Information about soldering materials & tools

Soldering set, Starter set for silver soldering 21252A)

Get started with silver soldering with this starter kit. The kit contains: mini torch (31162B), soldering plate (234415), impact soldering kit (21251B-0.8mm), Fluss H, Degussa (31142-100g), soldering steel, soldering spiral, 1 pair of soldering tweezers, flux brush.

Mini burner. For safety reasons, the burner may only be used for a maximum of 5 minutes at a time, this is plenty of time for small solderings. Gas (lighter gas) for the torch is not included. This small torch is good for small soldering jobs, but cannot be used for melting bigger amounts of metal.

The **soldering pad** is made of skamolex, a kind of compressed stone that can withstand high temperatures. Always use the pad, as a base for soldering.

The silver solder set consists of 3 different wires H (hard), M (medium) & (V) Easy. The wires are 0.8 mm each of 45 cm. (H) Hard can be recognised by a circle formed at the end of the wire and has a melting point of approx. 770°. (M) Medium can be recognised by an M/W shaped at the end of the wire and has a melting point of approx. 730°. (V) Easy can be recognised by a V shaped at the end of the wire and has a melting point of approx. 730°. Always use the opposite end of the wire so you know which is which. Very small amounts of solder can be used for various soldering applications, you probably need less than you think. As a starting point, use H (hard) when soldering, you can use M (medium) & V (Easy) if you have an item, with several different solders on the same item, to ensure that the previous solder, does not also melt during the next soldering. 925 silver has a melting point of approx. 810° - 896° depending on how much silver is melted at once. This is why silver solder is used for soldering, as it melts before the item you are working with, starts to melt.

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Flux (also known as fluss) is used to clean the surfaces you want to solder together, silver solder cannot flow/melt if the surface is dirty. This type of flux is a paste, it can be used as is or mixed with water. It's a matter of preference whether you choose one, or the other. If the paste has been left open for a long time, it tends to dry out a bit, so add water directly to the pot and stir with a soldering iron. Flux leaves a small glass-like surface after soldering, that needs to be cleaned off with acid. Many types of acid can be used to remove this layer, but the easiest to use is regular citric acid (do not use a file to remove flux residue as it will damage the tool).

How to make an acid bath: boil some water and pour it into a small bowl or similar, preferably microwave safe. Mix the citric acid with the hot water, about 1 tsp. citric acid to 1.5 dl water. Leave the item in the bath for 5-10 minutes, or longer if it is stubborn. It is important that the water is hot, otherwise it will not have an effect, so heat the acid water in the microwave as needed, WITHOUT THE JEWELLERY IN. Steel must not touch the citric acid bath, so do not use soldering tweezers to pick up the item, use plastic tweezers or something else to fish it out. You can reuse the acid bath, either until it turns a green colour, or until you no longer experience any effect. You can also use an old filter coffee maker for the acid bath, to ensure that the water stays hot. This results in a better and faster result.

A soldering needle is a pointed steel stick with an aluminium handle, it is used in soldering, to place the solder exactly where you want it. Dab a little flux on the tip and it can now be used to pick up small pieces of solder and place it. Also use while soldering, if the solder gets misplaced

Soldering coil is used for positioning and holding items. It can be shaped as desired. Another advantage is, that by placing an item on top of the spiral, the flame can get under the item and heat from below if needed.

Soldering tweezers are used to hold workpieces during soldering. It has a heat-insulating grip, so it can be held even under heat. The tweezers are self-tightening, so they can hold on to many types of workpieces.

A flux brush is used to brush flux onto a workpiece. If you use the flux paste as it is, the soldering needle is better for placing the flux. However, if you choose to mix the flux with water where it becomes very liquid, it is perfect for brushing the flux, right where you want it.