

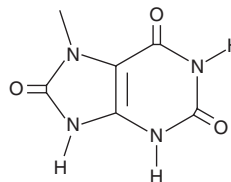
PRODUCT INFORMATION



7-Methyluric Acid

Item No. 21067

CAS Registry No.:	612-37-3
Formal Name:	7,9-dihydro-7-methyl-1H-purine-2,6,8(3H)-trione
Synonym:	N ⁷ -Methyluric Acid
MF:	C ₆ H ₆ N ₄ O ₃
FW:	182.1
Purity:	≥98%
UV/Vis.:	λ _{max} : 232, 287 nm
Supplied as:	A crystalline solid
Storage:	-20°C
Stability:	As supplied, 2 years from the QC date provided on the Certificate of Analysis, when stored properly



Laboratory Procedures

7-Methyluric acid is supplied as a crystalline solid. A stock solution may be made by dissolving the 7-methyluric acid in the solvent of choice. 7-Methyluric acid is soluble in organic solvents such as DMSO and dimethyl formamide, which should be purged with an inert gas. The solubility of 7-methyluric acid in these solvents is approximately 20 and 5 mg/ml, respectively.

7-Methyluric acid is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, 7-methyluric acid should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. 7-Methyluric acid has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

7-Methyluric acid is a methylated purine and uric acid (Item No. 16219) derivative. It is a metabolite of caffeine (Item No. 14118) that can be detected in urine.^{1,2} 7-Methyluric acid can also be detected in uric acid stones.³

References

1. Blanchard, J., Sawers, S.J.A., Jonkman, J.H.G., *et al.* Comparison of the urinary metabolite profile of caffeine in young and elderly males. *Br. J. Pharmacol.* **19(2)**, 225-232 (1985).
2. Ryback, M.E., Sternberg, M.R., Pao, C.I., *et al.* Urine excretion of caffeine and select caffeine metabolites is common in the U.S. population and associated with caffeine intake. *J. Nutr.* **145(4)**, 766-774 (2015).
3. Safranow, K. and Machoy, Z. Methylated purines in urinary stones. *Clin. Chem.* **51(8)**, 1493-1498 (2005).

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.

WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 02/16/2017

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM