

CERTIFICATE OF ANALYSIS # 20191182

Customer **CCS UK LTD**
ENGLAND

SHIPPING INFORMATION

Date *April 30, 2019*
VESSEL *SAN CLEMENTE*
Our Invoice # *F001-00004715*
Your P.O. # *46910*

Lot # **20190590**

Description **GOLD SEAL ZINC OXIDE**

Quantity 24.00000

CHEMICAL CHARACTERISTICS

Element	Specification %	Min	Max	Production Avg
As	0.0001 MAX	< 0.0001	< 0.0001	< 0.0001 ✓
Cd	<= 0.001 0	0.0002	0.0002	0.0002 ✓
Cl	0.0005 MAX	0.0004	0.0004	0.0004 ✓
Cu	<= 0.000 2	< 0.0001	< 0.0001	< 0.0001 ✓
Fe	0.0005 MAX	0.0002	0.0003	0.0002 ✓
Mn	<= 0.000 1	< 0.0001	< 0.0001	< 0.0001 ✓
Ni	0.0001 MAX	< 0.0001	< 0.0001	< 0.0001 ✓
ZnO	99.9 MIN	99.9000	99.9000	99.9000 ✓
Pb (including PbO)	0.0020 MAX	0.0010	0.0011	0.0010 ✓
S	0.0007 MAX	0.0001	0.0001	0.0001 ✓
Total Impurities	0.1 MAX	0.1000	0.1000	0.1000 ✓

OTHER CHARACTERISTICS

Item	Specification	Min	Max	Production Avg
Surface area BET method (m ² /g)	3.5 - 7	4.6000	4.6000	4.6000
Granulometry (through # 325 mesh) (%)	99.9 MIN	99.9810	99.9810	99.9810
Moisture (%) ²	0.2 MAX	0.0800	0.0800	0.0800
Volatile materials (%) ¹	0.2 MAX	0.1100	0.1100	0.1100
Ignition loss (%) ¹	0.2 MAX	0.1500	0.1500	0.1500
Specific weight (g/cm ³)	5.6	5.6000	5.6000	5.6000
pH ¹	7.3 - 7.5	7.4000	7.4000	7.4000
Water Soluble Salts (%) ¹	0.10 MAX	0.0800	0.0800	0.0800
Solubility in HCl (%) ¹	99.9 MIN	99.9800	99.9800	99.9800

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Pallet or Big Bag Number	Element (ppm)				Production Date y/m/d	Expiry Date y/m/d
	Pb	Cd	Fa	Cu		
5509	9	2	2	< 1	19/04/24	21/04/24
5510	9	2	2	< 1	19/04/24	21/04/24
5511	9	2	2	< 1	19/04/24	21/04/24
5512	9	2	2	< 1	19/04/24	21/04/24
5513	9	2	2	< 1	19/04/24	21/04/24
5514	9	2	2	< 1	19/04/24	21/04/24
5515	9	2	2	< 1	19/04/24	21/04/24
5516	9	2	2	< 1	19/04/24	21/04/24
5517	9	2	2	< 1	19/04/24	21/04/24
5518	9	2	2	< 1	19/04/24	21/04/24
5519	9	2	2	< 1	19/04/24	21/04/24
5520	10	2	2	1	19/04/24	21/04/24
5521	9	2	3	1	19/04/24	21/04/24
5522	9	2	3	1	19/04/24	21/04/24
5523	9	2	3	1	19/04/24	21/04/24
5524	9	2	3	1	19/04/24	21/04/24
5525	10	2	2	< 1	19/04/25	21/04/25
5526	10	2	2	< 1	19/04/25	21/04/25
5527	10	2	2	< 1	19/04/25	21/04/25
5528	10	2	2	< 1	19/04/25	21/04/25
5529	10	2	2	< 1	19/04/25	21/04/25
5530	10	2	2	< 1	19/04/25	21/04/25
5531	10	2	2	< 1	19/04/25	21/04/25
5532	10	2	2	< 1	19/04/25	21/04/25