Alpha Resources, LLC Certificate Of Analysis

AR2092-250 EDTA (Ethylenediaminetetraacetic Acid)

LOT # Z04D016

% Carbon	=	41.10
% Nitrogen	=	9.59
% Hydrogen	=	5.52

Test	Limits	Lot Results
Assay	99.4 – 100.6%	100.37%
Insoluble in dilute NH₄OH	0.005% max	< 0.003%
Nitrilotriacetic Acid	0.1% max	0.06%
Residue after ignition	0.2% max	0.03%
Heavy metals (as Pb)	0.001% max	< 0.001%
Iron	0.005% max	< 0.005%
Calcium	0.001% max	0.0004%
Magnesium	0.0005% max	<0.0003%

Notes:

This Organic Analytical Standard (OAS) contains 250g of high purity EDTA powder for use as a routine working micro analytical standard for the determination of Carbon, Nitrogen and Hydrogen. Refer to your instrument manufacturer's recommendations and/or test method for uncertainty capabilities and minimum sample size.

Store tightly sealed under normal laboratory conditions. While unable to determine a definite shelf life this reference should be reviewed 10 years from the date of certification. Once opened this product has a 2-year shelf life.

This is a reference material (RM) and is verified by its purity and empirical stoichiometry in accordance with recommendations of the Analytical Chemistry Section of the International Union of Pure and Applied Chemistry. The values for Carbon, Nitrogen and Hydrogen represent the stoichiometric values of high purity EDTA.

For good laboratory practice it is recommended that all standards be verified as fit for purpose prior to use. 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 RM IS VALID FOR TWO YEARS FROM THE DATE OF OPENING.

Certified July 23, 2018

Chief Chemist [°]