

## Certificate of Analysis

### (Representative Sample Certificate)

**Product Name:** Beetroot Extract Pigment  
**INCI Name:** Beta Vulgaris (beet) root extract, maltodextrin, citric acid, ascorbic acid  
**CAS Number:** 89957-89-1, 9050-36-6, 77-92-9, 50-81-7  
**Lot Number:** Not available (data may vary slightly with different lots or batches)  
**Expiration Date:** 24 months from production date

Analytical Tests	Specifications	Results
Antimony	5.0 ppm MAX	0.1 ppm
Arsenic	2.0 ppm MAX	0.1 ppm
Barium	20.0 ppm MAX	0.4 ppm
Cadmium	1.0 ppm MAX	0.1 ppm
Chromium	20.0 ppm MAX	0.4 ppm
Cobalt	30.0 ppm MAX	0.1 ppm
Copper	20.0 ppm MAX	1.6 ppm
Loss on Drying (CTM-18)	10.00 MAX	2.75
Color Evaluation (CTM1-G)	Powder	Powder
Delta E	5.00 MAX	1.50
Delta E CMC	3.00 MAX	0.98
Lead	2.0 ppm MAX	0.1 ppm
Mercury	2.0 ppm MAX	0.1 ppm
Mold	100 CFU/g MAX	0 CFU/g
Nickel	10.0 ppm MAX	0.3 ppm
Odor	Characteristic	Pass
Total Pathogens	0	None
pH	4.00-5.00	4.30

**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 themselves as to the suitability & completeness of such information for their own particular use.

Selenium	10.0 ppm MAX	0.1 ppm
Shade Comparison - Blends	Red	Red
Total Plate Count	100 CFU/g MAX	10 CFU/g
Yeast	100 CFU/g MAX	0 CFU/g
Zinc	100.0 ppm MAX	2.8 ppm

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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