

## Teflon Sprays

Teflon spray should always be used in the large holes in the heating block. This seems to help protect the block from acid vapors diffusing through the Teflon pressure vessels. This should be done even when the blocks are new. Teflon spray should also be used on all threaded parts of the pressure bolts and clamps, to prevent production of metal wear particles. We have tried two kinds of Teflon spray.

1. Dry Release, Teflon lubricant and release agent, Terand Industries, Inc. Seems OK for this application. This spray leaves behind a white powdery film that does not change color or bond to Teflon substrates at high temperature. While the white powder rubs off easily, even after heating, it is absolutely anti-stick and we have encountered no difficulties with it. This is the stuff to use!
2. Fluoroglide FB (film bonding grade) dry film lubricant and anti-stick agent, Norton Performance Plastics Corp. Not recommended for this application. Though very slippery and almost transparent, this product has an unlisted ingredient that turns brown at high temperature, and bonds tightly to Teflon. This is a problem because it bonds sample vessels to the Teflon coating on the block. This caused premature detachment of the protective Teflon coating inside the pressure block holes, exposing metal. On the other hand, this stuff is great for gluing the pressure disks to the 6 mm Teflon spacers, as described here.