

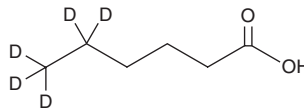
# PRODUCT INFORMATION



## Hexanoic Acid-d<sub>5</sub>

Item No. 31248

**CAS Registry No.:** 123167-40-8  
**Formal Name:** hexanoic-5,5,6,6,6-d<sub>5</sub> acid  
**Synonyms:** C6:0-d<sub>5</sub>, Caproic Acid-d<sub>5</sub>, FA 6:0-d<sub>5</sub>  
**MF:** C<sub>6</sub>H<sub>7</sub>D<sub>5</sub>O<sub>2</sub>  
**FW:** 121.2  
**Chemical Purity:** ≥95% (Hexanoic Acid)  
**Deuterium Incorporation:** ≥99% deuterated forms (d<sub>1</sub>-d<sub>5</sub>); ≤1% d<sub>0</sub>  
**Supplied as:** An oil  
**Storage:** -20°C  
**Stability:** ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

Hexanoic acid-d<sub>5</sub> is intended for use as an internal standard for the quantification of hexanoic acid by GC- or LC-MS. The accuracy of the sample weight in this vial is between 5% over and 2% under the amount shown on the vial. If better precision is required, the deuterated standard should be quantitated against a more precisely weighed unlabeled standard by constructing a standard curve of peak intensity ratios (deuterated versus unlabeled).

Hexanoic acid-d<sub>5</sub> is supplied as an oil. A stock solution may be made by dissolving the hexanoic acid-d<sub>5</sub> in the solvent of choice, which should be purged with an inert gas. Hexanoic acid-d<sub>5</sub> is slightly soluble in chloroform and methanol.

### Description

Hexanoic acid is a short-chain saturated fatty acid that has been found in various animal fats used in biodiesel production.<sup>1</sup>

### Reference

1. Sales, E.A., Ghirardi, M.L., and Jorquera, O. Subcritical ethylic biodiesel production from wet animal fat and vegetable oils: A net energy ratio analysis. *Energy Convers. Manag.* **141**, 216-223 (2017).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

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