



TKB TRADING, LLC
 1101 9th Avenue
 Oakland, CA 94606
 Tel: 510-922-9027
 www.tkbtrading.com

Certificate of Analysis (Representative Sample Certificate)

BRONZE FINE
 (COSMETIC PIGMENT)

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

Date of Manufacture N/a Expiration Date: N/a

ANALYTICAL DATA	SOP's	SPECS	RESULTS
Color and Appearance	Merck KGaA	Conforms	Conforms
Content of Mica *	Merck KGaA	50.0 -60.0	57.0 %
Content of Fe ₂ O ₃	Merck KGaA	40.0 -50.0	43.0 %
pH (10% aqueous suspension)	ISO 787-9	3.0 -7.0	5.1
Particle size distribution (80% within 5 - 25 μm)	Laser diffraction	Conforms	Conforms
Median particle size (D50)	Laser diffraction	7.0 -14.0	11.7 μ
Loss on Drying(2 hrs. 105 degrees C)	Merck KGaA	< /=0.5	< /= 0.5 %

Microbial Purity USP or EP or JP

Total Viable Aerobic Count	< 100 CFU/g
E. coli	Absent in 1g
Pseudomonas aeruginosa	Absent in 1g
Staphylococcus aureus	Absent in 1g
Salmonella species	Absent in 10g
Gram negative bacteria	Absent in 1g
Candida albicans	Absent in 1g

Heavy Metals

Modified CTFA/Internal

Arsenic	< 2 ppm	Barium	< 50 ppm	Cadmium	< 3 ppm
Chromium	< 100 ppm	Copper	< 50 ppm	Mercury	< 1 ppm
Nickel	< 10 ppm	Lead	< 10 ppm	Antimony	< 1 ppm
Zinc	< 50 ppm				

This material does not contain organic colorants

The color additives in this material meet all applicable purity requirements of the FDA(21 - CFR), the E C and Japan for cosmetic use

This document has been produced electronically and bears no signature

* Calculated by Difference