

# *SEAL FRIT*

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## *INSTRUCTIONS*

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302-42802-00  
Oct 2022  
(Rev C)

## ***TRADEMARKS***

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## INSTRUCTIONS FOR USING THE SEAL FRIT

The Seal Frit allows the transfer of air sensitive samples from the degas port of a VacPrep or Smart VacPrep to the analysis port of the TriStar without atmospheric contamination. It is designed for use with 1/2 in. round or flat bottom sample tubes and consists of two main components — the seal, which fits on the sample tube, and the opener, which is installed in the vacuum fittings of the VacPrep, Smart VacPrep, and sample ports of the TriStar. Appropriate filler rods (if used) are included in the Seal Frit kit; hanging filler rods cannot be used with the Seal Frit.



A Seal Frit cannot be used with flowing-gas degassers.

### Seal Frit kit contents [part number 302-33607-00]

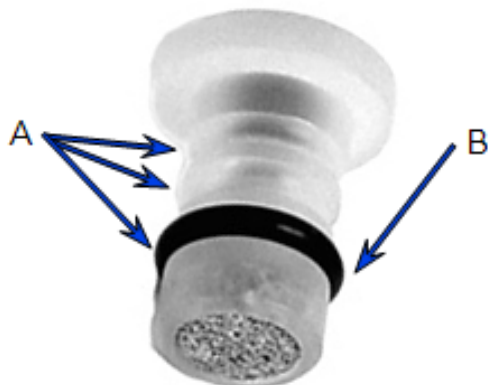
| Quantity | Part Number  | Description  |
|----------|--------------|--|
| 1        | 004-54130-00 | Tool for installing and removing the opener  |
| 3        | 260-25873-00 | Sample port plug   |
| 3        | 260-25890-00 | Seal Frit assembly   |
| 9        | 260-25891-00 | Sample tube opener; six for the VacPrep and three for the TriStar. The Smart VacPrep comes with the sample tube openers already installed. |
| 1        | 302-42802-00 | Instructions   |
| 3        | 302-61005-02 | Filler rod, for 1/2 in. sample tube  |

1. Install openers in the vacuum fittings of the VacPrep and in the sample ports of the TriStar. If using the Smart VacPrep, the sample tube openers are already installed and this step can be skipped.
  - a. Insert the barb of an opener into the hole located on the flat end of the tool.



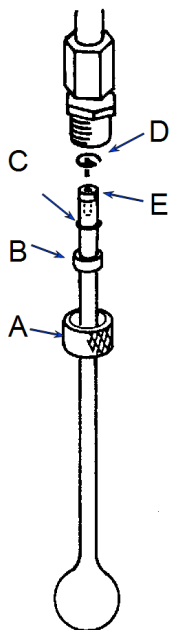
- A. Insert barb
- B. Barb
- C. Opener

- b. Insert the tool into the fitting of the VacPrep and into the sample port of the TriStar and push gently to seat the opener into place. Remove the tool.
2. Weigh the sample (refer to the TriStar operator manual) and place it into the sample tube. If using filler rods, insert them before beginning the weighing process.
3. Insert the Seal Frit into the sample tube. An O-ring provides sealing with the inside of the sample tube and can be shifted into any one of three positions (with position 1 being the tightest) to provide a tight seal.



- A. Positions 1, 2, 3
- B. O-ring

4. Install the sample tube onto the vacuum fitting of the VacPrep or Smart VacPrep using the following illustration as a guide.



- A. Connector nut
- B. Ferrule
- C. Sample tube O-ring
- D. Check seal opener (installed inside the port)
- E. Check seal or seal frit

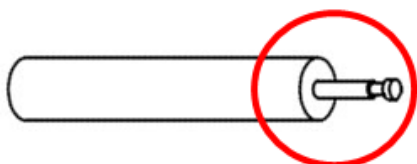
5. After degassing is complete, backfill to atmospheric pressure using clean nitrogen. Other clean, inert gases may be used; however, light gases like helium require correction for buoyancy.
6. Remove the sample tube from the VacPrep or Smart VacPrep and install it on a sample port of the TriStar.
7. Open the sample file to be used for the analysis.
  - a. Click the down arrow to the right of the *Sample Tube* field and select the *Sample Tube* file. Click **Edit**.
  - b. Select *Seal Frit* (or *Check seal*) as the vacuum seal type. Click **OK** to return to the sample file.
8. Click **Save**, then click **Close**.
9. Go to **Unit [n] > Sample Analysis**. Click **Browse** for each port to be used and choose the appropriate files. Click **Start** to begin the analyses.



Use the glass plugs provided in the Seal Frit kit in the sample ports when sample tubes are removed, unless the openers are removed (see Step 10). The metal plugs cannot be used in the ports if the openers remain installed.

When using a 1/2 in. tube without a Seal Frit, the openers may remain installed in the ports. Openers must be removed (see step 10) if using a 1/4 in. or 3/8 in. tube.

10. When removing the opener, use the opposite end of the tool (the end with a niche). Insert the stem into the port and twist until it hooks onto the opener. Tug gently to remove the opener from the port.



***Use this end for removing the opener***