# **PRODUCT** INFORMATION



## 2-Chloro-N-methyl-N-(4-nitrophenyl)acetamide

Item No. 35536

| CAS Registry No.: | 2653-16-9               |                 |
|-------------------|-------------------------|-----------------|
| Formal Name:      | 2-chloro-N-methyl-N-(4- |                 |
|                   | nitrophenyl)-acetamide  | NO <sub>2</sub> |
| MF:               | $C_9H_9CIN_2O_3$        | <u>o</u>    `   |
| FW:               | 228.6                   |                 |
| Purity:           | ≥98%                    |                 |
| Supplied as:      | A solid                 |                 |
| Storage:          | -20°C                   |                 |
| Stability:        | ≥4 years                |                 |

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

#### Laboratory Procedures

2-Chloro-N-methyl-N-(4-nitrophenyl)acetamide is supplied as a solid. A stock solution may be made by dissolving the 2-chloro-N-methyl-N-(4-nitrophenyl)acetamide in the solvent of choice, which should be purged with an inert gas. 2-Chloro-N-methyl-N-(4-nitrophenyl)acetamide is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of 2-chloro-N-methyl-N-(4-nitrophenyl) acetamide in these solvents is approximately 11 and 5 mg/ml, respectively.

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 2-chloro-N-methyl-N-(4-nitrophenyl)acetamide can be prepared by directly dissolving the solid in aqueous buffers. The solubility of 2-chloro-N-methyl-N-(4-nitrophenyl)acetamide in PBS (pH 7.2) is approximately 0.25 mg/ml. We do not recommend storing the aqueous solution for more than one day.

#### Description

2-Chloro-N-methyl-N-(4-nitrophenyl)acetamide is a synthetic intermediate.<sup>1</sup> It has been used in the synthesis of maternal embryonic leucine zipper kinase (MELK) inhibitors with anticancer activity.

#### Reference

1. Edupuganti, R., Taliaferro, J.M., Wang, Q., et al. Discovery of a potent inhibitor of MELK that inhibits expression of the anti-apoptotic protein Mcl-1 and TNBC cell growth. Bioorg. Med. Chem. 25(9), 2609-2616 (2017).

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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