

National Bureau of Standards
Certificate
Standard Reference Material 1821
ETHANOL
(Forensic Standard)

B. Coxon and R. Schaffer

This Standard Reference Material is certified as a chemical of known purity. It is intended primarily for use in the calibration and standardization of apparatus and technique used by law enforcement authorities for the determination of ethanol (ethyl alcohol) in the breath and the blood and for the routine critical evaluation of the daily working standards used in these procedures.

Certified Purity 99.9 + percent

Analytical data for information only.

Water	0.02 percent
Acetaldehyde	0.002 percent
Benzene	<0.0001 percent
Other organic compounds	0.0004 percent

Water was determined by the Karl Fischer technique. The organic impurities were determined by gas chromatography.

This Standard Reference Material should be used immediately upon opening, since "anhydrous" ethanol is quite hygroscopic.

The ethanol for this Standard Reference Material was obtained from Publicker Industries of Philadelphia, PA. Analyses were performed by B. Coxon, D. P. Enagonio, and S. A. Margolis.

The overall direction and coordination of technical measurements leading to the certification were under the chairmanship of R. Schaffer.

The technical and support aspects concerning the preparation, certification, and issuance of this Standard Reference Material were coordinated through the Office of Standard Reference Materials by T. W. Mears.

Washington, D.C. 20234
April 23, 1976

J. Paul Cali, Chief
Office of Standard Reference Materials