

## *Prelude*<sup>™</sup> Cleaning Procedures

This technical note reviews the cleaning procedures that should be performed on the *Prelude*<sup>™</sup> following each synthesis to prevent clogging and to keep your instrument running smoothly. Depending on whether the amino acids and solvents/reagents will be reused during the next synthesis, different cleaning procedures are recommended.

### **Cleaning Procedure when Amino Acids and Reagents will be Reused in Next Synthesis**

1. Place clean RVs and empty collection tubes in each position.
2. Perform **Wash RVs** by clicking on the **Operations** menu and selecting **Cleaning → Wash RVs**. (2 minutes)
3. Perform **Collect Back Flush** by clicking on the **Operations** menu and selecting **Cleaning → Collect Back Flush**. (7 minutes).
4. Empty collection tubes.
5. Instrument is now ready for the next synthesis.

### **Cleaning Procedure when Amino Acids and Reagents will be Replaced in Next Synthesis**

1. Place clean RVs and empty collection tubes in each position.
2. Pressurize and prime DMF and DCM using the **Bottle Preparations** screen.
3. Perform **Wash RVs** by clicking on the **Operations** menu and selecting **Cleaning → Wash RVs**. (2 minutes)
4. Perform **Collect Back Flush** by clicking on the **Operations** menu and selecting

**Cleaning → Collect Back Flush**. (7 minutes)

5. Empty collection tubes.
6. Click on **Bottle Preparations** tab in the **Bottle Preparations** window.
7. Select the amino acid and reagent bottles used during the synthesis.
8. Perform **Nitrogen Back Flush** by clicking the **Nitrogen Back Flush** button. (1 minute per bottle)
9. Empty the flushed bottles and place back on instrument.
10. Perform **Solvent Back Flush** by clicking the **Solvent Back Flush** button. (80 seconds per bottle)
11. Empty the flushed bottles and wipe outer tube with a clean paper towel.
12. **Nitrogen Back Flush** DMF and DCM.
13. Instrument is now ready for the next synthesis.

PTI also recommends that a full **System Clean** be performed every two weeks. If instrument is used heavily, a weekly **System Clean** is recommended.

### **Procedure for System Clean**

1. Place clean RVs in each position.
2. Empty all collection tubes, amino acid bottles and solvent bottles including DMF and DCM.
3. Place 1 L of methanol in the solvent bottle 2 position.

4. Perform a **System Clean** by clicking on the **Operations** menu and selecting **Cleaning** → **System Clean**. (65 minutes)
5. After the **System Clean** is complete, empty all collection tubes, amino acid bottles and solvent bottles including solvent bottle 2.
6. Click on the **Special Bottles** tab in the **Bottle Preparations** window and deselect TFA in the **No Prime** section.
7. Click on the **Bottle Preparations** tab in the **Bottle Preparations** window and use the **Select All** buttons to select all the amino acid and solvent bottles.
8. Perform a **Nitrogen Back Flush** by clicking on the **Nitrogen Back Flush** button. (28 minutes)