The use of silicone molds in the kitchen

The following points apply to our food-safe silicone range:

Clean

Prevent the soiling of your silicone molds. Animal oils and fats like chicken fat are particularly notorious for this, but plant-based versions such as some butters are also at the top of the list.

Why do silicone molds get dirty? This phenomenon is inherent in silicone rubbers due to their somewhat porous structure. Oil and fat molecules fit into the microscopic cavities between the silicone chains. When heated, these cavities enlarge, which exacerbates the problem. When cooled, the cavities become smaller, which pushes some of the oil and/or grease back out, leading to contamination. This can lead to a rancid odor and white contamination on the molds.

Tests by Tupperware, for example, showed that up to 20% of the weight of silicone molds can consist of absorbed fats and oils. This can be considered a lot, but the advantage is that this problem can be solved.

How can this problem be solved? All contaminants can be easily removed with hot water:

1-step cleaning:
Dip the molds in hot water with washing-up liquid or another grease-dissolving soap for about 10 minutes, then rinse and pat dry.

Immerse in hot water with alcohol (note: high concentrations of alcohol can affect silicone, a 10% alcohol solution will probably work well).

2-step cleaning:
Sprinkle the molds with baking soda and rub gently. Let sit for a minute.

Dip the molds as above in hot water with dish soap, soak for 10 minutes, rinse and pat dry.

Comments:
The 2-step method is the most effective.
Patting dry, not rubbing, is important to avoid damaging the silicone. Do not use paper towels, towels or industrial (non-)woven cleaning cloths that can be abrasive.

Consider testing the cleaning methods to determine the cause of the contamination. Regular cleaning after a number of uses can prevent this problem.

Loss of gloss of the mold

The loss of shine can be caused by harsh industrial cleaners or by the use of abrasive wipes or materials. This can reduce the shine of the molds. Although gloss loss is often seen as normal wear and tear, in food contact applications, proper cleaning takes precedence over wear and/or the longevity of molds.

Food and skin contact

Silicone molds made from our food-grade silicone still need to be tested according to the BfR guidelines (German legislation) or FDA guidelines.

Temperature range

Our silicones are suitable for use between -40°C and +180°C for long-term use. At temperatures above 180°C to 200°C and short heating above 200°C, the properties must be evaluated by the manufacturer or end user.

Microwave

Our silicones do not contain materials that react to microwave frequencies and are safe to use at temperatures up to 180°C.

Dishwasher

Silicone molds are tested for manual washing and remain undamaged as long as they are not scrubbed intensively. Normal dishwashers with non-aggressive detergents are usually suitable, but end users should test this themselves. Do not wash silicone molds together with dishes that contain intensely colored materials (such as pasta sauce).

Liability

All values provided are indicative and not warranties. Customers should always check the suitability of the mold for their process. Since we do not produce the molds ourselves, we take no responsibility for the end results or the incorrect use of molds by the customer.