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Run Date: 09/28/99 I/M Date: 09/28/99 8017 PINEMONT DRIVE Time: 01:53 PM

HOUSTON, TEXAS 77040-6519

ITEM: MGS7MPI50L40 MAGNESIUM SULFATE HEPTAHYDRATE

REF:PDS FOR PI PRODUCT DATA SHEET REV: 09/20/99 RCT DATE:

SYNONYMS : EPSOM SALT CHEMICAL FORMULA: MqSO4.7H2O CAS NUMBER : 10034-99-8 APPEARANCE: COLORLESS TO WHITE MOLECULAR WEIGHT: 246.48 COUNTRY OF ORIGIN: GERMANY PACKAGING : 50 LB BAG

THE FOLLOWING VALUES HAVE BEEN PROVIDED BY THE MANUFACTURER OF THIS PRODUCT. VERIFIED AND DIGITALLY SIGNED BY CHEM INFO ANALYST, PHONE 713-896-9966.

Si	PECIFICATIONS TYPICAL
MgSO4.7H2O - PURITY	98.5 % MIN 99.74-99.78%
MAGNESIUM SULFATE (MgSO4)	48.0 % MIN 48.85-49.09%
IGNITION LOSS	51.9 % MAX 50.79-51.05%
CHLORIDE (Cl)	
CALCIUM (Ca)	0.05 % MAX 0.005-0.008%
pH 5%	5.0-9.2 6.1 - 6.3
	MFG TYPICAL RESULTS
ARSENIC (As) 3. PPM	
CADMIUM (Cd) 0.001 PPM	
CHROMIUM (Cr) 0.05 PPM	I MAX 0.05 PPM
COPPER (Cu) 0.02 PPM	I MAX 0.02 PPM
MERCURY (Hg) 0.001 PPM	MAX <0.001 PPM
ALUMINUM (Al) 0.20 PPM	
NICKEL (Ni) 0.01 PPM	
LEAD (Pb) 0.20 PPM	
ZINC $(Zn) \dots 10$. PPM	
SELENIUM (Se) 1. PPM	I MAX
HEAVY METALS (as Pb) 10. PPM	I MAX
MANGANESE(Mn)	1. PPM
IRON (Fe)	10. PPM
WATER INSOL RESIDUE 0.01 %	MAX
FREE ACID as H2SO4 0.01 %	
BULK DENSITY 0.95 gr/cm3, ANGLE	REPOSE 33 DEG, TYPICAL GRAIN SIZE 0.1-3mm

PLEASE READ MATERIAL SAFETY DATA SHEET PRIOR TO HANDLING THIS PRODUCT. ***FOR CHEMICAL EMERGENCY CALL CHEMTREC, DAY/NIGHT 1-800-424-9300 *** THIS PRODUCT IS NOT TO BE USED IN VIOLATION OF ANY PATENTS. CHEM ONE CORP. DISCLAIMS ANY AND ALL WARRANTIES, EITHER EXPRESSED OR IMPLIED, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR APPLICATION. IN NO EVENT SHALL CHEM ONE CORP. OR ITS SUPPLIERS BE LIABLE FOR ANY DAMAGES WHATSOEVER INCLUDING DIRECT, INDIRECT, INCIDENTAL, CONSEQUENTIAL, LOSS OF BUSINESS PROFITS OR SPECIAL DAMAGES, EVEN IF CHEM ONE CORP. OR ITS SUPPLIERS HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF LIABILITY FOR CONSEQUENTIAL OR INCIDENTAL DAMAGES SO THE FOREGOING LIMITATION MAY NOT APPLY. REV 011299 AA APPROVED PURCHASING REPLACES 120998 SSD 093198