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## Product Information

### Sodium 1-heptanesulfonate SigmaUltra

Product Number **H8901**  
Store at Room Temperature

#### Product Description

Molecular Formula:  $C_7H_{15}SO_3Na$   
Molecular Weight: 202.2  
CAS Number: 22767-50-6  
Synonym: 1-heptanesulfonic acid sodium salt

Trace elemental analyses have been performed on the SigmaUltra sodium 1-heptanesulfonate. The Certificate of Analysis provides lot-specific results. SigmaUltra sodium 1-heptanesulfonate is for applications which require tight control of elemental content.

Sodium 1-heptanesulfonate is a commonly used ion pairing reagent for HPLC.<sup>1</sup> The anionic sulfonate counterion permits the separation and resolution of positively charged analytes. It is utilized in the analysis of both organic and inorganic small molecule compounds.<sup>2,3,4</sup> HPLC analysis of many pharmaceutical products or metabolites commonly incorporates sodium 1-heptanesulfonate.<sup>5,6</sup> Sodium 1-heptanesulfonate has also been used in high-performance capillary electrophoresis analysis of peptides.<sup>7</sup>

#### Precautions and Disclaimer

For Laboratory Use Only. Not for drug, household or other uses.

#### Preparation Instructions

This product is soluble in water (100 mg/ml), yielding a clear, colorless solution.

#### References

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2. He, H. B., et al., Optimization of high-performance liquid chromatographic assay for catecholamines. Determination of optimal mobile phase composition and elimination of species-dependent differences in extraction recovery of 3,4-dihydroxybenzylamine. *J. Chromatogr.*, **574(2)**, 213-218 (1992).
3. Zhao, Z., et al., Determination of cisplatin and some possible metabolites by ion-pairing chromatography with inductively coupled plasma mass spectrometric detection. *J. Chromatogr.*, **615(1)**, 83-89 (1993).
4. Deng, Y., et al., Mechanism of enantioseparation of salsolinols, endogenous neurotoxins in human brain, with ion-pair chromatography using beta-cyclodextrin as a mobile phase additive. *Anal. Chem.*, **68(17)**, 2826-2831 (1996).
5. Storms, M. L., and Stewart, J. T., Stability-indicating HPLC assays for the determination of prilocaine and procaine drug combinations. *J. Pharm. Biomed. Anal.*, **30(1)**, 49-58 (2002).
6. Marzolini, C., et al., Simultaneous determination of the HIV protease inhibitors indinavir, amprenavir, saquinavir, zidovudine, zalcitabine and the non-nucleoside reverse transcriptase inhibitor efavirenz by high-performance liquid chromatography after solid-phase extraction. *J. Chromatogr. B Biomed. Sci. Appl.*, **740(1)**, 43-58 (2000).
7. Rush, R. S., et al., Peptide mapping and evaluation of glycopeptide microheterogeneity derived from endoproteinase digestion of erythropoietin by affinity high-performance capillary electrophoresis. *Anal. Chem.*, **65(14)**, 1834-1842 (1993).

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