# **PRODUCT** INFORMATION



## L-Thyroxine-N-methylamide

Item No. 35606

CAS Registry No.: Formal Name:	2088032-52-2 αS-amino-4-(4-hydroxy-3,5- diiodophenoxy)-3,5-diiodo-N- methyl-benzenepropanamide	
MF:	C <sub>16</sub> H <sub>14</sub> I <sub>4</sub> N <sub>2</sub> O <sub>3</sub>	
FW:	789.9	
Purity:	≥90%	
UV/Vis.:	λ <sub>max</sub> : 224 nm	Ŭ
Supplied as:	A solid	i
Storage:	-20°C	
Stability:	≥4 years	
Information represents the product expecifications. Batch exactly analytical results are provided on each cortificate of analytic		

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#### Laboratory Procedures

L-Thyroxine-N-methylamide is supplied as a solid. A stock solution may be made by dissolving the L-thyroxine-N-methylamide in the solvent of choice, which should be purged with an inert gas. L-Thyroxine-N-methylamide is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of L-thyroxine-N-methylamide in these solvents is approximately 10 mg/ml. L-Thyroxine-N-methylamide is slightly soluble in ethanol.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of L-thyroxine-N-methylamide can be prepared by directly dissolving the solid in aqueous buffers. The solubility of L-thyroxine-N-methylamide in PBS (pH 7.2) is approximately 0.20 mg/ml. We do not recommend storing the aqueous solution for more than one day.

### Description

L-Thyroxine-N-methylamide is a potential impurity found in commercial preparations of the synthetic thyroid hormone form L-thyroxine (Item No. 14116).<sup>1</sup>

#### Reference

1. Panmanad, D., Joshi, M.S., Patil, R., et al. Synthesis and characterization of potential impurities in levothyroxine. Chem. Sci. Trans. 5(4), 1082-1089 (2016).

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

#### SAFFTY 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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