

# PRODUCT INFORMATION



## Pantoprazole N-oxide

Item No. 35449

CAS Registry No.: 953787-60-5

Formal Name: 6-(difluoromethoxy)-2-[[[(3,4-dimethoxy-1-oxido-2-pyridinyl)methyl]sulfinyl]-1H-benzimidazole

MF:  $C_{16}H_{15}F_2N_3O_5S$

FW: 399.4

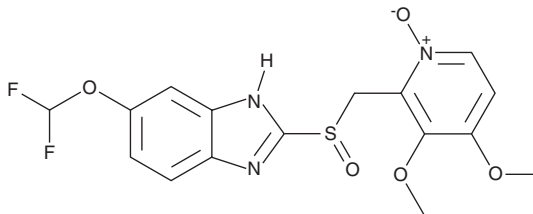
Purity:  $\geq 95\%$

UV/Vis.:  $\lambda_{max}$ : 281 nm

Supplied as: A solid

Storage:  $-20^{\circ}C$

Stability:  $\geq 4$  years



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

### Laboratory Procedures

Pantoprazole N-oxide is supplied as a solid. A stock solution may be made by dissolving the pantoprazole N-oxide in the solvent of choice, which should be purged with an inert gas. Pantoprazole N-oxide is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of pantoprazole N-oxide in these solvents is approximately 14 mg/ml. Pantoprazole N-oxide 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 pantoprazole N-oxide can be prepared by directly dissolving the solid in aqueous buffers. The solubility of pantoprazole N-oxide in PBS (pH 7.2) is approximately 0.2 mg/ml. We do not recommend storing the aqueous solution for more than one day.

### Description

Pantoprazole N-oxide is a potential impurity found in bulk preparations of the proton pump inhibitor pantoprazole (Item No. 21345).<sup>1</sup>

### Reference

1. Reddy, G.M., Bhaskar, B.V., Reddy, P.P., *et al.* Structural identification and characterization of potential impurities of pantoprazole sodium. *J. Pharm. Biomed. Anal.* **45(2)**, 201-210 (2007).

#### 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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