## **UNIQUE CHEMICALS**

(A Division of J. B. Chemicals & Pharmaceuticals Ltd.)
Plot no. 5, Phase IV, GIDC Estate, Panoli-394 116 (GUJARAT) INDIA.

## CERTIFICATE OF ANALYSIS

## QUALITY CONTROL DEPARTMENT

Name of product	: DICLOFENAC SODIUI	M EP	
Manufactured by	: Unique Chemicals, Panoli.		
Batch No.	: PDFS120226	A.R. No.	: 09FP12001327
Manufacturing Date	: Nov-2012	Expiry Date	: Oct-2017
		Release Date	: 27/11/2012

TESTS	RESULTS	CTANDADOC
Appearance	White crystalline powder, slightly hygroscopic.	STANDARDS  A white or slightly yellowisl crystalline powder, slightly hygroscopic.
Solubility	Sparingly soluble in water, freely soluble in methanol, soluble in alcohol, slightly soluble in acetone.	Sparingly soluble in water, freely soluble in methanol, soluble in alcohol, slightly soluble in acetone.
Melting point	It melts at 281° C with decomposition	It melts at about 280°C with decomposition
Identification		decomposition
A: IR Spectrum	A: The infra-red spectrum of sample is concordant with the spectrum obtained from Diclofenac sodium working standard.	A: The infra-red spectrum of sample should concordant with the spectrum obtained from Diclofenac sodium working standard.
D: Reaction (b) of sodium salt	D: The solution gives reaction (b) of sodium	D: The solution gives reaction (b) of sodium
Appearance of solution:		
Clarity of solution Colour of solution	Clear solution 0.01	Solution should be clear E at 440 Maximum 0.05 (5% w/v)
Related Substances (HPLC):		(3% W/V)
Diclofenac impurity A	Not Detected	Not many than 0.20
Diclofenac impurity B	Not Detected	Not more than 0.2% Not more than 0.2%
Diclofenac impurity C	Not Detected	Not more than 0.2%
Diclofenac impurity D	Not Detected	Not more than 0.2%
Diclofenac impurity E	Not Detected	Not more than 0.2%
Any other impurity	0.01%	Not more than 0.10%
Total impurities	0.01%	Not more than 0.5%
Heavy metals	Less than 10 ppm	Not more than 10 ppm
Loss on drying	0.23 % w/w	Not more than 0.5 % w/w
Assay (On dried basis)	99.7 % w/w	99.0% w/w to 101.0% w/w
Additional tests:		27.0 % W/ W to 101.0 % W/ W
Particle Size	90 % < 18.8 μm	Minimum 05 % < 50
(By Sympatech)	100 % < 91.0 µm	Minimum 95 % < 50 μm,
Diclofenac Sodium Dimer (By HPLC)		Minimum 100 % < 125 $\mu$ m.  Not more than 0.1 %

OPINION: The above sample complies with the prescribed standards of quality as per EP and the requirements of certificate of suitability no. R1-CEP 1997-041-Rev 03.

Prepared By / Date	Checked By / Date	Approved By / Date
P	nd	mels
24/12/12	24.12.12	24/12/12