



Knife Care Instructions for Carbon steel knives.

About Carbon knives

In South Africa we have become so accustomed to “factory produced stainless steel knives” that very few people know and appreciate the hand-forged, simple carbon knife.

Carbon knives are different from Stainless Steel knives in that they:

- Have no or less chromium, vanadium, and other additives added to the iron during manufacturing.
- It is usually a simple mixture of Iron, Carbon and in certain cases a little bit of chromium.
 - o Examples include:
 - 1070
 - 1084
 - 1095
 - 5160 (spring steel)
 - 52100 (bearing steel)
- They can be heat-worked and forged, providing the blade smith a blank slate to work from, with the only limiting factor, his/her imagination.
- Most of the wonderful blades throughout history were simple, hand-forged carbon blades.

Due to the chemistry, they will oxidise in two ways

- **Rust** (Hematite) is a very aggressive oxidation that will weaken and over time destroy the blade if not taken care of (see below for instructions on how to avoid this)
- Develop a “**patina**” (Magnetite) during normal use.
 - o The patina is not to be confused with rust (as it is not a destructive process)
 - o It is only the outer surface that is affected and forms an isolation layer, protecting the blade from rust.
 - o This patina is caused by the chemical reaction between the metal and certain materials like blood, fruit, etc.
 - o The patina is a blue-grey to brown (for the not-colour blind) that “stains” the knife,
 - o Over time, this patina grows and makes each blade totally unique.
 - o Like a bronze statue, the patina can be removed by light sanding, buffing, etc., but that is a travesty!!!
 - o Your knife is part of you, it will develop with you. Your adventures will leave a reminder on its blade.

So why invest in a knife that can rust?

- Forged blades are unique. It is only with great effort, that a few of the best blade smiths, will be able to exactly reproduce a knife (but none will try 😊)
- With each knife, the blade smith puts a little bit of himself/herself in each blade that he/she makes.
- They are excellent cutters, slicers and stabbers and will retain an edge, far better than any “Chinese cheapy”.
- Usually easy to sharpen and keep fine honed.
- Tough as nails, (although you can, please don’t cut nails with it)
- In our crazy modern life-style of “buy and discard”, a small thing like a knife, well made by the hands of a skilled craftsman, still has a certain appeal.



Care instructions

Blades & Sheaths

- Damascus and carbon steel knives, axes and swords have been around for thousands of years, so with care, you can own a future antique!
- Carbon and Damascus steels will rust if not cared for. To prevent rust, do not store your knife in its leather sheath (a sheath is to protect you from the knife 😊).
 - o The chemicals used in tanning of leather sometimes react with moisture in the air, leading to corroding of even stainless steels!
 - o Rather oil or wax your blade and wrap it in a soft cloth for storage.
 - o Use the sheath only when you are using or wearing the knife. Wipe off the oil or wax before using.
 - o For very long term storage, store your knife with the sheath, not in it!
- Do not use any kind of oil on the sheaths; this will cause them to soften, weakening their protective function, softening glues, sealants, and dyes.
- Never use knives to pry, dig, or chop. Get a pry bar, shovel or axe instead.
- The weakest part of any knife is usually the tip, which happens to be the most abused part! Take care of the tip, and the rest of the blade will follow.
- Never throw knives, unless the knife was specifically designed for that use
- Some carbon steel knife blades are blued. Bluing is a very thin patina that can eventually wear away, leaving a grey metal finish. These are used to lightly protect or cosmetically enhance the blades. They are rust inhibitors, not rust preventatives.

Cleaning

- Do not wash your hand-made knife in a dishwasher.
- Wash by hand in warm soapy water; do not let it soak in the water. Dry immediately, don't leave it to drain in the drying rack.
- Oil the knife with olive oil if it is used regularly in the kitchen or with a gun oil or Museum / Renaissance wax (www.harveyswax.com) when storing.
- If rust spots appear, rub the blade with a metal polish like Brasso or a very fine (0000) steel wool, then oil or wax the blade.
- Don't confuse rust with a patina or stain that may appear on your knife after cutting something acidic. This is normal and adds to the character of your knife.
- Do not use oil with silicon in it as this can cause rust. Do not leave knives and sheaths in direct sun light.
- Ultraviolet light oxidizes woods and bleaches the colour of some gemstones.

Handles

- Wood handles usually benefit from a light coating of furniture wax or Museum / Renaissance wax and a good hand rubbing.
- Heat bakes the protective oils out of most hardwoods and weakens adhesive bonds. Prolonged exposure to the sun and heat can also destroy knife sheaths.

Credit

Credit for the Care Instructions to Kevin Harvey, Heather Harvey (Heavin Forge) & Neels van den Bergh (Black Dragon Forge). Versions of this information can be found on their respective websites.

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