LKT Laboratories, Inc.

# Furosemide

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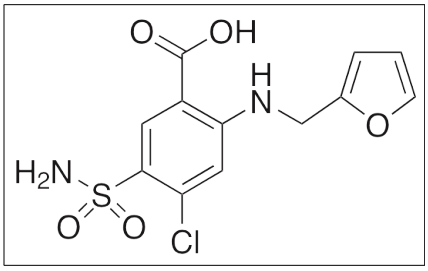
## Product Information

**Product ID** F8270
**CAS No.** 54-31-9
**Chemical Name** 5-(Aminosulfonyl)-4-chloro-2-[(2-furanylmethyl)- amino] benzoic acid

**Synonym** Fursemide, Beronald, Discoid, Durafurid, Eutensin, Fulsix, Furosedon, Impugan, Katlex, Lasix, Macasirrol, Nicorol, Odemase, Rosemide, Urex

**Formula** $C_{12}H_{11}ClN_2O_5S$
**Formula Wt.** 330.74
**Melting Point** 203-206°C
**Purity** ≥97%
**Solubility** Soluble in acetone, DMF, and methanol. Slightly soluble in water, chloroform and ether.
**Store Temp** Ambient
**Ship Temp** Ambient




***Bulk quanitites available upon request***

| Product ID | Size |
|---|---|
| F8270 | 5 g |
| F8270 | 10 g |
| F8270 | 25 g |

**Description** Furosemide is a loop diuretic that is clinically used to treat congestive heart failure, edema, and hypertension; it inhibits the Na+/K+/Cl2- (NKCC) symporter and CFTR Cl- channels in the loop of Henle, decreasing reabsorption of Na+ and K+ and increasing secretion of Mg2+ and Ca2+. Furosemide exhibits antihypertensive, anxiolytic, and potentially antiepileptic/anticonvulsant activities. Furosemide noncompetitively inhibits GABA-A receptors and decreases conditioned anxiety in animal models of contextual fear conditioning and fear-potentiated startle.

**References**

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Krystal AD, Sutherland J, Hochman DW. Loop diuretics have anxiolytic effects in rat models of conditioned anxiety. PLoS One. 2012;7(4):e35417. PMID: 22514741.

Somasekharan S, Tanis J, Forbush B. Loop diuretic and ion-binding residues revealed by scanning mutagenesis of transmembrane helix 3 (TM3) of Na-K-Cl cotransporter (NKCC1). J Biol Chem. 2012 May 18;287(21):17308-17. PMID: 22437837.

Korpi ER, Kuner T, Seeburg PH, et al. Selective antagonist for the cerebellar granule cell-specific gamma-aminobutyric acid type A receptor. Mol Pharmacol. 1995 Feb;47(2):283-9. PMID: 7870036.