

Tecmangam®
**(Monohydrated Manganese Sulfate)
TECHNICAL BULLETIN**
CHEMICAL ANALYSIS

	<u>TYPICAL</u>	<u>GUARANTEE</u>
MANGANESE SULFATE MONOHYDRATED (MnSO ₄ ·H ₂ O)	98.4 - 99.0%	-
EQUIVALENT AS MANGANESE SULFATE (MnSO ₄)	87.9 - 88.5 %	-
EQUIVALENT AS MANGANESE (Mn)	32.0 - 32.2 %	32 % min.
SULFUR (S)	19.0 - 19.5 %	-
MOISTURE (H ₂ O)	0.15 - 0.30%	0.5% max
INSOLUBLE MATTER IN WATER	0.05 - 0.20%	-
pH	4 - 6	-

SOME TRACE ELEMENTS

IRON (Fe)	less than 150 ppm
ARSEMIC (As)	less than 0.5 ppm
LEAD (Pb)	less than 10.0 ppm
MERCURY (Hg)	less than 0.5 ppm
CROMIUM (total) (Cr)	less than 100 ppm
CADMIUM (Cd)	less than 5.0 ppm

GENERAL PHYSICAL DATA

APPEARANCE	White to cream colored
WATER SOLUBILITY	99.8% minimum
SOLUBLE MANGANESE AS (Mn)	100% from total Mn

PRODUCT
POWDER

BULK DENSITY (loose) 0.80 - 1.10 gr/cm³ (50 - 68 Lb / Ft³)

GRANULOMETRY

<u>(American US std.) MESH</u>	<u>%</u>	<u>DIAMETER (mm)</u>
+ 100	20.0	Greater than 0.15
+ 200	20.0	Greater than 0.075
+ 325	20.0	Greater than 0.045
- 325	40.0	Smaller than 0.045

MICRO-GRANULAR

BULK DENSITY (loose) 1.40 - 1.50 gr / cm³ (87 - 94 Lb / Ft³)

GRANULOMETRY

<u>(American US std.) MESH</u>	<u>%</u>	<u>DIAMETER (mm)</u>
- 40 + 200	90.0	0.425 a 0.075

MINI-GRANULAR

BULK DENSITY (loose) 1.35 - 1.60 gr / cm³ (84 - 100 Lb / Ft³)

GRANULOMETRY

<u>(American US std.) MESH</u>	<u>%</u>	<u>DIAMETER (mm)</u>
- 20 + 80	90.0	0.85 a 0.18 mm

MAXI-GRANULAR

BULK DENSITY (loose) 1.30 - 1.50 gr / cm³ (81 - 94 Lb / Ft³)

GRANULOMETRY

<u>(American US std.) MESH</u>	<u>%</u>	<u>DIAMETER (mm)</u>
- 5 + 16	90.0	4.00 a 1.18 mm

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TECHNOLOGY PROCESS AND QUALITY CONTROL DEPARTMENT