

Stabilimento di Garbagnate
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Olon S.p.A.
Sede Legale
Strada Rivoltana km 6/7
Rodano (MI)



Certificate of analysis

Product **TRETINOIN-USP/EP current edition** Code N° **2610460** Batch N° **1510001153**

Manufacturing date **MAY 2015** Retest date (where applicable) **APR 2017**

Analysis Number **P1PF051605** Bulletin **4P1542496**

Test	References	Result	M.U.	Limits
Description		Yellow, crystalline powder	--	Yellow or light orange, crystalline powder
IR		Conforms to Standard	--	Conforms to Standard
UV		Conforms to Standard	--	Conforms to Standard
Loss on drying		0,1	%	≤ 0,5
Sulphated Ash		0,0	%	≤ 0,1
Heavy metals		< 20	ppm	≤ 20
Assay (TBAH)		101,7	%	98,0 + 102,0
Isotretinoin		< 0,01	%	≤ 0,50
Epoxy derivative		0,08	%	< 0,15
Impurity A (4-methoxy retinoic acid)		0,03	%	< 0,15
Highest impurity unknown		0,05	%	≤ 0,10
Total impurities (except isotretinoin)		0,21	%	≤ 0,50
ICH Class 1 solvents : Not used		Not tested	--	Not tested
ICH Class 2 solvents :		In specifica	--	Conforms
Chloroform		< 25	ppm	≤ 50
Methyl alcohol		< 26	ppm	≤ 100
ICH Class 3 solvents		In specifica	--	Conforms
Ethyl acetate		< 20	ppm	≤ 100
Isopropanol		396	ppm	≤ 2000
Isotretinoin		< 0,05	%	≤ 0,50
Epoxy derivative		0,08	%	< 0,15
4-methoxy retinoic acid (Imp a)		< 0,05	%	< 0,15
Largest unknown impurity		< 0,05	%	≤ 0,10
Total impurities		0,08	%	≤ 0,50
In chloroform		0,6	NTU	≤ 3,0
In THF (10%)		Clear	--	Clear
Packaging and storage		Preserve in airtight containers, protected from light	--	Preserve in airtight containers, protected from light

Capitale Sociale € 40.000.000 i.v. - R.I. Milano, Cod. Fisc. e P. IVA n. 06101100157 - R.E.A. Milano n. 1291640
Società del Gruppo P. & R. S.p.A. soggetta all'attività di direzione e coordinamento della Società Capogruppo P. & R. S.p.A.
Strada Rivoltana km 6/7 - 20090 Rodano (MI) - ITALY capitale sociale € 12.000.000,00 i.v. - C.F. e P.I. 00651030181

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Analysis Date

06/15/2015

QC Manager

15/06/2015

Reviewed by Qualified Person

Notes:

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: Stabilimento di Garbagnate

[Signature] 15/06/15