



EPA SW846-Method 0011 Summary
Sampling for Selected Aldehyde and Ketone Emissions from Stationary Sources

This method applies to the analysis of select Aldehydes and Ketones in stationary source emissions utilizing three impingers in series containing acidified aqueous DNPH solutions followed by high performance liquid chromatographic detection.

A typical test program per source includes 3 runs plus possibly a 4th matrix spike run

DNPH Solution Requirements for Sampling

Impinger #1-200mL , Impinger #2-100mL, Impinger #3-100mL
Total=**400mL** per run

DNPH Solution Requirements for the Field Spike

DNPH for Field Spike=200ml per spike

Total =**1400-1800mL** per source

You will need HPLC grade water and MECL to clean up the sample train
All 3 impingers are combined into one sample and analyzed together

Formaldehyde Spiking Solution for Field Spike

4010ug/ml in Methanol-spike 200ul into an impinger containing 200ml DNPH and recover like a sample.

AAC will provide a 0.5 or 1.0 ml syringe for spiking

QC Requirements

- The method requires a Sample Blank which contains equal portions of DNPH solution and MECL
- Field Blanks (Methylene Chloride, Water, DNPH) are optional but are often used to figure out contamination issues.
- The method requires a real Matrix Spike Sample (a fourth spiked run collected under similar conditions or better yet simultaneously) but some of our clients get away with not doing it (at least for non-compliance tests) or with using our matrix spike from the QC report (per CARB 430 section 10.1.2)
- We will provide our normal 2 trip blanks/trip spikes like we do with CARB 430 etc



**EPA SW846-Method 0011 Summary Cont.
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Storage, Shipping, and Holding Times

- Use amber glass bottles with Teflon lined lids
- Store samples at 4 degrees Celsius after collection and during transport
- Ship the 0011 by HAZ MAT due to the DNPH, Acid and MECL.
- You have to use the 0011 solution within 5 days of certification and 2 days of opening each container. Recertification to extend the lifetime of the solution is possible.
- Samples must be extracted and analyzed within 30 days of collection.
- Please let us know how much 0011 solution you will need and when as soon as you can so that we can order any supplies that maybe needed.

Analytes

Please specify which analytes you will require

- **Validated Analyte List:** Formaldehyde, Acetaldehyde, and Propionaldehyde.
- **Optional Analytes List:** Crotonaldehyde, Methacrolein, MEK+Butanal, Benzaldehyde, Valeraldehyde, m-Tolualdehyde, Hexaldehyde.
- **Other analytes** including Acetophenone and Isophorone are available upon request