

# Material Safety Data Sheet (MSDS) – CalPatible Manganese

Section One Identification of Product		
Manufactures Name:	Emergency Telephone Number(s):	
Bio-Gro, Inc. 681 Glade Road Mabton, WA 98935	1-509-894-4110 1-800-738-7457 Contact Person: Peter Aleman	
Trade Name and Synonyms:	CalPatible Manganese	
Chemical Name and Synonyms:	Manganese Nitrate	
Chemical Family:	Agricultural Fertilizers	
Section Two Hazardous Ingredient s of Mixtures		
Component:	% (ppm)	Threshold Limit Value:
Manganese Nitrate (CAS – 10377-66-9) Manganese Sulfate (CAS –7785-87-7)	3 to 25% 2 to 25%	Not available Not available
Substances Contained in Product Regulated Under SARA, Title III, Section 313:		
None	-	--
Section Three Physical & Chemical Characteristics		
Boiling Point:	100oC (212oF)	
Vapor Pressure (mm Hg):	N/A	
Solubility in Water:	Complete	
Specific Gravity (H2O = 1):	1.150 – 1.180	
Vapor Density (Air=1):	N/A	
Reactivity in Water:	NONE	
Appearance & Odor:	Blue Color	
Section Four Fire & Explosion Data		
Flash Point (oF): >200	Flammable Limits (%/Vol): N/A	
Fire Extinguishing Media: Water spray, dry chemical, foam or carbon dioxide.		
Special Fire Fighting Procedures: Eliminate ignition source. Wear self-contained breathing apparatus and complete personal protective equipment. Use water spray to cool fire, exposed structures and tanks, and to disperse vapor cloud if fire is not present. Use water spray, dry chemical, carbon dioxide or foam.		
Unusual Fire & Explosion Hazards: Although this material is not flammable in aqueous state, it will burn in the presence of a strong ignition source after the water is removed.		
Section Five Reactivity Data		
Stability:	Stable	
Conditions to Avoid:	Excessive Heat	
Incompatibility (Materials to Avoid):	Strong oxidizers	
Hazardous Decomposition Products:	Ammonia, Oxides of Nitrogen and Oxides of Carbon	
Hazardous Polymerization:	Will not occur	
Section Six Special Precautions		
Precautions to be taken in Handling & Storing: Store in cool, dry place, away from children and feed or food products. Do not contaminate other stored products or the storage area by the handling or storage of this material. Immediately clean up any spills, which may occur during storage. Do not allow material to Freeze.		
Other Precautions: Do not contaminate water supplies by handling & storage, cleaning of equipment or disposal of wastes. Keep work & storage areas clean. Read & follow precautionary measures on product label.		

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