

דרך קצרה

Brief summaries of cRc Kashrus Policies

LIBUN KAL [PART 2]

The previous installment described two types of *libun kal* – one that replaces *hag'alah*, and one that might take the place of *libun gamur*.

What temperatures are required for these two types of *libun kal*? As a point of reference, we note that the auto-ignition temperature of paper is known to be 451° F, and for straw it is somewhat lower. Our tests showed that *kash nisraf* should be measured based on both temperature and time, as follows. After 10 minutes, paper in a 550° F oven was completely "burnt", in a 450° F oven it was starting to brown, and in a 375° F oven there was barely any effect on the paper. Based on this, the standard recommendation for creating *libun kal* in a home oven is to have the oven turned to 550° F for an hour.

The reason to recommend it be for an hour (rather than just 10 minutes) is to ensure that all parts of the oven, including the areas around the door where air escapes, reach the desired temperature and maintain it for long enough.

Further tests showed that even if the paper was left in the oven at 375° F for 2.5 hours, it never reached the "burnt" state described above, and it would therefore seem that that temperature never qualifies as *libun kal* (as *libun*) since the paper/straw never burns at that temperature. At the same time, paper put into the oven at 450° F did show signs of being "burnt" after approximately 2 hours, and for that reason

there are those who consider that to be *kash nisraf* (i.e., *libun kal* as *libun*).

In contrast to the relatively high temperatures required for *kash nisraf* when *libun kal* replaces *libun gamur*, when *libun kal* takes the place of *hag'alah* one can be satisfied with a much lower temperature of *yad soledes bo*. For example, when a caterer needs to *kasher* a stainless-steel counter, the "required" method is *hag'alah* but the *Mashgiach* sometimes finds it easier to perform *libun kal* with a blowtorch. When doing this, as the *Mashgiach* uses one hand to pass the torch over the top of the counter, he places his hand on the bottom of the counter (i.e., the "other" side) to see if the metal is *yad soledes bo*.

Another example is a hot box used for warming food, which can be *kashered* with *hag'alah* but it is more practical to perform *libun kal* instead. Commonly, this is done by placing portable, disposable canisters of chafing fuel (a.k.a. "Sternos") into the chamber and letting them burn for their full 2-hour life. This can be accomplished with the following guidelines:

1. Clean the hot box thoroughly, and do not use it for 24 hours.
2. Calculate the correct number of 2-hour ethanol or methanol canisters based on the size of the hot box, as follows. [Liquid



diethylene glycol canisters should not be used for *kashering*.] Measure the height, width, and depth of the box in inches, and multiple the three numbers by one another to arrive at the box's volume in cubic inches. Use one canister for each 10,000 cubic inches.

For example: A large hot box measures 63" by 54" by 23" such that the calculated volume is 78,246 cubic inches. This hot box should be kashered with 8 canisters.

3. Place canisters into the hot box, placing 2 or 3 of them near the door.
4. Light the canisters and close the door of the hot box.
 - a. If there is no gasket around the door, close the door tightly.
 - b. If there is a gasket around the door, leave the door open very slightly.
5. Keep the door closed until all of the canisters have burned out and have had a chance to cool off.

CRC POLICIES

59. In situations when one may perform *libun kal* in place of *libun gamur*:

- a. Must the "other side" of the equipment reach קש נשרף or יד סולדת בו?

קש נשרף

- b. In a home oven, what temperature is that equivalent to? How long must the oven remain at that temperature?

550° F for an hour or 450° F for two hours

60. If one performs *libun kal* in place of *hag'alah*, must the "other side" of the equipment reach קש נשרף or יד סולדת בו?

יד סולדת בו

מראה מקומות

שולחן ערוך סימן תנ"א סעיף ד'