



**El Dorado County Emergency Medical
Services Agency**
Quick Reference

Revised Date: July 1, 2020

Medication Profile

Magnesium Sulfate
(MgSO₄)

Class:

Antidysrhythmic, Electrolyte

Action:

Controls ventricle response rate.

Increases the movement of potassium into cells.

Blocks the release of acetylcholine

Onset: Immediate

Peak: Variable

Duration: 3-4 hours

Adult Administration:

- Torsades De Pointe pulseless:
 - 2grams in 10mL NS IV/IO bolus
- Torsades De Pointe with a pulse:
 - 2grams in 10mL NS IV/IO push over 1-2minutes.
- Eclampsia
 - 6grams in 10mL NS IV/IO push over 15minutes. Base MD Order.

Pediatric Administration:

- Not recommended for prehospital use

Indications:

Seizures related to eclampsia

Torsades De Pointe

- Vfib, Pulseless V-Tach
- V-Tach with a pulse
- Post conversion of VF/VT

Contraindications:

Hypersensitivity

Sinus Bradycardia

Pediatrics

Side Effects:

- Hypotension
- Hypertension
- Dysrhythmias
- Facial flushing
- Diaphoresis
- Depressed Reflexes
- Bradycardia

Pregnancy:

Category A

Notes:

- Magnesium is a naturally occurring positive ion present in all cells of the body.
- Check deep tendon reflexes every 15 minutes and continuously monitor respirations.
- Discontinue administration if either become depressed.