



Instructions for Catalog # 461 1,4-Dioxane in Soil

Revision 071125

Description:

- This standard consists of a 2 mL flame-sealed ampule containing the 1,4-Dioxane in Soil concentrate and a 15 mL screw top vial containing approximately 10-grams of Matrix soil.
- The solvent for the 1,4-Dioxane in Soil concentrate is Methanol.
- The concentrate and matrix should be stored at $4\pm 2^{\circ}\text{C}$.
- The diluted standard will contain all or a subset of the analytes listed in the ranges specified on the data reporting form.

Before you begin:

- This standard has been prepared as a concentrate and must be diluted prior to analysis.
- As the diluted standard is not stable, it must be analyzed **immediately** after the concentrate is diluted.
- **If you are performing work in support of US EPA's Contract Lab Program, please follow directions in the CLP SFAM SOW and use the instructions for Semivolatile methodologies.**

Instructions:

Analysis using Volatile methodologies:

1. Weigh 5.0 grams of the 1,4-Dioxane in Soil Matrix into a sparger cell.
2. Carefully snap the top off of the 1,4-Dioxane in Soil ampule.
3. Using a ten-microliter syringe, inject 10 μL of the concentrate into the matrix by placing the syringe tip slightly below the surface of the matrix in the sparger cell.
4. Immediately complete other sample preparation steps such as adding water to the sparger cell and closing the apparatus according to your analytical procedures.
5. Complete the analysis per your normal procedures.
6. Report results as $\mu\text{g}/\text{kg}$ for the diluted sample.

Analysis using Semivolatile methodologies:

1. Weigh 5.0 grams of the 1,4-Dioxane in Soil Matrix into your extraction vessel.
2. Carefully snap the top off of the 1,4-Dioxane in Soil ampule.
3. Using a ten-microliter syringe, inject 10 μL of the concentrate into the matrix by placing the syringe tip slightly below the surface of the matrix in the extraction vessel.
4. Complete the analysis per your normal procedures.
5. Report results as $\mu\text{g}/\text{kg}$ for the diluted sample.

Safety:

ERA products may be hazardous and are intended for use by professional laboratory personnel trained in the competent handling of such materials. Responsibility for the safe use of these products rests entirely with the buyer and/or user. Material Safety Data Sheets (MSDS) for all ERA products are available by calling 1-800-372-0122.