Microencapsulated Marigold Extract (Tagetes erecta) – Zeaxanthin 2–20%, CWS/WD

Tagetes erecta · Asteraceae

DOCUMENT	PRODUCT CODE	DOCUMENT NO.	REVISION
Technical Data Sheet	AP1496	TDS-AP1496	1.0 · 24 October 2026

PRODUCT FORM
Microencapsulated Extract (CWS/WD)

1 Product description

Marigold extract is produced from the flower of Tagetes erecta (Asteraceae family) and supplied as a microencapsulated cold-water-soluble / water-dispersible ingredient, standardized to Zeaxanthin. Available grades: 2%, 5%, 20%. Typical sourcing: India, China, Peru. Intended for B2B formulation in nutraceuticals & supplements, food & beverage.

2% 5% 20%

2 Identification

Botanical source	*Tagetes erecta* (Asteraceae)
Common name(s)	Marigold
Plant part used	Flower
Typical origin	India, China, Peru
Marker compound	Zeaxanthin (Xanthophylls & apocarotenoids)
CAS number	144-68-3
Manufacturing process	Extract microencapsulated on a food-grade carrier (carrier stated on the CoA) to give a cold-water-soluble / water-dispersible form
Standardisation	2–20% (HPLC)
Assay method	HPLC
Pharmacopoeia & standards	USP, JECFA specification, EFSA opinion / novel food

3 Specification

PARAMETER	SPECIFICATION	METHOD
Appearance	Orange-yellow to orange powder	Visual
Odour	Characteristic	Organoleptic
Identification	Conforms (HPTLC / HPLC fingerprint vs. reference)	HPTLC / HPLC
Assay – Zeaxanthin	Not less than the labelled grade (2%, 5%, 20%)	HPLC
Loss on drying	≤ 5.0%	USP ‹731›
Total ash	≤ 5.0%	USP ‹561›
Particle size	≥ 95% through 80 mesh (180 µm)	USP ‹786›
Bulk density	Report (typically 0.40–0.70 g/mL)	USP ‹616›
Residual solvents	Complies with ICH Q3C / USP ‹467›	GC-HS
Lead (Pb)	≤ 3.0 mg/kg	ICP-MS
Arsenic (As)	≤ 2.0 mg/kg	ICP-MS
Cadmium (Cd)	≤ 1.0 mg/kg	ICP-MS
Mercury (Hg)	≤ 0.1 mg/kg	ICP-MS
Pesticide residues	Complies with USP ‹561› and Regulation (EC) No 396/2005	GC-MS/MS, LC-MS/MS

Aflatoxins	B1 ≤ 2 µg/kg; sum of B1, B2, G1, G2 ≤ 4 µg/kg	HPLC-FLD
Total aerobic microbial count	≤ 10,000 cfu/g	USP ‹2021›
Yeasts & moulds	≤ 1,000 cfu/g	USP ‹2021›
Escherichia coli	Absent in 10 g	USP ‹2022›
Salmonella spp.	Absent in 25 g	USP ‹2022›
Staphylococcus aureus	Absent in 10 g	USP ‹2022›

Limits above are the standard release specification for this product class. Each lot is released against its Certificate of Analysis, which is the governing document and is available on request.

4 Grades & pack sizes

GRADE	SKU PREFIX	PACK SIZES
2%	AP1496-2	Sample (50 g) · 250 g · 1 Kg · 5 Kg · 25 Kg
5%	AP1496-5	Sample (50 g) · 250 g · 1 Kg · 5 Kg · 25 Kg
20%	AP1496-20	Sample (50 g) · 250 g · 1 Kg · 5 Kg · 25 Kg

5 Packaging

- Samples: food-grade HDPE jar or aluminium-laminate pouch.
- 250 g – 1 Kg: food-grade LDPE bag sealed in an aluminium-laminate pouch.
- 5 Kg – 25 Kg: double food-grade LDPE bags in a fibre drum or HDPE pail.
- Packaging may vary by lot and is stated on the packing list.

6 Storage & shelf life

- Shelf life: 24 months from date of manufacture in the original, unopened packaging.
- Store in a cool (below 25 °C), dry place, protected from light.
- Hygroscopic: reseal immediately after use and minimise exposure to humid air.
- Light- and oxygen-sensitive: keep in opaque, oxygen-barrier packaging.

7 Applications

Industries	Nutraceuticals & Supplements, Food & Beverage
Formulation focus	Eye Health, Antioxidant & Healthy Ageing

Use levels depend on the finished product and the target market. The customer is responsible for establishing safe and permitted use levels and for any claims made on finished products.

8 Regulatory & compliance

- Pharmacopoeia / standard references: USP, JECFA specification, EFSA opinion / novel food.
- Allergen information: not derived from a source listed in Annex II of Regulation (EU) No 1169/2011.
- Regulatory status for food, supplement, cosmetic or pharmaceutical use (e.g. EU novel food, US NDI/GRAS, FSSAI) must be confirmed by the customer for the intended market and use.

This Technical Data Sheet is issued by CHOLAD PRIVATE LIMITED (trading as Extrakte), C 22/4, 2nd & 3rd Floor, Sector-57, Noida-201301, Uttar Pradesh, India · +91 817 8117 600 · choladco@gmail.com · extrakte.com. The information is given in good faith and reflects our current knowledge of the product; it does not constitute a warranty of properties for any specific application. Refer to the Safety Data Sheet **SDS-AP1496** for hazard, handling and transport information. Certificates of Analysis are issued per lot and are available on request.