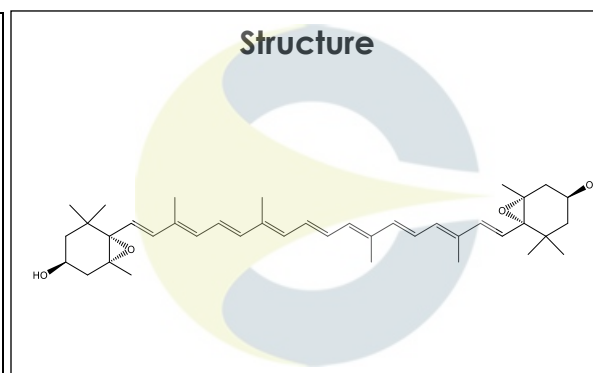


**Certificate of Analysis**

For Laboratory Use Only

<b>PRODUCT NAME</b>	Violaxanthin
<b>PART NUMBER</b>	00022535
<b>STANDARD TYPE</b>	Analytical Standard (AS)
<b>LOT NUMBER</b>	00022535-146
<b>REPORT NUMBER</b>	CDXA-RSS-10049-00
<b>DATE OF SAMPLE</b>	01/17/2023
<b>DATE OF REPORT</b>	01/20/2023



<b>CHEMICAL NAMES</b>	(3S,3'S,5R,5'R,6S,6'S)-5,6:5',6'-Diepoxy-5,5',6,6'-tetrahydro-β,β-carotene-3,3'-diol; <i>all-trans</i> -Violaxanthin
<b>CHEMICAL FORMULA</b>	C <sub>40</sub> H <sub>56</sub> O <sub>4</sub>
<b>MOLECULAR WEIGHT (MW)</b>	600.87
<b>CHEMICAL FAMILY</b>	Carotenoids
<b>CAS NUMBER</b>	[126-29-4]
<b>EC#(EINECS)</b>	NA
<b>RTECS</b>	FI0329970
<b>EXTRACTED FROM</b>	Chlorophyceae

**PREPARED CONCENTRATION**

0.964 mg/L in Ethanol Volume 2.5 mL	Extinction Coefficient is 255 L/g/cm at 443 nm.	Be advised to use measured volumes of this standard solution before diluting to the desired concentration.
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**ANALYTICAL RESULTS**

TEST	METHOD	SPECIFICATION	RESULT
HPLC – Purity	See below	>75%	96.8%
HPLC – Identity	See below	Conforms	Conforms

