



Certificate of Analysis

AR-2017

CORN GLUTEN CRM

LOT # 222C

DRIED BASIS VALUES

Feed Analysis					Ultimate Analysis				
		n=	k=	AOAC			n=	k=	AOAC
% Ash	(5.97)	11	--	942.05	% Carbon	50.0 ± 1.6	38	2.0	972.43
% Crude Fat	2.44 ± 0.53	17	2.1	920.39	% Hydrogen	7.21 ± 0.09	20	2.1	CHNOS
% Crude Fiber	(1.99)	6	--	978.10	% Nitrogen	10.28 ± 0.29	26	2.1	990.03
% ADF Fiber	(8.4)	8	--	973.18	% Sulfur	0.95 ± 0.10	38	2.0	985.01
% Crude Protein	65.0 ± 1.3	22	2.1	990.03					
% Starch	15.42 ± 1.78	16	2.1	2014.10					
% Sugar	2.07 ± 0.41	4	3.2	985.29					

Mineral Analysis					Mineral Analysis				
		n=	k=	AOAC			n=	k=	AOAC
mg/kg Copper	26 ± 7	15	2.1	2011.14	% Sodium	0.16 ± 0.02	18	2.1	2011.14
mg/kg Aluminum	(40)	14	--	ICP	mg/kg Boron	(2.8)	18	--	975.03b
mg/kg Chromium	1.8 ± 0.3	8	2.4	ICP	% Phosphorus	0.52 ± 0.06	18	2.1	2011.14
mg/kg Iron	189 ± 34	16	2.1	2011.14	mg/kg Zinc	186 ± 34	16	2.1	2011.14
% Calcium	0.35 ± 0.05	18	2.1	2011.14	% Chlorine	(0.26)	4	--	915.01
% Magnesium	0.10 ± 0.01	18	2.1	2011.14	mg/kg Manganese	(36)	13	--	2011.14
% Potassium	0.24 ± 0.05	18	2.1	2011.14	mg/kg Strontium	2.5 ± 0.4	8	2.4	ICP

Items shown in () are given for informational or reference purposes. Dried per AOAC methods.

The intended use of this reference standard is for the verification of food or feed analysis by various test methods. When necessary, professional judgment is applied toward consideration of data and statistical information. The statistical analysis and the overall direction and coordination of the analytical measurements leading to certification were performed by K.E. Dyer, Chief Chemist, at Alpha Resources. The uncertainty values represent the k=2, 95% confidence limits using ISO Guide 35 and ISO Guide to Uncertainty Measurement. Refer to your test methods and or manufacturer manual for expanded uncertainties, repeatability/reproducibility factors, and typical or minimum sample size needed.

Samples for round robin testing were selected in accordance with ARI-LAB-625. The values only relate to the material certified. Material processing includes a freezing, drying, pulverizing, and mixing to ensure homogeneity and eradicate any bio-organisms. This bottle contains 30g of fine Corn Gluten powder to be used per the test method you follow. This reference is valid for two years after opening and should be reviewed 20 years after certification date. Keep sealed tightly and store under normal laboratory conditions.

This is a certified reference material and shows metrological traceability in the form of SI units expressed as mass fraction in percent or mg/kg. For good laboratory practice, we recommend that all reference materials 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 CRM was produced in accordance with ISO17034 (RMP) accreditation issued by ANSI-ASQ/ANAB. Refer to certificate and scope of accreditation AR1920.

THIS CRM IS VALID FOR TWO YEARS FROM THE DATE OF OPENING

CERTIFIED November 28, 2022

Kent Dyer
Chief Chemist