

## Product Data Sheet

Product Name: Heptanoic Acid

Cat. No.: GC48962

### Chemical Properties

Cas. No. 111-14-8

SMILES O=C(CCCCCC)O

Formula  $C_7H_{14}O_2$

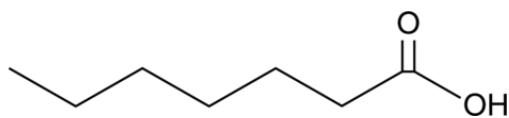
M.Wt 130.2

Solubility DMSO :  $\geq 100$  mg/mL (768.17 mM) Storage Store at RT

General tips For obtaining a higher solubility, please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution : ship with blue ice All other available size: ship with RT, or blue ice upon request.

Structure



### Background

Heptanoic acid is a medium-chain saturated fatty acid. It is a volatile component of the rancid odor of defective olive oil.<sup>1</sup> It has also been found as a volatile component in pig farm wastewater.<sup>2</sup> Heptanoic acid induces neurite outgrowth, a marker of neuronal differentiation, in PC12 cells in a concentration-dependent manner and increases the length of neurites when used at a concentration of 7.5 mM.<sup>3</sup> [Matreya, LLC. Catalog No. 1196]

1. Oliver-Pozo, C., Aparicio-Ruiz, R., Romero, I., et al. Analysis of volatile markers for virgin olive oil aroma defects by SPME-GC/FID: Possible sources of incorrect data. *J. Agric. Food Chem.* 63(48)10477-10483(2015)

2. Yo, S.-P. Analysis of volatile fatty acids in wastewater collected from a pig farm by a solid phase microextraction method. *Chemosphere* 38(4)823-834(1999)

3. Kamata, Y., Shiraga, H., Tai, A., et al. Induction of neurite outgrowth in PC12 cells by the medium-chain fatty acid octanoic acid. *Neuroscience* 146(3)1073-1081(2007)

**Caution: Product has not been fully validated for medical applications. For research use only.**

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