

CERTIFICATE OF ANALYSIS

Product Name	β -carotene	Batch Number	25121211
CAS	7235-40-7		
Manufacture Date	Dec. 12, 2025		
Expiry Date	Dec. 11, 2028		

ITEM	SPECIFICATION	RESULT	STANDARD REFERENCED
Physical			
Appearance	Red brown powder	Complies	Visual
Odor	Characteristic	Complies	Sensory
Taste	Characteristic	Complies	Sensory
Loss on drying	$\leq 8.0\%$	2.70%	2g/105°C/5hrs
Chemical			
Heavy metals	$\leq 10\text{ppm}$	Complies	Colorimetric method
Arsenic(As)	$\leq 3\text{ppm}$	Complies	Atomic Absorption
Lead(Pb)	$\leq 2\text{ppm}$	Complies	Atomic Absorption
Cadmium(Cd)	$\leq 1\text{ppm}$	Complies	Atomic Absorption
Mercury(Hg)	$\leq 0.1\text{ppm}$	Complies	Atomic Absorption
Solvent residual	$\leq 5000\text{ppm}$	Complies	Gas Chromatography
Assay			
Total carotenoid content	$\geq 20.0\%$	21.30%	UV
β -Carotene	$\geq 20.0\%$	21.00%	HPLC
Microbial			
Total microbacterial count	$\leq 1000\text{CFU/g}$	$\leq 10\text{CFU/g}$	ChP
Mould	$\leq 100\text{CFU/g}$	$\leq 10\text{CFU/g}$	ChP
Yeast	$\leq 100\text{CFU/g}$	$\leq 10\text{CFU/g}$	ChP
Escherichia Coli presence	Negative	Negative	ChP
Salmonella	Negative	Negative	ChP
Else			
Shelf life	Three years when properly stored.		