



Doc. No. QC / SPEC / FP /10A
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**ATUL LIMITED
AROMATICS DIVISION
ANKLESHWAR**

FINISHED PRODUCT SPECIFICATION

MANGANESE SULPHATE MONOHYDRATE- AGRICULTURE GRADE

Molecular Formula: $MnSO_4 \cdot H_2O$

Molecular Weight: 169 g mol^{-1}

CAS Number: 10034-96-5

Sr. No.	PARAMETER	SPECIFICATION
1	Appearance	White to light pink powder
2	Purity as $MnSO_4 \cdot H_2O$ % on dry base	98.7 Min
3	Manganese as Mn % on dry base	32.0 Min
4	Iron content as Fe in PPM	50 Max.
5	Moisture % (w/w)	0.30 Max.
6	Water insoluble % (at 5.0 pH)	0.10 Max.
7	Bulk Density (gm/cm ³)	0.90 – 1.70
8	pH of 10% Aq.Solution	5.5 – 7.0
9	Solubility in Water	Highly Soluble in water

IMPURITY PROFILE

Aluminum as Al ppm	15 Max
Arsenic as As ppm	2 Max
Cadmium as Cd ppm	2 Max
Lead as Pb ppm	15 Max
Mercury as Hg ppm	0.3 Max
Cobalt as Co ppm	100 Max
Nickel Ni ppm	100 Max
Calcium as Ca %	0.5 Max

Prepared By :
Mgr. QC

Approved By :
Head QC