonyYan - 18 Sep 2012 03:28

_____

From what I've read, there are a couple of different ways abrasive diamonds are bonded. But the most common way is to use electroplating of nickel to bond the diamonds to a steel surface.

Nickel is a hard and corrosion-resistant metal. This is why DMT and Eze-Lap, etc., say it is okay to use water on them with no worries. Nickle is sometimes used as a corrosion-resistant layer, because like aluminum, it tends to form a protective oxide layer, that is mechanically strong and stays bonded to the surface. In contrast, when iron oxidizes as Fe_2O_3, the oxide layer is mechanically weak, and it flakes off easily as rust which exposes more iron for corrosion. (There are also other forms of iron oxide; you can learn about them on wikipedia.)

en.wikipedia.org/wiki/Nickel

en.wikipedia.org/wiki/Iron (III)_oxide

So, I would not be worried about using solvents (or lubricants with solvents) on diamond stones. But I'm not an expert, so if anyone who is more knowledgable is around, please chime in. ☺

Personally, I've had no problems with using WD-40 on my DMT diamond stones, and WD-40 has an extremely high percentage of solvent.

Sincerely,

--Lagrangian

P.S. On the other hand, I would be very hesitant to use solvents on diamond films where the substrate is plastic, because solvents (and also some petroleum products) can dissolve/damage plastics.

==========

Re: Found an easy way to clean your Diamond Stones

Posted by AlexDoherty - 18 Sep 2012 04:31

_____

I love clenzoil. I use it for everything it's a great clp and it's safe for fine wood or plastics. I don't know if it's food safe but it works great on the WE stones as well. So far it's the best all round gun oil I've found.

==========

Re: Found an easy way to clean your Diamond Stones

Posted by mark76 - 23 Sep 2012 10:47

_____

Thanks! That sounds like a great idea I'll immediately try next time I use my WEPS!

==========