

TICARCILLIN SODIUM with POTASSIUM CLAVULANATE

SYNONYMS	Ticarcillin sodium-clavulanic acid, ticarcillin-clavulanate
BRAND NAME	TIMENTIN
DRUG CLASS	Penicillin antibiotic and beta-lactamase inhibitor
AVAILABILITY	Vial contains 3.1 g consisting of 3 g of ticarcillin as ticarcillin sodium and 100 mg of clavulanic acid as potassium clavulanate. Contains 15.6 mmol (360 mg) of sodium and 0.5 mmol (20 mg) of potassium. ¹ The dose is based on the ticarcillin component. ¹ <div style="border: 2px solid red; padding: 5px; margin-top: 5px;">Contraindicated in patients with severe hypersensitivity to penicillins, carbapenems and cephalosporin antibiotics.¹</div>
pH	6–8 when reconstituted ¹
PREPARATION	Reconstitute the vial with 10–20 mL of water for injections or sodium chloride 0.9%. ¹ If a part dose is required use 13 mL of water for injections or sodium chloride 0.9% to make a final concentration of ticarcillin of 200 mg/mL. ¹ Shake gently. The solution is clear and colourless or pale yellow. ¹
STABILITY	Vial: store below 25 °C. ¹ Reconstituted solution: stable for 6 hours at 25 °C and up to 24 hours at 2 to 8 °C. ¹ Infusion solution: solutions in glucose 5% are stable for 6 hours at 25 °C and 24 hours at 2 to 8 °C. Solutions in Hartmann's are stable for 12 hours at 25 °C. Solutions in sodium chloride 0.9% are stable for 24 hours at 25 °C or 2 to 8 °C. ¹ Longer stability data is available. ¹ Consult the pharmacist, pharmacy department or medicines information service for advice.
ADMINISTRATION	
IM injection	Not recommended
SUBCUT injection	Not recommended
IV injection	Not recommended
IV infusion	Dilute the dose with 50–100 mL of a compatible fluid and infuse over at least 30 minutes. ^{1,2}
IV use for infants and children	Dilute the dose to 100 mg/mL or weaker with a compatible fluid and infuse over at least 30 minutes. ^{3,4} Concentrations less than 50 mg/mL are preferred. ⁴
COMPATIBILITY	
Fluids	Glucose 5% ¹ , Hartmann's ¹ , sodium chloride 0.9% ¹
Y-site	Amifostine ² , anidulafungin ² , aztreonam ² , bivalirudin ² , dexmedetomidine ² , filgrastim ² , fluconazole ² , fosfarnet ² , granisetron ² , remifentanyl ²
INCOMPATIBILITY	
Fluids	No information
Drugs	Aciclovir ⁵ , aminoglycosides - amikacin, gentamicin, tobramycin ^{1,2} , azathioprine ⁵ , azithromycin ² , caspofungin ⁵ , dobutamine ⁵ , dolasetron ⁵ , erythromycin ⁵ , ganciclovir ⁵ , haloperidol lactate ⁵ , mycophenolate mofetil ⁵ , pentamidine ⁵ , promethazine ⁵ , protamine ⁵ , sodium bicarbonate ^{1,2} , tranexamic acid ⁵
SPECIAL NOTES	May cause pain, burning, erythema, infiltration, swelling and induration at the infusion site and thrombophlebitis. ¹ Slow the infusion rate to reduce local irritation. For information about the use of ticarcillin sodium with potassium clavulanate in outpatient antimicrobial therapy or hospital in the home see <i>Therapeutic Guidelines, Antibiotic Version 15, 2014</i> .

REFERENCES

1. Product information. Available from www.tga.gov.au. Accessed 21/07/16.
2. McEvoy GK editor. Handbook on injectable drugs. 18th ed. Bethesda, MD: American Society of Health-System Pharmacists; 2015.
3. Phelps SJ, Hak EB, Crill CM. Pediatric injectable drugs. The teddy bear book. 10th ed. Bethesda, MD: American Society of Health-System Pharmacists; 2013.
4. Taketomo C, Hodding J, Kraus D. Pediatric and neonatal dosage handbook. 21st ed. Hudson, Ohio: American Pharmacists Association. Lexicomp; 2014-5.
5. Ticarcillin-Clavulanate. In: IV index [Internet]. Trissel's 2 clinical pharmaceuticals database (parenteral compatibility). Greenwood Village, Colorado: Truven Health Analytics. Accessed 21/07/16.