



THE LEADER IN ENVIRONMENTAL TESTING

Tallahassee Laboratory – Crotonaldehyde by EPA Method 8315A

Method Application:

Crotonaldehyde is analyzed by EPA Method 8315A. This method is used to determine free carbonyl compounds in various matrices by derivatization with 2, 4 –dinitrophenylhydrazine (DNPH). This method uses HPLC with UV/vis detection to identify and quantitate the analytes.

Market Application:

In 1985, the EPA's Office of Solid Waste developed a list of Appendix VIII Hazardous Constituents applicable to refinery wastes. This list became known as the "Skinner List" and has been used as the basis for many RCRA Facility Investigations (RFI) at refineries. In 1993, the EPA's Office of Solid Waste updated the Skinner List by removing some constituents and adding others to the original 1985 list. In 1997, Region V's Waste Management Branch reviewed the 1985 and 1993 Skinner Lists, melded them, and established a broader list of refinery process waste constituents, or a Region V Skinner List for use in RFI investigations at refineries in Region V. The Region V Skinner List continues to be a requirement on refinery sites in Texas.

Advantages:

Technical advantages of this approach include the derivatization of the carbonyl compounds. Each compound has a specific pH range for optimum recovery to ensure more accurate quantitation.

New Method and Instrumentation Development June 2009

For more information on Tallahassee's new method capability, please contact:

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