



Cooper Natural Resources
 Cedar Lake Facility
 Sodium Sulfate
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**CERTIFICATE OF ANALYSIS
 NATURAL SODIUM SULFATE**

Date of Manufacture: 06/26/12

Product: STANDARD GRADE

Customer: Sensient


PO# 243908

CHEMICAL ANALYSIS			TRACE METAL ANALYSIS			NOTES
Analyte	Spec	Actual	Element	Max	Actual	
Purity (% Na ₂ SO ₄) #3	99	99.8	Fe (ppm) #1	10	1	Note #1: These values are from weekly statistical control data.
NaCl (%) #2	0.5	0.15				
Water Insoluble (%) #1	0.03	0.01				
Na ₂ CO ₃ (%) #4	0.5	0.5				
As (ppm) # 4	3	0.3				
			PHYSICAL PROPERTIES			Note # 2: These values are from analysis of samples taken from this shipment.
			Density (lbs/ft ³) #2		88.0	Note # 3: Na ₂ SO ₄ is determined by difference (100 minus insoluble, minus MgSQ, minus NaCl).
Optical Brightness			Moisture (%) #1		0.01	
			Appearance	white, granular, crystalline		

SCREEN ANALYSIS								NOTES
Screen #		Retained On Screen (%)			Cumulative % Retained			Customer Spec Sheet, Revision Date: <u>3/16/06</u>
		Customer Specs		Actual	Customer Specs		Actual	
U.S.	Tyler	Min	Max		Min	Max		
20				0.0%		1.0%	0.0%	
40				1.6%			1.6%	
60				21.4%			22.9%	
80				34.5%			57.4%	
100				20.4%			77.8%	
140				17.0%			94.8%	
200				3.0%	85.0%		97.8%	
-200				2.2%			100.0%	
TOTAL				100.0%				

Comments: This product is certified to meet the limits of impurities (heavy metals, arsenic and selenium) of the Food Chemicals Codex Fifth Edition Specifications.

Country of Origin USA


 REVIEWED BY

D.R.
 ANALYZED BY

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.