



947485

### CERTIFICATE OF ANALYSIS

CUSTOMER		PRODUCT	
Brenntag Mid-South - Chattanooga PO Box 20 Henderson, KY 42419 USA		Sodium Metabisulfite NF/Food/P	
ESSECO ORDER NUMBER:	19904	PRODUCT CODE:	1NP04E-0050LB
CUSTOMER PO NUMBER:	734885	LOT NUMBER:	171695
RELEASE NUMBER:		SPECIFICATION:	Standard
PRINT DATE:	08/31/2017	VERSION:	4.0
EXPIRATION DATE:	06/17/2020	EFFECTIVE:	7/16/2013
PARAMETER	SPECIFICATION	ANALYSIS	
Sodium Metabisulfite (Na <sub>2</sub> S <sub>2</sub> O <sub>5</sub> )	98.6 =< Value =< 99.8%	99.2 %	
Sodium Sulfite (Na <sub>2</sub> SO <sub>3</sub> )	0.0 =< Value =< 0.6%	0.4 %	
pH (5% solution)	4.0 =< Value =< 4.6	4.3	
Sulfur Dioxide (SO <sub>2</sub> )	66.4 =< Value =< 67.2%	66.8 %	
Appearance of Solution	Clear and Free from Insoluble Matter Except for a Slight Flocculence	PASS	
Appearance	White Crystals	PASS	
Arsenic (As)	0.0 <= Value <= 1.0 ppm	PASS	
Chloride (Cl)	0.00 <= Value <= 0.02 %	PASS	
Heavy Metals (as Pb)	0.0 <= Value <= 10.0 ppm	PASS	
Identification	To Pass Tests	PASS	
Insoluble Matter (Ca, Mg, NH <sub>4</sub> OH)	0.00 <= Value <= 0.05 %	PASS	
Iron (Fe)	0.0 <= Value <= 5.0 ppm	PASS	
Lead (Pb)	0.0 <= Value <= 0.5 ppm	PASS	
React to Amm Silver Nitrate	To Pass Test	PASS	
Selenium (Se)	0.0 <= Value <= 5.0 ppm	PASS	
On 40 Mesh	0.0 <= Value <= 20.0 %	PASS	
Through 100 Mesh	0.0 <= Value <= 35.0 %	PASS	
Through 20 Mesh	99.0 <= Value <= 100.0 %	PASS	
Sodium Thiosulfate (Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> )	0.00 <= Value <= 0.04 %	PASS	
<b>REMARKS</b>			

CERTIFIED BY: *Mark D. Dull*  
 AUTHORIZED SIGNATURE

Esseco USA LLC  
 4 Gatehall Drive  
 Parsippany, NJ 07054  
 (973) 267-3330 FAX: (973) 267-8299

**IMPORTANT:** All information provided is believed to be accurate and complete. The data provided is representative of the product quality on the date of analysis for the lot number indicated. This certificate of analysis may not include all of the constituents of the product. Persons using this information should make their own determination regarding its suitability for their particular application. This certificate of analysis shall not in any way limit or preclude the operation and effect of the applicable terms and conditions of sale.