SILVER TARNISHING

Silver jewellery and silverware are popular, but unfortunately the precious metal has a weakness - it tarnishes, sometimes faster than we want or expect.

The question arises 'Why does silver turn black when exposed to air?'. The reason for this is the particular sensitivity of the silver surface to sulphur-containing gases, such as those found in the ambient air. Traces of hydrogen sulphide in the air, in concentrations that we cannot even smell, are enough to discolour silver. Even at room temperature, a reaction takes place between hydrogen sulphide and silver, which sets a process in motion. As a result, silver sulphide forms on the surface of the silverware and the silver tarnishes. Tarnishing is an oxidation of silver jewellery that usually appears as a matt, grey or black coating. Silver tarnishing is a form of corrosion that does not destroy the metal. It is purely superficial and does not lead to structural damage. Tarnishing only affects the upper layers, and the coating ultimately protects the underlying silver.

Sulphur compounds can be found everywhere in everyday life: in the air, in liquids (tap water!), in car exhaust fumes, in many cosmetics, in perfumes and even in foods such as eggs or fish. In cities with high levels of industry/power stations etc., silver objects darken more quickly as the air contains more sulphur dioxide. Chlorinated substances, acidic substances, perfume and hairspray, for example, also have an accelerating effect. Increased humidity and/or higher temperatures can also accelerate and worsen tarnishing. Even comparatively mild chemical ingredients in sweat can accelerate oxidation, especially in combination with heat and air. How quickly silver tarnishes also depends on the quality of the tarnish protection. In principle, the tarnishing of silver is a positive quality feature! Because if it is genuine silver, this is a completely normal chemical reaction with oxygen.

When silver jewellery is worn, grease from the skin collects on the surface of the jewellery, which can promote oxidation after the jewellery has been taken off and stored. Silver jewellery that is worn frequently does not tarnish. Even if a piece of silver jewellery is only worn once a month, it is unlikely to tarnish. However, if silver remains unworn for six months or longer, it may darken. Silver tarnishing cannot be completely prevented, but it is very easy to clean tarnished silver with commercially available silver baths. Drugstores sell silver baths in which you briefly immerse the piece of jewellery and then rinse it well; in no time at all, the silver and also the gold-plated/gold-plated pieces of jewellery regain their original colour (pearls and some gemstones must not be placed in the bath, however). However, such a bath is not necessary for smooth, polished surfaces; a simple silver cleaning cloth is sufficient. But be careful, the thinner the silver plating, the more sensitive it is to damage. For matt surfaces, you can use a special commercially available fleece, which can also be used to re-matt worn areas.

To prevent re-sulphurisation, silver can be wrapped in silver cleaning cloths or stored in a drawer with silica gel bags, salt or chalk, for example. In these cases, the substances bind the hydrogen sulphide in the air. In the case of jewellery, airtightness in velvet cloths or caskets is often sufficient, although tarnishing cannot be completely prevented but only delayed.

Due to the materials used in our packaging from our own production and in products from our Asian partners, silver jewellery does not tarnish any more or less than when exposed to air. **To ensure that our products do not contribute to the tarnishing of your silver, we test our materials before use.** Before series production, both the materials themselves and the finished packaging products are tested to ensure that they do not contain any tarnish-promoting chemicals. This involves stress testing (a so-called silver plate test), in which the items to be tested are exposed to a warm environment with high humidity in order to induce or accelerate a reaction. The test takes between three and four weeks, depending on the product.

We work closely with our trusted, long-standing suppliers in Asia and Europe to ensure that our products are only made from the right materials and therefore meet the highest quality standards.

The satisfaction of our customers is our daily incentive and guideline in everything we do.