

In 2011 the Joint Commission recommended that magnesium sulfate be written out and not abbreviated as MgSO₄, as this designation can be misinterpreted as MS or MSO₄, which are abbreviations for morphine sulfate.¹⁸

Table 1: Steps for Preparation, Storage, Ordering and Administration of Magnesium Sulfate

Step 1: Preparation	<ul style="list-style-type: none"> a. Purchase commercially prepared standard concentrations of magnesium sulfate. b. Use standard premixed magnesium sulfate infusions in a volume different than Oxytocin to prevent accidental loading dose. c. Pharmacy should prepare any non-commercially prepared solutions. d. Use a piggy-back bag for magnesium sulfate loading doses, do not use the main infusion bag
Step 2: Storage	<ul style="list-style-type: none"> a. Label bags with a High Alert Sticker or distinctive colored label. b. Loading dose bags should be stored in a separate pharmacy area to prevent mix-ups.
Step 3: Order/ Transcribe	<ul style="list-style-type: none"> a. Use preprinted orders and order sets with the entire medication spelled out when prescribing magnesium sulfate. b. Utilize a High Alert warning on the automated dispensing machine (ADM) when magnesium sulfate is withdrawn.
Step 4: Administration	<ul style="list-style-type: none"> a. Label tubing used for infusing magnesium sulfate appropriately. b. An infusion pump should always be used. A ‘smart’ infusion pump with patient safety software activated should be used when available. <p>NOTE: An independent double check should be performed by two nurses when magnesium sulfate is initiated, dose is changed and at change of shift.</p>
Step 5: Discontinuation	<ul style="list-style-type: none"> a. Disconnect tubing from main line immediately when magnesium sulfate is discontinued.