



CitraFlow™ 30% SF (sterile field):

30% anticoagulant/antimicrobial
Sodium Citrate prefilled syringe
for catheter locking.



Clinical studies have shown that the use of a 30% Sodium Citrate solution to lock indwelling catheters has significant advantages compared to existing standards of care :

- Avoids the risk of systemic heparinization
- Prevents exacerbation of active bleeding^{7,8,11}
- Reduction of clotting incidents^{4,5}
- Lower tPA utilization rates and costs^{4,5,7}
- Reduction of catheter exchange rates⁸
- Prevents the formation of biofilms^{3,6}
- Lowers the rate of catheter related bacteremia infections^{9,10}
- Safe for use in patients with HIT (Heparin Induced Thrombocytopenia)
- Improved INR reliability (international normalized ratio)
- Potential savings compared to other lock regimens^{1,2,5}
- Terminally sterilized. Sterile field compatible product
- Available in safe and convenient to use 5cc syringes and avoids the high pressure risks associated with smaller 3cc syringe sizes
- All natural. No artificial colors or preservatives



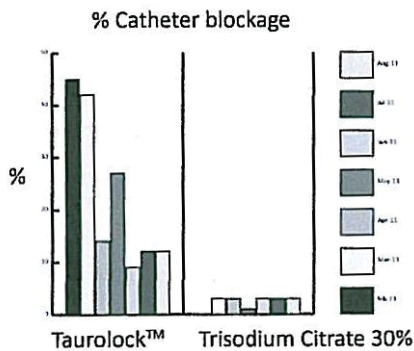
* This document contains information about products which may or may not be available in any particular country, and if applicable, may have received approval or market clearance by a governmental regulatory body for different indications and restrictions in different countries. | Photo representative only. Product may not be exactly as shown.

CitraFlow™...

The natural way to lock catheters

Anticoagulation :

30% CitraFlow™ is superior to Taurolidine/heparin based solutions for reducing the rates of catheter blockages.



The efficacy of trisodium citrate 30% appears to work in maintaining effective bloodflow rates in comparison with Taurolidine/heparin solutions¹²



Catalog #	Description	Quantity/case
38243	One 3ml 30% Sodium Citrate solution in 5ml syringe	150 units / cs
38243-1	Twinpack of two 3ml 30% Sodium Citrate solution in 5ml syringe	100 units / cs (200 syringes)

- Lok CE, et al. Trisodium citrate 4%-an alternative to heparin capping of haemodialysis catheters. *Nephrol Dial Transplant* Feb 2007;22(2):477-483.
- Grudzinski I, et al. Sodium citrate 4% locking solution for central venous dialysis catheters-an effective, more cost efficient alternative to heparin. *Nephrol Dial Transplant* Feb 2007;22(2):471-476.
- Shanks R. M. Q., et al. Catheter lock solutions influence staphylococcal biofilm formation on abiotic surfaces. *Nephrol Dial Transplant* (2006); Doi: 10.1093/ndt/gfl170.
- Meeus Gert, et al. A prospective, randomized, double-blind crossover study on the use of 5% citrate lock versus 10% citrate lock in permanent hemodialysis catheters. *Blood Purification* 2005;23:101-105.
- MacRe J et al, Citrate 4% versus Heparin and the reduction of thrombosis *Clin, J. Am Soc. Nephrol* 3:369-374 2008.
- Calantha K. et al. Catheter related infections with Sodium Citrate locks compared to heparin locks in hemodialysis patients. Poster 2012 San Diego USA.
- Ash SR (2000) Concentrated Sodium Citrate (23%) for Catheter Lock. *Haemodialysis International* 4:22-31.
- Weijmer JC (2005) Randomized, Clinical Trial Comparison of Trisodium Citrate 30% and Heparin as Catheter-Locking Solution in Haemodialysis Patients. *J Am Soc Nephrol. Sep; 16(9):2769-77.*
- Weijmer JC (2002) Superior Antimicrobial Activity of Trisodium Citrate over Heparin for Catheter Locking. *Nephrol Dial Transplant* 17:2189-2195.
- Nolan JP (2007) Reducing Catheter Related Bacteraemia in Haemodialysis. *Vascular Access Soc. 5th Int. Congress of Vascular Access Soc, Nice.*
- Winnet G (2008) Trisodium citrate (TSC) 46.7% selectively and safely reduces staphylococcal. *Nephrol Dial Transplant* 10:1093-1100.
- Sanzes R. & Dean S. (2012), Our Experience using citrate 30% to maintain the patency of permanent tunneled vascular catheter. Poster NHS trust.