Alpha Resources, Inc. Certificate Of Analysis

1-Chloro-2,4-dinitrobenzene, OAS

AEB-2010 Lot Number 12432MZSB

> Carbon = 35.58 % Hydrogen = 1.49 % Nitrogen = 13.83 % Oxygen = 31.60 % Chlorine = 17.50 %

This Organic Analytical Standard (OAS) consists of purified 1-Chloro-2,4-Dinitrobenzene for use as a routine working microanalytical standard for the determination of Carbon, Hydrogen, Nitrogen, Oxygen and Chlorine.

Carbon, Hydrogen and Nitrogen

The values for Carbon and Hydrogen were checked using a commercial Carbon, Hydrogen and Nitrogen analyzer against Acetanilide Standard Reference Material 141c, from NIST.

The value for Nitrogen was referenced to Urea Standard Reference Material 21412 from NIST.

Oxygen

The value for Oxygen was checked using a commercial Oxygen analyzer against Chlorobenzoic Acid available from NIST.

Chlorine

The value for Chlorine was determined after oxygen flask combustion by argentometric titration against NIST SEM 2144 and against Aristar grade Sodium Chloride.

Remedies for any claimed defect in this product will be limited to product replacement or refund of the purchase price. In no event shall Alpha Resources be liable for incidental or consequential damages.

This is a Certified Reference Material (CRM), and should be verified, prior to use, against a primary Standard Reference Material (SRM) provided by a governing agency such as NIST, when available.

Prepared by D.M. Reasons

Director of Quality Assurance

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