



## Instructions for Catalog # 1014 Air and Emissions Aldehydes & Ketones on Sorbent

Revision 031326

### Description:

- This standard is packaged in a 2 mL flame-sealed ampule containing approximately 2 mL of standard concentrate and a silica gel sorbent tube coated with 2,4-dinitrophenylhydrazine (2,4-DNPH).
- This concentrate is not preserved.
- The solvent for this concentrate is Acetonitrile.
- The concentrate and sorbent tube should be stored at  $4\pm 2^{\circ}\text{C}$ .
- The prepared standard will contain a subset of the analytes listed on the data reporting form in the range of 0.5 to 10  $\mu\text{g}/\text{sample}$ .

### Before you begin:

- This standard has been prepared as a concentrate intended for spiking onto the sorbent tube supplied and must be prepared prior to analysis.
- The concentrate contains the underivatized Aldehydes & Ketones analytes; the instruction must be followed to allow the derivatization process to occur.
- The elution volume of acetonitrile used during desorption for the size of sorbent tube supplied is 5 mL.
- This standard should be analyzed as soon as possible after the sample is prepared using the instruction.

### Instructions:

1. Remove the sorbent tube from the foil bag.
2. Remove both caps from the sorbent tube.
3. Place the sorbent tube onto your desorption elution rack or apparatus.
4. Add 50 $\mu\text{L}$  of phosphoric acid, Analytical grade, to the upper glass frit on the sorbent tube. (Note: The aliquot will remain resting on the glass frit it will not seep into the coated silica gel below.)
5. Carefully snap the top off of the Aldehydes & Ketones on Sorbent ampule.
6. Using a 250-microliter syringe, transfer 200  $\mu\text{L}$  of the concentrate into the sorbent tube on top of the acid aliquot.
7. Allow the concentrate/acid mixture to wet the 2,4-DNPH coated silica gel sorbent.
8. Elute the sorbent tube following your normal procedures and proceed with analysis.
9. Report your results as  $\mu\text{g}/\text{sample}$  for the prepared 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.