

1.0 Overview

- 1.1 This SOP is written to outline the steps taken to bomb-load tips and frits for use on the Thermo equipment.

2.0 Reagents and Materials

- 2.1 Fused silica tubing - 100 μ m I.D, 50 meters; Polymicro Technologies - Part #2000023.
- 2.2 Packing resin - Jupiter 5u C18 300A, 1 gram bottle; Phenomenex - Cat #04A-4053. Make packing resin solution by adding about a half a spatula of C18 to an Eppendorf tube and adding methanol. This solution should be made up weekly.

3.0 Apparatus/Instrumentation

- 3.1 Bomb – Made in-house.
- 3.2 Microscope – Fisher Scientific Stereomaster Microscope, 10X and 30X Total Magnification, Fisher Scientific Cat #1256212.

4.0 Procedure

- 4.1 To pack tips or frits:
 - 4.1.1 Place an Eppendorf tube with C18 packing resin solution in the bomb. Add a magnetic stirbar to the tube to ensure that the C18 material stays in solution.
 - 4.1.2 Place the tip from section 4.1 into the bomb and pull it up slightly so it is situated ~1mm from the bottom of Eppendorf tube. Turn on helium and pack each tube with ~11cm of C18.
 - 4.1.3 (FOR FRITS) Follow steps 4.1.1 and 4.1.2, but pack ~6cm of C18 resin.
 - 4.1.4 Check tips under microscope to ensure the packing material is uniform throughout and that no foreign matter is present.
 - 4.1.5 Before installing on an instrument, pack the resin in the tip further by placing the tip on the instrument and running 98:2 ACN/0.1% FA (flow rate ~ 700 μ L/min) through the tip for approximately 15 minutes.