PRODUCT INFORMATION



Omeprazole sulfide

Item No. 18885

CAS Registry No.:	73590-85-9	
Formal Name:	6-methoxy-2-[[(4-methoxy-3,5-dimethyl-	
Synonyms:	2-pyridinyl)methyl]thio]-1H-benzimidazole OMEP sulfide, OMP sulfide, OMZ sulfide, Pyrmetazole	H / N
MF: FW:	$C_{17}H_{19}N_3O_2S$ 329.4	
Purity:	270%	\rightarrow
Supplied as:	A _{max} : 300 nm A crystalline solid	/ `o_
Storage:	-20°C	
Stability:	≥4 years	

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

Laboratory Procedures

Omeprazole sulfide is supplied as a crystalline solid. A stock solution may be made by dissolving the omeprazole sulfide in the solvent of choice, which should be purged with an inert gas. Omeprazole sulfide is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of omeprazole sulfide in these solvents is approximately 2, 1, and 0.5 mg/ml, respectively.

Description

Omeprazole sulfide is an active metabolite of the gastric H⁺/K⁺ ATPase inhibitor omeprazole (Item No. 14880).^{1,2} Omeprazole sulfide has been used as a precursor in the synthesis of the H⁺/K⁺ ATPase inhibitor esomeprazole (Item No. 17303).³ It is also a potential impurity in commercial preparations of omeprazole.4

References

- 1. Hoffmann, K.J. Identification of the main urinary metabolites of omeprazole after an oral dose to rats and dogs. Drug Metab. Dispos. 14(3), 341-348 (1986).
- 2. Ogilvie, B.W., Yerino, P., Kazmi, F., et al. The proton pump inhibitor, omeprazole, but not lansoprazole or pantoprazole, is a metabolism-dependent inhibitor of CYP2C19: Implications for coadministration with clopidogrel. Drug Metab. Dispos. 39(11), 2020-2033 (2011).
- 3. Cotton, H., Elebring, T., Larsson, M., et al. Asymmetric synthesis of esomeprazole. Tetrahedron Asymmetry 11(18), 3819-3825 (2000).
- 4. luga, C., Bojiță, M., and Leucuța, S.E. Development of a validated RP-HPLC method for separation and determination of process-related impurities of omeprazole in bulk drugs. Farmacia 57(5), 534-541 (2009).

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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