



Via Pavia, 1 • 27027 Gropello Cairoli PV, Italy Tel. +39 0382 819.1 - Fax +39 0382 815886

## **CERTIFICATE OF ANALYSIS**

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## Product Name BETAMETHASONE DIPROPIONATE MICRONIZED

According to Ph. Eur.- USP

Batch Nr.	2109DM0	B0021622	Manufacturing Date	03/2016	Expiration Date	03/2021
Analysis record	Nr. 201601562		Net weight		Nr. of packages	

Appearance White to almost-white, microcrystalline powder. Practically insoluble in Water; sparingly soluble in Alcohol; freely soluble in Acetone, Methylene Chloride and Chloroform.

TESTS	RESULTS	SPECIFICATIONS	UNITS
IDENTIFICATION (IR-TLC)	COMPLIES	COMPLIES	
LOSS ON DRYING (After 3 hours at 105°C)	0.12	<= 1.0	36
WATER CONTENT (KF)	0.40	<= 1.0	%
SPECIFIC OPTICAL ROTATION (c=1% in Ethanol)	+35.6	+84 - +88	* o.d.b.
SPECIFIC OPTICAL ROTATION (c=1% in Dioxane)	+65.4	+63 - +70	° o.d.b.
SPECIFIC ABSORBANCE (at about 240 nm)	302.0	295.0 - 315.0	A(1%,1cm) o.d b
RESIDUE ON IGNITION	0.00	<= 0.2	1 %
RELATED SUBSTANCES (HPLC method)			
Betamethasone	N.D.	<= 0.10	% Vs Std
Betamethasone 17-Propionate	N.D.	<= C.3	% Vs Std
Betamethasone 21-Propionate	0.17	<= 0.5	% Vs Std
Betamethasone 11,17,21-Tripropionate	0.11	<= 0.2	% Vs Std
Single unknown	0.05	<= 0.10	% Vs Std
Total impurities	0.40	<= 1.0	3%
ASSAY (HPLC inethod)	98.9	97.0 - 102.0	% *
ASSAY (Spectrophotometric method) RESIDUAL SOLVENTS (GLC methods)	99.0	97.0 - 102.0	%
Methanol	N.D.	<= 1000	ppm
Acetone	55	<= 2000	ppm
Methylene Chloride (*)	N.D.	<= 600	; ppm
!sopropy! Ether	N.D.	<= 1000	ppm
Te trahydrofuren	N.D.	<= 720	ppm
Pyridine	N.D.	<= 200	ppm
(*)No potential for alther "OVIs" USP <467> presence because not used in the process.	2 7 2200 (200		

<sup>\*</sup> as C28H37FO7 on dried basis referred to the Std.

	Assay Date	Print Date	Q.C. department	Release Date	Qualified Person
	05/04/2016	11/01/2017	FABIO VECCHIO	07/04/2016	SABRINA ABBIATI





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TESTS		RESULTS	SPECIFICATIONS	UNITS
PARTICLE SIZE (Laser Scattering method)			The second secon	1
Particle <= 20 µm		100.0	>= 99.0	% of total volume
Particle <= 10 µm	and triming the second	98.9	>= 90.0	% of total volume
Particle <= 5 µm		93.9	>= 82.0	% of total volume
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<sup>\*</sup> as C28H37F07 on dried basis referred to the Std.

Assay Date	Print Date	Q.C. department	Release Date	Qualified Person
05/04/2016	11/01/2017	FABIO VECCHIO	07/04/2016	SABRINA ABBIATI