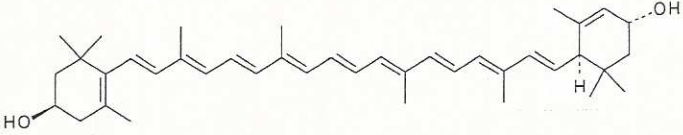


**INDOFINE Chemical Company, Inc.**

121 Stryker Lane, Bldg. 30
Hillsborough, NJ 08844 USA
Phone: (908) 359-6778; Fax: (908) 359-1179

Certificate Of Analysis**020306S****LUTEIN****Lot No.: 13081949****IDENTIFICATION**

CAS number	[127-40-2]	
Chemical family	Carotenoids	
Synonym	Xanthophyll	
Molecular formula	C ₄₀ H ₅₆ O ₂	
Molecular weight	568.89	

ANALYSIS

TEST	SPECIFICATION <i>(December 2010, version 03)</i>	RESULT
Appearance	Powder	Conform
Melting point	174-181°C	180-181°C
TLC	Silicagel Heptane / acetone (60/40, V/V) Visible	Main spot
UV/Visible spectrum λ max (\pm 2 nm)	421, 444, 472 nm in methanol + 0.5% methylene chloride	Conform
E1%	2470 \pm 100 at 444 nm 2290 \pm 100 at 472 nm	2440 2250
Assay (UV)*	\geq 95%	Conform
Date of last QC-recheck	July 2013	
Date of retest	July 2014	

*Despite the specific and intensive care taken with these products, they are very fragile. We recommend that you confirm product purity by measuring the E1%
The values given on the 'Certificate of Analysis' are the results determined at the time of analysis.

STORAGE

Store at $<-15^{\circ}\text{C}$
Store away from light
HYGHLY UNSTABLE