

Lycopene / Beta Carotene

Carotenoids – natural and synthetic

Product Description

Lycopene and Beta Carotene are carotenoid antioxidants used as natural colorants and nutraceutical actives in food, beverage and supplement formulations. Available as natural and synthetic grades.

Certificate of Analysis

HSN Code: 3203.00

CAS Number: Lycopene: 502-65-8 / Beta-Carotene: 7035-40-7

Classification: 223540 — Carotenoids (

Parameter	Specification	Test Method
Appearance (Lycopene)	Red powder	Visual
Appearance (Beta-Carotene)	Orange powder	Visual
Assay Lycopene	"e 5 % o r a s p e r g r a d e	HPLC (UV 470 nm)
Assay Beta-Carotene (synthetic)	"e 9 6 %	HPLC (UV 454 nm)
Identification (Lycopene)	UV absorption at 470 nm	UV / HPLC
Identification (Beta-Carotene)	UV absorption at 454 nm	UV / HPLC
Residue on Ignition	As per grade	USP <281>
Heavy Metals	"d 1 0 p p m	USP <231>

Physical Properties

Appearance: Red powder (lycopene) / Orange powder (beta-carotene)

Molecular Formula: Lycopene: C₁₁H₁₁...† / Beta-Carotene: C₄₀H₅₆...†

Molecular Weight: Both: 536.87 g/mol

Solubility: Practically insoluble in water; soluble in hexane and oils

Melting Point: Lycopene: 172–175°C / Beta-Carotene: 178–179°C

Packing: 25 kg HDPE drums; 1 kg, 5 kg aluminium foil pouches (nitrogen-flushed)

Storage: Store in a cool, dry place away from light. Below 15°C. Under nitrogen blanket.

Safety & Handling

PPE: Gloves, safety goggles, dust mask, lab coat

Hazards:

- Light and oxygen sensitive
- Staining