# **PRODUCT** INFORMATION



## **Descarbonyl Lacosamide**

Item No. 34380

CAS Registry No.:	196601-69-1	
Formal Name:	2R-amino-3-methoxy-N-(phenylmethyl)-	
	propanamide	0
Synonym:	DP-I	
MF:	$C_{11}H_{16}N_2O_2$	
FW:	208.3	
Purity:	≥95%	H H
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

Descarbonyl lacosamide is supplied as a oil. A stock solution may be made by dissolving the descarbonyl lacosamide in the solvent of choice, which should be purged with an inert gas. Descarbonyl lacosamide is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of descarbonyl lacosamide in these solvents is approximately 10 mg/ml.

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 descarbonyl lacosamide can be prepared by directly dissolving the oil in aqueous buffers. The solubility of descarbonyl lacosamide in PBS (pH 7.2) is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

#### Description

Descarbonyl lacosamide is a potential impurity found in commercial preparations of lacosamide (Item No. 10012592).<sup>1</sup> It is a degradation product formed under acidic conditions.<sup>2</sup>

#### References

- 1. Molleti, S., Rao, V., and Jayaveera, K.N. Stability indicating RP-UPLC method for the determination of lacosamide and its impurities in bulk drugs and its pharmaceutical dosage forms. Der Pharma Chemica 5(1), 81-89 (2013).
- 2. Tiwari, R.N. and Bonde, C.G. Identification and characterization of degradation products of lacosamide by liquid-chromatography/time-of-flight mass spectrometric and multi-stage mass spectrometric analysis. J. Liq. Chromatogr. 37(14), 2046-2061 (2014).

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.

#### WARRANTY AND LIMITATION OF REMEDY

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