



# Certificate of Analysis (Representative Sample Certificate)

Product Name                      Green Sparks  
 Lot Number                        Not available (data may vary slightly with different lots or batches)  
 Date of Manufacture              03.08.2019                                      Expiration Date:                      03.21.2029

**ANALYTICAL DATA**

	<b><u>SOP's</u></b>	<b><u>SPECS</u></b>	<b><u>RESULTS</u></b>
Color and Appearance	Merck KGaA		Conforms
Content of Calcium-Aluminum Borosilicate *	Merck KGaA	59.0 -75.0	66.3 %
Content of TiO2	Merck KGaA	24.0 -35.0	29.8 %
Content of SiO2	Merck KGaA	1.0 -5.0	3.2 %
Content of SnO2	Merck KGaA	</=1.0	0.7 %
Particle size distribution (80% within 20 - 200 µm)	Laser diffraction		Conforms
Median particle size (D50)	Laser diffraction	75.0 -95.0	73.8 µ    **
pH (10% aqueous suspension)	ISO 787-9	8.0 -11.0	10.5
Loss on Drying (2 hrs, 105 degrees C)	Merck KGaA	</=1.0	</= 1.0

**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
Chromium	< 100 ppm	Cadmium	< 3 ppm
Nickel	< 10 ppm	Copper	< 50 ppm
		Mercury	< 1 ppm
		Lead	< 10 ppm
		Antimony	< 1ppm

\*\* Non Conforming  
 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

Quality Control  
 TKB Trading, LLC

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