

3050 Spruce Street
Saint Louis, Missouri 63103 USA
Telephone 800-325-5832 • (314) 771-5765
Fax (314) 286-7828
email: techserv@sial.com
sigma-aldrich.com

# **ProductInformation**

# Sodium taurodeoxycholate hydrate

Product Number **T 0875**Store at Room Temperature

### **Product Description**

Molecular Formula: C<sub>26</sub>H<sub>44</sub>NO<sub>6</sub>SNa (anhydrous)

Molecular Weight: 521.7 CAS Number: 1180-95-6

Melting Point: 168 °C (with decomposition) Critical Micelle Concentration (CMC): 2-6 mM $^1$  Synonyms:  $3\alpha$ ,12 $\alpha$ -Dihydroxy-5 $\beta$ -cholan-24-oic acid N-(2-sulfoethyl)amide; 2-([ $3\alpha$ ,12 $\alpha$ -Dihydroxy-24-oxo-5 $\beta$ -cholan-24-yl]amino)ethanesulfonic acid; N-(Deoxycholyl)taurine sodium salt

Sodium taurodeoxycholate is a hydrophilic, bile salt-related anionic detergent that is used for isolation of membrane proteins, including inner mitochondrial membrane proteins.<sup>2,3</sup> It is widely investigated in cholesterol and liver studies.<sup>4</sup>

An investigation of the use of sodium taurodeoxycholate in the nonaqueous capillary electrophoresis separation of hydrophobic compounds has been published.<sup>5</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

- Helenius, A., and Simons, K., Solubilization of Membranes by Detergents. Biochim. Biophys. Acta, 415(1), 29-79 (1975).
- Kispal, G., et al., Isolation and Characterization of 3-hydroxyacyl Coenzyme A Dehydrogenasebinding Protein from Pig Heart Inner Mitochondrial Membrane. J. Biol. Chem., 261(30), 14209-14213 (1986).
- Coffer, A., et al., Solubilization of the Bombesin Receptor from Swiss 3T3 Cell Membranes. Functional Association to a Guanine Nucleotide Regulatory Protein. FEBS Lett., 263(1), 80-84 (1990).
- 4. Baumgartner, U., et al., Colchicine Inhibits Taurodeoxycholate Transport in Pericentral But Not in Periportal Hepatocytes. Biochim. Biophys. Acta, **1539(3)**, 218-224 (2001).
- Lin, J. M., et al., Comparison of Three Different Anionic Surfactants For the Separation of Hydrophobic Compounds by Nonaqueous Capillary Electrophoresis. Electrophoresis, 23(3), 421-425 (2002).

GCY/RXR 11/02