

Certificate of Analysis

(Representative Sample Certificate)

Product Name: Iron Oxide Yellow
INCI Name: CI77492 (iron oxide yellow)
CAS Number: 51274-00-1
Lot Number: Not available (data may vary slightly with different lots or batches)
Expiration Date: 120 months from production date

Test	Specifications	Results
Appearance (CSOA001 Appearance)	Powder	Powder
Odor (CSOA003 Odor)	None	None
Water Solubility (CSOA004 Water Solubility)	Insoluble	Insoluble
Full Shade (delta E < 1,2) (CSOA098 Full Shade DE 1,2)	Pass	Pass
Muller Blasting (delta E < 1,2) (CSOA114 Muller 10% DE 1,2)	Pass	Pass
Antimony (CSOA112 Antimony)	10 ppm MAX	0 ppm
Arsenic (CSOA123 Arsenic)	3.0 ppm MAX	0 ppm
Barium (CSOA124 Barium)	50 ppm MAX	0 ppm
Cadmium (CSOA126 Cadmium)	1.0 ppm MAX	0 ppm
Chromium (CSOA128 Chromium)	50 ppm MAX	29 ppm

Disclaimer: 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 himself as to the suitability & completeness of such information for his own particular use.

Cobalt (CSOA131 Cobalt)	30 ppm MAX	16 ppm
Copper (CSOA132 Copper)	50 ppm MAX	3 ppm
Iron (CSOA136 Iron %)	60.0-100.0%	80.1%
Lead (CSOA138 Lead)	10.0 ppm MAX	0 ppm
Mercury (CSOA140 Mercury)	1.0 ppm MAX	0 ppm
Nickel (CSOA141 Nickel)	50 ppm MAX	4 ppm
Zinc (CSOA145 Zinc)	100 ppm MAX	9 ppm
Microbiology (CSOA147 Microbiology Path)	Pathogens free	Pass
Microbiology (CSOA297 Microbio <100)	<100 CFU/g	Pass

Product complies with all FDA requirements for color additives as listed in 21 CFR parts 73.200, 73.1200 and 73.2250; the requirements for E172 found in EC Directive 231/2012/EC.

The above data were 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.

This report is not to be signed.

All data are as per our supplier.

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