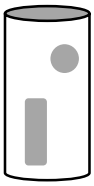
אדר א' תשפ"ב / February 2022 Volume 30

דרך קצרה

Brief summaries of cRc Kashrus Policies

PISTON FILLER
[FILLERS - PART 4]

A piston filler is used to put a measured amount of liquid mixed with solids, such as pizza sauce or baked beans, into a glass jar, metal can, or similar container. This type of product might not flow well through a gravity filler and cannot easily be pumped into a jar. Instead, it uses a hollow, round "piston" which has two openings on the size of the piston: a round one towards the top for inlet and an elongated opening towards the bottom for outlet. The piston is inside the filler valve, the valves surround the filler bowl (like in a gravity filler), and the piston itself rotates within the valve. When the piston's inlet hole faces the filler bowl, product flows through the hole filling up the piston's interior cavity. Then the piston rotates so that the outlet hole faces the jar, and the product flows from the piston's cavity into the jar.



The pistons are made of thick stainless steel and have a separate (half-inch thick) layer of Teflon on top of the metal. The Teflon allows the piston to rotate without rubbing against the valve, and this is also assisted by a heavy layer of grease which is smeared on the outside of the Teflon. Due to the cavity and holes in each piston, it is not feasible to clean the piston "in place", and the pistons must be removed for cleaning. That is to say that each valve is taken apart, the pistons and valves are individually washed by hand or in a wash basin, and then the filler is put back together for the next production.

In theory, the ideal way to *kasher* the piston filler is for the *Mashgiach* to be present when the filler is taken apart, so that he can put each piston into a pot of boiling water when it is out of the filler. However, there is reason to believe that if the piston was put into boiling water, the metal and Teflon would expand at different rates, and the Teflon would crack. It is therefore generally assumed that *kashering* must happen once the clean pistons have already been put back into the valves, and the filler is operational. *Kashering* would involve running boiling water through the pistons (with empty bottles underneath, as above) for long enough that there would not be דפנות מקררות.

One issue with this method of *kashering* is that *Mashgichim* who have seen the filler taken apart have noticed that product ends up leaking through to the outside of the Teflon, such that it leaves residue in the (cracks in the) Teflon. [It may also cause *ta'am* to be absorbed directly into those areas]. If no *Mashgiach* is present when the filler is taken apart, it is possible that some residue of non-kosher product will remain on the outside of the piston. Although *ta'am* cannot pass from the Teflon into the piston, seemingly *ta'am* will pass from the

cRc Kosher Certification

Abridged from Chapter 19 of the forthcoming *Imrei Dovid*, *Kashering*, by Rabbi Dovid Cohen
cRc Policies are from the cRc בית דין.

Teflon into the food as it comes into and out of the piston. This issue requires further consideration.

cRc Policies

73. Do the valves and pistons of the following fillers qualify as not being דפנות מקררות during production, such that their hag'alah must be for an extended amount of time?

    a. Gravity filler?

       It depends on the particular filler and how it is operated. When in doubt, one should assume that there is no דפנות מקררות and *kasher* accordingly.

    b. Overflow filler?

       Yes

    c. Piston filler?

       Yes

74. Must a Mashgiach be present when a piston filler is (taken apart and) cleaned, or can he be satisfied with how clean the factory workers will get it?

    A *Mashgiach* should be present

75. Can the pistons be kashered while inside the valves/filler, or do they have to be kashered separately in a pot of boiling water?

    The hot part of the *kashering* can be done while the pistons are in the filler

<u>מראה מקומות</u>

שולחן ערוך סימן תנ"א סעיף ה'