

# Preventative Cleaning of ELSD Detector

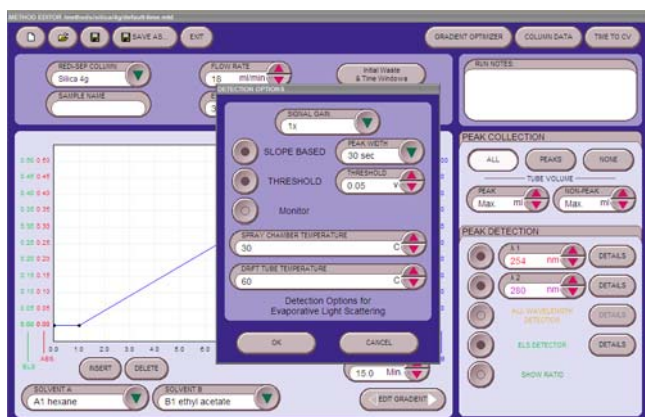
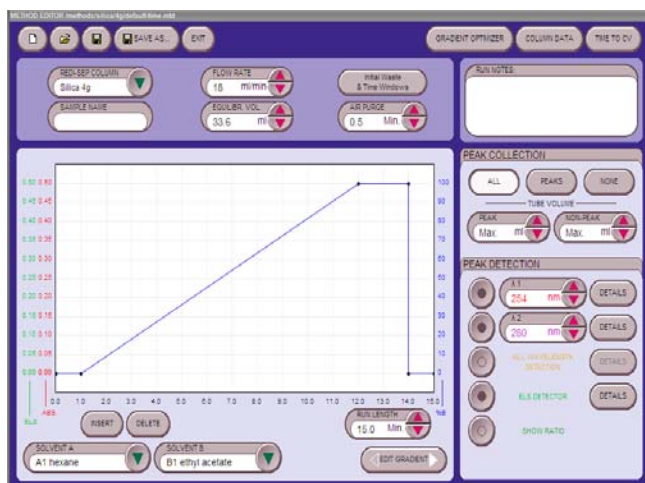
## in the CombiFlash® System

### Overview

Periodic cleaning of the spray chamber will keep the CombiFlash operating at maximum performance. Use the following steps if spray chamber cleaning is recommended by the software.

### Cleaning the ELSD Detector

1. From the run screen select the METHOD EDITOR.
2. In the Peak detection window, select the ELS DETECTOR radio button then select DETAILS.
3. Set the spray chamber temperature to 40°C.
4. Exit the Edit Method screen and accept the changes, then allow approximately 5 minutes for the chamber to reach the set temperature.



**Figure 1: Method Editor screens**

5. Using a wash bottle and appropriate size tubing, fill the p-trap drain line with 40 ml of Acetone and wait 1 minute.



**Figure 2: Line filled with 40 ml of acetone**

6. Place the open end of the p-trap drain line in a 100 ml (or greater) beaker.



**Figure 3: Draining the acetone into a 100 ml beaker**

7. Allow the acetone to drain out of the unit by dropping the end of the p-trap drain line, while it is in the 100ml beaker, below the p-trap drain line level.

#### **Note**

The acetone may have translucent flakes or brown particles in it. This is normal.

8. Fill the ptrap pump drain line with 40 ml of Iso-propyl Alcohol.

9. Hold the p-trap pump drain line above the unit for 1 minute.
10. Place the open end of the p-trap drain line in a 100 ml (or greater) beaker.
11. Allow the Isopropyl alcohol to drain out of the unit by dropping the end of the p-trap drain line, while it is in the 100ml beaker, below the p-trap drain line level.

**✓ Note**

The Isopropyl alcohol may have translucent flakes or brown particles in it. This is normal.

12. Use the DETAILS menu to set the spray chamber to 60°C.
13. Fill the p-trap drain line with 40 ml of Isopropyl alcohol.
14. Drape the p-trap drain line over top of the unit and let set for 20 minutes.



**Figure 4: P-trap pump drain line draped over the unit**

15. Place the open end of the p-trap drain line in a 100 ml (or greater) beaker.
16. Allow the Isopropyl alcohol to drain out of the unit by dropping the end of the p-trap drain line, while it is in the 100ml beaker, below the p-trap drain line level.

**✓ Note**

The Isopropyl alcohol may have translucent flakes or brown particles in it. This is normal.

17. To ensure that there is no fluid remaining in the drift tube, set the drift tube to 90°C. Go to the MANUAL CONTROL window to turn the gas on and let run 10 minutes. Turn off the gas.
18. Press FILE and then NEW to reset the method temperatures. Use the instrument normally.

**Teledyne ISCO**

P.O. Box 82531, Lincoln, Nebraska, 68501 USA  
Toll-free: (800) 775-2965 • Phone: (402) 464-0231 • Fax: (402) 465-3001



Teledyne ISCO is continually improving its products and reserves the right to change product specifications, replacement parts, schematics, and instructions without notice.