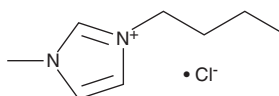


PRODUCT INFORMATION

1-Butyl-3-methylimidazolium (chloride)

Item No. 43925

CAS Registry No.: 79917-90-1
 Formal Name: 3-butyl-1-methyl-1H-imidazolium, monochloride
 MF: $C_8H_{15}N_2 \cdot Cl$
 FW: 174.7
 Purity: $\geq 95\%$
 Supplied as: A semi-solid
 Storage: $-20^\circ C$
 Stability: ≥ 4 years



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

Laboratory Procedures

1-Butyl-3-methylimidazolium is supplied as a semi-solid. A stock solution may be made by dissolving the 1-butyl-3-methylimidazolium in the solvent of choice, which should be purged with an inert gas. 1-Butyl-3-methylimidazolium is soluble (≥ 10 mg/ml) in ethanol and DMSO.

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 1-butyl-3-methylimidazolium can be prepared by directly dissolving the semi-solid in aqueous buffers. 1-butyl-3-methylimidazolium is soluble (≥ 10 mg/ml) in PBS (pH 7.2). We do not recommend storing the aqueous solution for more than one day.

Description

1-Butyl-3-methylimidazolium is an ionic liquid.¹ It has been used as a plasticizing agent and in the fractionation of brown algae biomass.^{1,2}

References

1. Li, N., Liu, C., Niu, L., *et al.* The synergistic effect of 1-butyl-3-methylimidazolium chloride and glycerol on the performance of chitosan films. *Int. J. Biol. Macromol.* **302**, 140456 (2025).
2. Belesov, A.V., Lvova, D.A., Falev, D.I., *et al.* Fractionation of arctic brown algae (*Fucus vesiculosus*) biomass using 1-butyl-3-methylimidazolium-based ionic liquids. *Molecules* **28(22)**, 7596 (2023).

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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