



Product Description:

Fosbiotic- Each sachet of Fosbiotic contains 3gm of Fosfomycin trometamol

General Information:

- An antibiotic used to treat urinary tract infections.
- **Fosbiotic** is a broad-spectrum antibiotic used to treat uncomplicated urinary tract infections.

Indication & Usage:

Fosbiotic is indicated for the treatment of uncomplicated cases of cystitis caused by susceptible strains of *Escherichia coli* and *Enterococcus faecalis*.

Also, indicated for the treatment of complicated Urinary tract infection.

Dosage & Administration:

- Single-dose oral Fosbiotic is approved for uncomplicated UTIs.
- Multidose regimens (e.g., 3 g once every 2–3 days for three doses) have been described, particularly for MDR UTIs and prostatitis.
- 1 sachet after every 48 hours for 3 doses.
- Fosbiotic should be taken with or without food. It should not be taken in dry form. Always mix Fosbiotic sachet with water before ingesting.

Mode of administration- Mix 1 sachet of Fosbiotic into a glass of water (90-120ml) and stir to dissolve. Do not use hot water. Fosbiotic sachet should be taken immediately after dissolving in water.

Mechanism of Action:

Fosbiotic exerts its bactericidal effects by binding covalently to a cysteine in the active site of the UDP-N-acetylglucosamine enolpyruvyl transferase (MurA) enzyme, rendering it inactive. By preventing MurA from catalyzing the condensation of phosphoenolpyruvate (PEP) with UDP-N-acetylglucosamine (UNAG), fosbiotic inhibits the production of the peptidoglycan precursor UDP N-acetylmuramic acid (UDP-MurNAc). Ultimately, the first step of bacterial cell wall synthesis is disrupted, leading to cell lysis and death.

Pharmacokinetic



Absorption- Fosfomycin is a low molecular weight and hydrophilic drug. When administered orally, fosfomycin is rapidly absorbed in the small intestine and distributed widely to the tissues. The oral bioavailability ranges from 34-58%. Co-administration of fosfomycin with food decreases gastrointestinal absorption to approximately 30%

Distribution- the volume of distribution (Vd) of fosfomycin is approximately 0.3 L/Kg. Due to changes in the vascular endothelium, the Vd can be up to 50% higher in critically ill patients.

Metabolism-

Fosfomycin is not metabolized and is predominantly excreted unchanged in the urine.

Excretion- Fosfomycin is excreted almost entirely by the kidneys. Factors including administration with food, impaired renal function, and older age may reduce the rate of fosfomycin elimination.

Use in Special population

- **Pregnancy** Fosbiotic is classified as a pregnancy category B drug by the Food and Drug Administration, which means that it is quite safe during pregnancy.
- **Nursing Mother**-- There isn't enough reliable information to know if Fosbiotic is safe to use when breast-feeding as it may excrete out from breast milk.
- **Paediatric use** there is no study that demonstrate that Fosfomycin can be used in paediatric patients. If, yes Dose must be determined by doctor.

Contradiction- Fosbiotic is contradicted in patients with:

- Diabetic patient
- Phenylketonuria (PKU)

<u>Warning & Precaution</u>- Use only as directed by Physician. Tell your doctor if you use other medicines or have other medical conditions or allergies.

Adverse Reaction - Diarrhea, nausea, headache, vaginal discomfort, or dizziness may occur.

Competitor Brands



		Values		
BRAND	CORPORATE	Sum of MAT VAL APR'22	Sum of MAT VAL APR'23	Sum of MAT VAL APR'23 GR%
FOSIROL	CIPLA	18.7	27.0	44.4
MONUROL	MODI MUNDI	15.6	18.3	17.3
FOSFOCIN	ARISTO	12.6	17.6	39.5
FONYL	GLENMARK	9.9	11.6	16.8
NOVEFOS	sun*	6.3	7.3	17.2
FOSFOTAS	INTAS	6.3	7.0	10.9
FOSFONA	ALNICHE LIFE SCIENCE	5.2	6.8	30.9
LUPIFOS	LUPIN	4.8	4.6	-3.5
FOSFOE	KOYE	3.1	4.0	30.4
EVAFOS	WIN-MEDICARE	0.7	2.2	217.3
FOSINTA	INTAS	0.1	2.2	1430.0
CRIFOS	CIPLA	2.7	2.0	-26.2
MYFOS	SUN*	1.1	1.8	66.5
ERAFOS -	BHARAT SERUMS	2.1	1.5	-25.5
FOSRIUM	LUPIN	1.8	1.4	-17.8
SAMFOS	SAMARTH	0.0	0.7	#DIV/0!
MURINACT	FUSION HEALTHCARE	0.5	0.5	-9.6
BDFOSF	BDR PHARMACEUTICALS INTERNATIONALS PVT. LTD	0.0	0.2	38750.0
FOSIL	LINCOLN	0.1	0.1	1.0
ICUFOS O	MICRO	0.1	0.1	-7.9
IBIFOS	INDIABULLS PHARMACEUTICALS	0.0	0.1	210.2
FOSFOFIC	GUFIC BIOSCIENCE	0.1	0.1	-58.8
FOSFOJOY	ALKEM*	0.0	0.0	#DIV/0!
ICUFOS	MICRO	0.0	0.0	#DIV/0!
FOSIDAL	DR. REDDYS	0.2	0.0	-99.8
UTIZAP	USV	0.0	0.0	-99.7
UTSURE	GUFIC BIOSCIENCE	0.0	0.0	#DIV/0!
MONUFOS	ALNICHE LIFE SCIENCE	0.0	0.0	-100.0
FOSMURA	CELON LABS	0.0	0.0	#DIV/0!
FLUDAFOS	BHARAT SERUMS	0.1	0.0	-100.0
Grand Total		92.0	117.1	27.2