SIGMA-ALDRICH®

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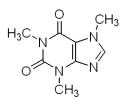
Product Information

Caffeine Sigma Reference Standard

Catalog Number **C1778** Lot Number 031M8712 Store at Room Temperature

CAS RN 58-08-2 Synonyms: 1,3,7-Trimethylxanthine

Product Description



Molecular Formula: $C_8H_{10}N_4O_2$ Molecular Weight: 194.19 This product meets USP specifications (Current through USP 34) and is traceable to USP Reference Standard lot J1D241.

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Preparation Instructions

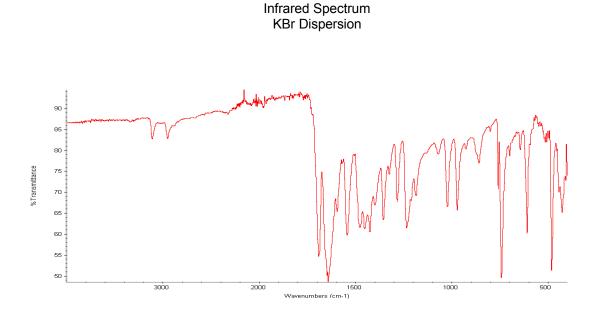
Dry a portion at 80 $^\circ\text{C}$ for 4 hours before use. Use promptly. Discard unused material.

Storage/Stability

Store in a sealed vial at room temperature.

TEST	USP 34 SPECIFICATIONS	Result Sigma Reference Standard Lot 031M8712
Identification A <197M> Infrared absorption	Compares to standard	Conforms to USP RS Lot J1D241
Identification B	Retention time of the caffeine peak in the chromatogram of the Assay preparation corresponds to the chromatogram of the Standard preparation in the Assay	Pass
Water <921> Method III	Not more than 0.5%	0.0%
Residue on ignition <281>	Not more than 0.1%	0.0%
Heavy Metals <231> Method II	Not more than 0.001%	<0.001%
Residual Solvents <467>	Meets the requirements	Pass (no solvents)
Chromatographic Purity	Not more than 0.1% of any individual impurity is found; and not more than 0.1% of total impurities is found.	Pass
Assay<621> High performance liquid chromatography	Not less than 98.5% and not more than 101.0% on the anhydrous basis	100.2%

See reverse side for IR spectrum of Sigma Reference Standard



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