



Jiwan Pharmaceutical Technology Co., Ltd
No. 1222 West Aoti Road, Lixia District, Jinan, Shandong, China
Phone: +86-531-55519016 Fax: +86-531-55519016

Certificate of Analysis

PRODUCT	ALL-TRANS-RETINAL		
CAS #	116-31-4	Batch No.	20220901
M.F.	C ₂₀ H ₂₈ O	MFG date	Sep 01, 2022
M.W.	284.44 g/mol	Test date	Sep 14, 2022
Grade	Cosmetic ingredient	Expiration date	Aug 30, 2024
Storage	-20°C, under inner atmosphere		

TEST	SPECIFICATION	RESULTS
Appearance	Yellow powder or saffron yellow powder	Saffron yellow powder
Assay (HPLC)	98%min	98.7%
MP.	61-63°C	61-63°C
Storage temp.	-20°C	-20°C
Moisture	< 0.5%	0.15%
¹ H NMR	Consistent	Consistent

METAPHARMACEUTICAL

N DE LOTE:

0011222

01/12/2022

Approved by
Quality System Manager

Signature Zhenhua Song