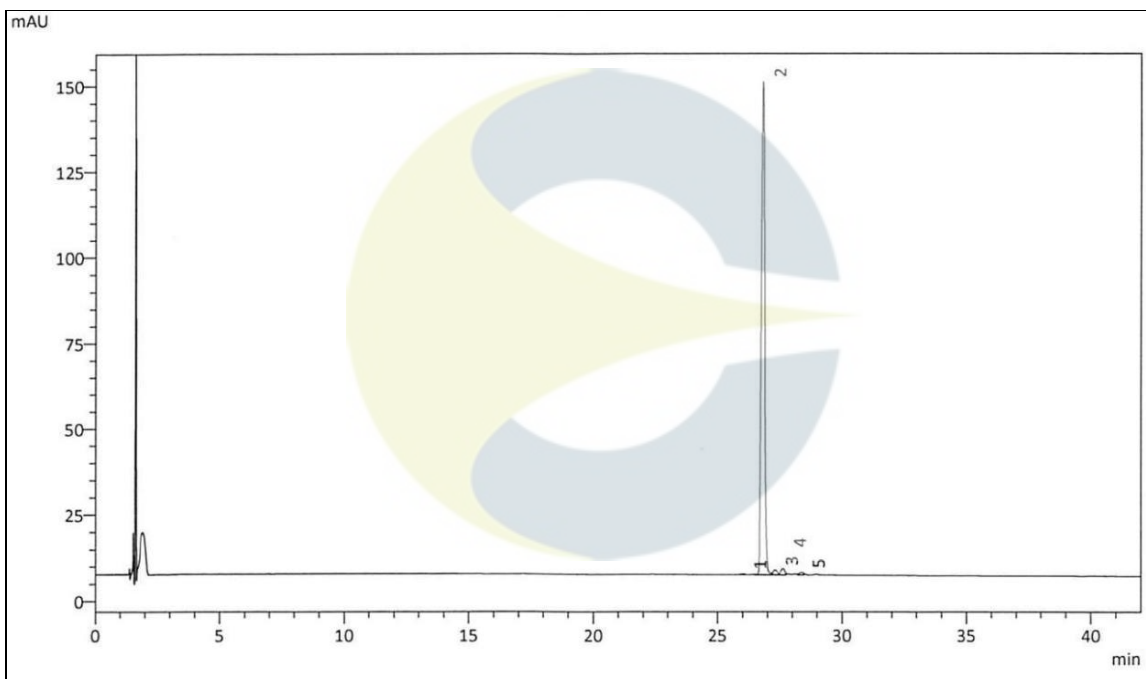
**STORAGE CONDITIONS**

<b>STORAGE</b>	-80 °C in a dry place away from light.
<b>EXPIRATION DATE</b>	01/2026 under the above conditions, if unopened.

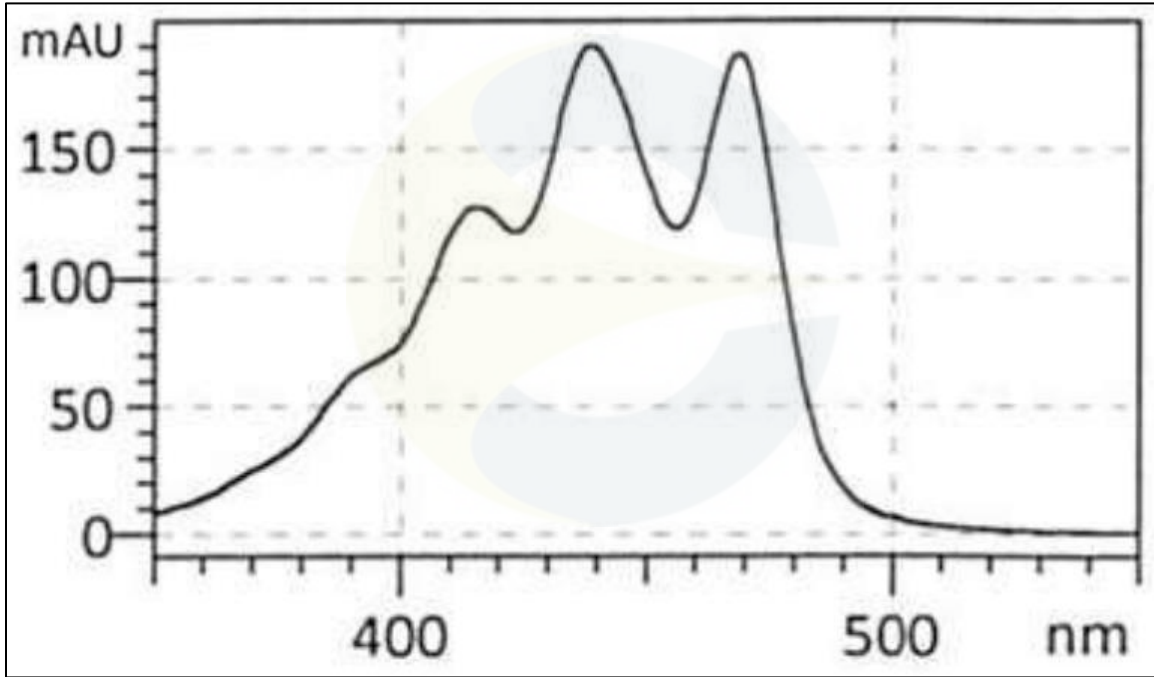
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**ANALYTICAL CONDITIONS**

<b>INSTRUMENT</b>	HPLC/UV
<b>COLUMN</b>	Eclipse XDB-C8 150 x 4.6 mm, 3.5 µm particle size
<b>MOBILE PHASE</b>	A – Methanol/28 mM Tetrabutylammonium acetate, pH 6.5 (70/30), B – Methanol 5% B increasing to 95% B over 22 minutes. Hold at 95% B for 7 minutes then return to 5% B over 2 minutes. Equilibrate at 5% B for 6.4 minutes.
<b>COLUMN TEMP.</b>	60 °C
<b>FLOW RATE</b>	1.1 mL/minute
<b>INJECTION VOL.</b>	500 µL
<b>INJECTION CONC.</b>	28.5% standard:71.5% Tetrabutylammonium acetate
<b>DETECTION</b>	450 nm

**HPLC CHROMATOGRAM OF VIOLAXANTHIN**


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**UV SPECTRUM AT RT = 26.8 MINUTES**

**REVISION HISTORY**

<u>Revision History</u>	<u>Date of Revision</u>	<u>Document/Changes</u>
00	01/20/2023	New report

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