



**CitraLok™ :**  
 4% anticoagulant  
 Sodium Citrate prefilled syringe  
 for catheter locking.



**Clinical studies have shown that the use of a 4% anticoagulant sodium citrate solution to lock indwelling catheters has significant advantages compared to existing standards of care :**



- Avoids risk of systemic heparinization.
- Local anticoagulation prevents exacerbation of active bleeding.
- Safe in patients with suspected or confirmed HIT (Heparin Induced Thrombocytopenia).
- Potentially lower rt-PA (Alteplase) utilization rate and cost.
- Improved INR reliability (international normalized ratio).
- Potential savings compared to a heparin lock regimen.
- Terminally sterilized product coming soon.
- Sterile field compatible.
- All natural, no artificial colours or preservatives.



**CitraLok™...**

**The natural way to lock catheters**

Catalog #	Description	Quantity/case
3854	5mL 4% Sodium Citrate solution in a 5mL syringe	120 units / cs
385425-1	Twinpack of two 2.5mL 4% Sodium Citrate solution in 5mL syringes	120 units / cs (240 syringes)
385425	One 2.5mL 4% Sodium Citrate solution in 5mL syringes	150 units / cs (150 syringes)

For further information, please contact your representative.

1. Lok CE, et al. Trisodium citrate 4%-an alternative to heparin capping of haemodialysis catheters. Nephrol Dial Transplant Feb 2007;22(2):477-483.
2. Grudzinski L, 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.
3. Moran J, Ash S R, et al. Locking Solutions for Hemodialysis Catheters; Heparin and Citrate - A Position Paper by ASDIN. Seminars in Dialysis-2008; DOI: 10.1111/j. 1525-139X.2008.00466.x
4. Vanholder R. et al. Diagnosis, prevention and treatment of haemodialysis catheter-related bloodstream infections (CRBSI): a position statement of European Renal Best Practice (ERBP). Nephrology Dialysis Transplantation Plus (2010) 3: 234-246.
5. Lok CE, et al. Trisodium citrate 4%: A less costly yet effective alternative to heparin capping of hemodialysis catheters. ASN Annual Meeting; J. American Society of Nephrology Nov 2005;16:452A.
6. 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.
7. Grudzinski L. Humber River Regional Hospital retrospective analysis to evaluate clinical experience with the use of sodium citrate 4% versus heparin 10,000 u/ml to maintain long term interdialytic patency of central venous hemodialysis catheter. 2005 (available upon request)
8. Michaud D, Komant T, Pfefferle P. Four percent trisodium citrate as an alternative anticoagulant formaintaining patency of central venous hemodialysis catheters : case report and discussion. Am J Crit Care 2001;10:351-354.
9. Hendrickx L, et al. A comparative prospective study on the use of low concentrate citrate lock versus heparin lock in permanent dialysis catheters. Int J Artif Organs Apr 2001;24(4):208-11.
10. FDA issues warning on Trictrasol dialysis catheter anticoagulant. FDA. Apr 14 2000. <http://www.fda.gov/bbs/topics/ANSWERS/ANS01009.html>
11. Bayes B, Bonal J, Romero R. Sodium citrate for filling haemodialysis catheters. Nephrol Dial Transplant 1999;14:2532-2533.
12. Buturovic J. Filling hemodialysis catheters in the interdialytic period: heparin versus citrate versus polygeline: A prospective randomized study. Int J Artif Organs Nov 1998;22(11):945-7.
13. Flanagan MJ, et al. Regional hemodialysis anticoagulation: Hypertonic tri-sodium citrate or anticoagulant citrate dextrose-A. Am J Kidney Dis 1996;27: 519-524.