# Mangalam Drugs and Organics Ltd.



Unit II: Plot No. 1203, 3rd Phase, G. I. D. C., VAPI, Dist. Valsad - 396195 (Gujarat) 

91 - 0260 - 2432669 / 07490052669

91 - 0260 - 2432669 / 2424970 

modol2@mangalamdrugs.com 

CIN: L24230MH1972PLC116413

## **CERTIFICATE OF ANALYSIS**

Page No. 1 of 3

Name of the Materia	ıl: FUROSEMIDE Ph.	Eur.	1 age 140. 1 01 .
Mfg. License No.	G/1315	CAS No.	54-31-9
Batch No.	FRD-2B-202010	Batch Size	366.00 Kg
Mfg. Date	June-2020	Expiry Date	May-2025
Received Date	24/06/2020	Release Date	01/07/2020
A. R. No.	FRD-20/10		
<b>Storage Conditions</b>	Store in well closed containers, protected from light.		

**RESULTS OF ANALYSIS** 

Sr. No.	Test	Observation	Specification
01	Description	White crystalline powder	White or almost white, crystalline powder.
02	Solubility	Complies	Practically insoluble in water, soluble in acetone, sparingly soluble in ethanol (96%), Practically insoluble in methylene chloride. It dissolves in dilute solutions of alkali hydroxides.
03	Identification:		
Ξ	Test A: (By Infrared Absorption Spectrophotometry)	Complies	The infra-red absorption spectrum of the test sample is concordant with the spectrum obtained from Furosemide RS/WS.
	Test B: By TLC	Complies	Result A: The principal spot in the chromatogram obtained with the test solution is similar in position and size to the principal spot in the chromatogram obtained with the reference solution.
		Complies	Result B: The Principal spot in the chromatogram obtained with the test solution is similar in position, colour and size to the principal spot in the chromatogram obtained with the reference
04	Appearance of solution	Complies	The solution is clear and not more intensely coloured than reference solution BY <sub>5</sub>

Prepared by	Checked by	Approved by
1001/03/30	210712020	To 01/07/2020
(Jr.Executive - Q.C.)	(Sr.Manager- Q.C.)	(Sr.Manager - Q.A.)
Ms.Krishna Patel	Mr.Machindra Mungase	Mr.Hemant Patel

# Mangalam Drugs and Organics Ltd.



Unit II: Plot No. 1203, 3rd Phase, G. I. D. C., VAPI, Dist. Valsad - 396195 (Gujarat) **3** 91 - 0260 - 2432669 / 07490052669 **9** 91 - 0260 - 2432669 / 2424970 **9** mdol2@mangalamdrugs.com • CIN: L24230MH1972PLC116413

### **CERTIFICATE OF ANALYSIS**

Page No. 2 of 3

Name of the Materia	al: FUROSEMIDE Ph.	Eur.	1 45 1101 5 01
Mfg. License No.	G/1315	CAS No.	54-31-9
Batch No.	FRD-2B-202010	Batch Size	366.00 Kg
Mfg. Date	June-2020	Expiry Date	May-2025
Received Date	24/06/2020	Release Date	01/07/2020
A. R. No.	FRD-20/10		-
<b>Storage Conditions</b>	Store in well closed containers, protected from light.		

#### **RESULTS OF ANALYSIS**

Sr. No.	Test	Observation	Specification	
05	Related Substance (By HPLC):			
	Impurity A	0.03% w/w	Not more than 0.10% w/w	
	Impurity B	0.01% w/w	Not more than 0.10% w/w	
	Impurity C	0.03% w/w	Not more than 0.20% w/w	
	Impurity D	Below Quantification Limit	Not more than 0.15% w/w	
	Impurity E	Below Detection Limit	Not more than 0.10% w/w	
	Impurity F	Below Quantification Limit	Not more than 0.10% w/w	
	Unspecified impurities	Below Disregard Limit	Not more than 0.10% w/w	
	Total impurities	0.07% w/w	Not more than 0.5% w/w	
06	Chlorides	Less than 200 ppm	Not more than 200 ppm	
07	Sulfates	Less than 300 ppm	Not more than 300 ppm	
08	Loss on drying	0.23% w/w	Not more than 0.5% w/w	
09	Sulfated Ash	0.04% w/w	Not more than 0.1% w/w	
10	Assay (By Potentiometrically)	99.3% w/w	Not less than 98.5% w/w and Not more than 101.0% w/w (Calculated on dried basis)	

Prepared by	Checked by	Approved by
110343B	201071200	1001/2020
(Jr.Executive - Q.C.)	(Sr.Manager- Q.C.)	(Sr.Manager - Q.A.)
Ms.Krishna Patel	Mr.Machindra Mungase	Mr.Hemant Patel

# Mangalam Drugs and Organics Ltd.



## **CERTIFICATE OF ANALYSIS**

Page No. 3 of 3

Name of the Materi	al: FUROSEMIDE Ph.	Eur.	1 450 110. 5 01.
Mfg. License No.	G/1315	CAS No.	54-31-9
Batch No.	FRD-2B-202010	Batch Size	366.00 Kg
Mfg. Date	June-2020	Expiry Date	May-2025
Received Date	24/06/2020	Release Date	01/07/2020
A. R. No.	FRD-20/10	4	
<b>Storage Conditions</b>	Store in well closed containers, protected from light.		

#### **RESULTS OF ANALYSIS**

Sr.	Test	Observation Observation	Specification				
No.		Observation	Specification				
Addi	Additional In house tests:						
11	Residual Solvents (By GC	C-HS):					
	Methanol	188 ppm	Not more than 3000 ppm				
	Ethanol	Not detected	Not more than 5000 ppm				
	Isopropyl alcohol	Not detected	Not more than 5000 ppm				
	Ethyl Acetate	Below Quantification Limit	Not more than 5000 ppm				
	Methyl Acetate	Below Detection Limit	Not more than 5000 ppm				
12	Furfurylamine Content (By GC)	Not detected	Not more than 1000 ppm				
13	Furfuraldehyde Content (By GC)	Not detected	Not more than 1500 ppm				
14 Bulk Density:							
	Untapped density	0.35 gm/ml	For Record				
	Tapped density	0.56 gm/ml	For Record				
15	Particle size	100.0% passing through 40 mesh	For Record				

Remark: The material Complies as per Ph. Eur. and In-House specification.

Prepared by	Checked by	Approved by
10363030	-100 12 m	103/2020
(Jr.Executive - Q.C.)	(Sr.Manager- Q.C.)	(Sr.Manager - Q.A.)
Ms.Krishna Patel	Mr.Machindra Mungase	Mr.Hemant Patel