

Certificate of Analysis

(Representative Sample Certificate)

Titanium Dioxide **Product Name:**

INCI Name: Titanium dioxide (CI 77891)

CAS Number: 13463-67-7

Lot Number: Not available (data may vary slightly with different lots or batches)

Expiration Date: 60 months from production date

Characteristics	Specifications	Test Value
Appearance	Smooth white powder	Pass
Identification	Conforms to specifications	Pass
Loss on Dry	0.5% MAX	0.1%
Loss on Ignition	0.5% MAX	<0.1%
Water Solubles	0.25% MAX	0.16%
Acid Solubles	0.5% MAX	0.2%
Aluminum Oxide/Silicon Dioxide	2.0% MAX (singly or combined)	
Aluminum Oxide		<0.010%
Silicon Dioxide		<0.010%
Arsenic (leachable)	1.0 ppm MAX	<0.2 ppm
Mercury (total)	1.0 ppm MAX	<0.2 ppm
Antimony (leachable)	2.0 ppm MAX	<0.2 ppm
Assay	99.0 - 100.5	99.2%
Lead (total)	5.0 ppm MAX	<1.0 ppm
pH	6.5 - 8.0	7.4
Brightness	98.4 MIN	98.8%
Microbial Count	<100 CFU/g	Pass
Yeasts & Molds	<50 CFU/g	Pass

<u>Disclaimer</u>: This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any other process. Such information is to be the best of the company's knowledge and believed accurate and reliable as of the date indicated. However, no representation, warranty or guarantee of any kind, express or implied, is made as to its accuracy, reliability or completeness and we assume no responsibility for any loss, damage or expense, direct or consequential, arising out of use. It is the user's responsibility to satisfy themself as to the suitableness & completeness of such information for their own particular use.



E. Coli, Salmonella, Staph Absent **Pass** aureus, Pseudomonas aeruginosa information only 20 Water Absorption Dispersibility Forms milky suspension in water Pass Retained 325 Mesh Information only <0.01% Nil Soluble Barium Solution opalescence Copper, ppm (total) Information only <0.5 ppm Arsenic, ppm (total) 1.0 ppm MAX (BP/EP) <0.5 ppm Antimony, ppm (total) 2.0 ppm MAX (BP/EP) <1 ppm Zinc, ppm (total) 50.0 ppm MAX <1.0 ppm 200.0 ppm MAX (BP/EP) Iron, ppm (total) 2 ppm Chromium, ppm (total) Information only <0.5 ppm Cadmium, ppm (total) 1.0 ppm MAX <0.2 ppm 10.0 ppm MAX Lead, ppm (leachable) 0.2 ppm Characteristics Conforms to EP Pass Identification A Conforms to BP/EP **Pass** Conforms to BP/EP Identification B **Pass** Conforms to BP/EP Identification C **Pass** Appearance of Solution Conforms to EP requirements **Pass** 20.0 ppm MAX (BP) Barium (total) 0.6 ppm **Heavy Metals** 20.0 ppm MAX (BP/EP) <20.0 ppm 200.0 ppm MAX (BP/EP) <200.0 ppm Iron

<100.0 ppm

Pass

100.0 ppm MAX (BP/EP)

Conforms to EP

This report is not to be signed.

Antimony

Acidity/Alkalinity

All data are as per our supplier.

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[&]quot;Certified in compliance with the terms of the US-Canada Organic Equivalency Arrangement. The above data was obtained using the test indicated and is subject to the deviation inherent in the test method. Results may vary under other test methods or conditions.