

Drug Name: Mannitol

Trade Name: Osmitrol

REVISED: November 1, 2018

Class:

- Sugar Alcohol
- Osmotic Diuretic

Mechanism of Action:

- Induces the movement of intracellular water to the extracellular and vascular spaces.

Indications:

- The promotion of diuresis in the treatment of acute renal failure (Oliguria)
- Increased intracranial pressure
- Elevated intraocular pressure
- Promoting the urinary excretion of toxic substances.
- Blood transfusion reactions

Contraindications:

- Hypersensitivity
- Frank pulmonary edema

Precautions:

- Pregnancy category C
- Hyponatremia
- Congestive heart failure
- Hypotension, dehydration

Dosage:

Doses are highly variable. Double check orders with transferring physician.

IV Infusion. Observe closely for particulates and color of solution. DO NOT administer if discolored or there are particulates.

- **Adult: 1.5-2 GM/KG slow IV Infusion over 15-60 minutes**
- **Pediatric: 0.25-0.5 gm/kg over 60 minutes**

Onset:

- IV/IO: Onset: (IV) Immediate

Duration:

- Based on infusion duration

Side Effects:

- Electrolyte imbalances (hyponatremia, hypokalemia)
- Fluid shift and intravascular overload
- Congestive heart failure and pulmonary edema

IFT

REFERENCE ONLY

This document is for **reference only**. Please refer to Physician Order's for specific indications, dosages, and applications

- Angina
- Seizures
- Hypovolemia via excessive diuresis

Interactions:

- ***Not line compatible with blood.***

PEARLS:

Do not administer unless solution is clear and without any particulates. This is especially important in cold weather.

- Mannitol is available in concentrations of 5%, 10%, 15%, 20% and 25%.
 - **Dilute to at least a 15% solution prior to administration.**
- Mannitol is usually supplied in glass bottles or non-pvc plastic containers as it will form a precipitate with PVC surfaces from traditional IV bags. Make sure to use vented tubing.
- Do not administer unless solution is clear and without any particulates.
- **Monitor closely for shock, hypotension, dehydration, decreased or compromise urine output, or neurological changes. If these occur, contact medical control promptly.**

IFT DRUG: MANNITOL

REFERENCE ONLY