



METAPHARMACEUTICAL

N DE LOTE:

0271025

Certificate of Analysis

Product name TRETINOIN - USP/EP Current Edition

Product Code 2610460
Batch Number 0025101527
Order 1250795
Quantity 5,000 KG

Manufacturing date 04/08/2025
Re-test date 03/08/2030
Certificate Nr. 10000042238
Batch Size 23,895 KG
Ref. Order 2067

Alcandro
23/10/2025

Test	References	Specification	M.U.	Result
Appearance	EP / USP	Crystalline powder		Crystalline powder
Colour	EP / USP	Yellow or light orange		Yellow
IR identification	EP2.2.24/USP<197M>	Conforms to standard		Conforms to standard
UV identification	USP <197U>	Conforms to standard		Conforms to standard
Loss on drying	EP2.2.32/USP<731>	<= 0,5	%	0,1
Residue on ignition	EP / USP	<= 0,1	%	0,0
Assay (TBAH)	EP / USP	98,0 - 102,0	% d.b.	100,6
Isotretinoin	Int Val Meth (HPLC)	<= 0,50	%	< LOQ (<0,01)
Epoxy derivative	Int Val Meth (HPLC)	< 0,15	%	0,04
Impurity a (4-methoxy retinoic acid)	Int Val Meth (HPLC)	< 0,15	%	0,02
Any unspecified impurity	Int Val Meth (HPLC)	<= 0,10	%	0,03
Total impurities (except Isotretinoin)	Int Val Meth (HPLC)	<= 0,50	%	0,14
ICH Class 1 solvents : not used	Int Val Meth (GC)	Not tested		Not tested
ICH Class 2 solvents	Int Val Meth (GC)	In specific		In specific
Chloroform	Int Val Meth (GC)	<= 50	ppm	< LOQ (<25)
Methyl alcohol	Int Val Meth (GC)	<= 100	ppm	26
ICH Class 3 solvents	Int Val Meth (GC)	In specific		In specific
Ethyl acetate	Int Val Meth (GC)	<= 100	ppm	< LOQ (<20)
Isopropyl alcohol	Int Val Meth (GC)	<= 2000	ppm	689
Isotretinoin (EP)	EP (HPLC)	<= 0,50	%	< LOQ (<0,05)
Epoxy derivative (EP)	EP (HPLC)	< 0,15	%	< LOQ (<0,05)
Impurity a (EP)	EP (HPLC)	< 0,15	%	< LOQ (<0,05)
(4-methoxy retinoic acid)				
Any unspecified impurity (EP)	EP (HPLC)	<= 0,10	%	0,05
Total impurities (EP)	EP (HPLC)	<= 0,50	%	0,05
Clarity of solution in chloroform	Internal Method	<= 3,0	NTU	0,4
Clarity of solution in THF (10%)	Internal Method	Clear		Clear

Packaging and storage: store in airtight containers, in a dry place, protected from light, heat and moisture,
at a mean temperature of 25°C (allowed excursions 15-30°C). It is recommended that the contents of an opened container

Alessandro Paganelli Resp. Laboratorio QM Approved October 03, 2025	Manuel Volpiana Qualified Person Released October 03, 2025		
'Emission'	Beatrice Parma	QA Specialist	October 06, 2025

Capitale Sociale € 40.000.000 i.v. - R.I. Milano Cod. Fisc. e P.IVA n. 08101100157 - R.E.A. Milano n. 1201640
Società Capogruppo P. & R. Principi Attivi S.p.A.
Società con Socio unico - Strada Rivoltana km. 6/7 - 20053 Rodano (MI) ITALY - Capitale sociale € 1.200.000 i.v. - C.F. e P.IVA 11155530964

Modello: 2610460_S/1
October 06, 2025

This CoA is electronically dated and signed by authorized personnel of the Quality Unit October 06, 2025 Pag. 1 / 2



Certificate of Analysis

Product name	TRETINOIN - USP/EP Current Edition	Manufacturing date	04/08/2025
Product Code	2610460	Re-test date	03/08/2030
Batch Number	0025101527	Certificate Nr.	100000042238
Order	1250795	Batch Size	23,895 KG
Quantity	5,000 KG	Ref. Order	2067

<u>Test</u>	<u>References</u>	<u>Specification</u>	<u>M.U.</u>	<u>Result</u>
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be used as soon as possible and any unused part be protected under vacuum or under atmosphere of an Inert gas.

This batch has been manufactured, packaged and tested in accordance with EU GMP Guideline Volume 4 Part II (ICH Q7A).
Manufacturing site of the Active Pharmaceutical Ingredient: Olon S.p.A - Garbagnate Milanese

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