PRODUCT INFORMATION



4-methyl-1-Pentanol

Item No. 18446

CAS Registry No.: 626-89-1

Formal Name: 4-methyl-1-pentanol

Synonyms: Isohexanol, Isohexyl Alcohol, NSC 91492

MF: $C_6 H_{14} O$ FW: 102.2 **Purity:** ≥95% Supplied as: A neat oil Storage: -20°C Stability: ≥4 years

Laboratory Procedures

4-methyl-1-Pentanol is supplied as a neat oil. A stock solution may be made by dissolving the 4-methyl-1-pentanol in the solvent of choice, which should be purged with an inert gas. 4-methyl-1-Pentanol is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of 4-methyl-1-pentanol in these solvents is approximately 50 mg/ml.

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

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 4-methyl-1-pentanol can be prepared by directly dissolving the neat oil in aqueous buffers. The solubility of 4-methyl-1-pentanol in PBS, pH 7.2, is approximately 1.4 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

4-methyl-1-Pentanol is a branched chain primary alcohol found in wine and produced during fermentation.¹ As a volatile compound it is reported to have a nutty odor. It is also used in cosmetic compounds for its antimicrobial effects.²

References

- 1. Tsakiris, A., Koutinas, A.A., Psarianos, C., et al. A new process for wine production by penetration of yeast in uncrushed frozen grapes. Appl. Biochem. Biotechnol. 162(4), 1109-1121 (2010).
- 2. Dekić, M.S., Radulovic, N., Randelovic, V.N., et al. Essential oils and diethyl ether extracts of Serbian Xeranthemum cylindraceum and X. annum: Chemical composition, antimicrobial activity, and chemotaxonomic implications. Chem. Biodivers. 12(9), 1378-1397 (2015).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

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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