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Product Information

CAFFEINE (ANHYDROUS) SIGMA REFERENCE STANDARD

Product No. **C1778**

Lot No: 109H8813

Storage Temperature: Room Temperature

Formula: $C_8H_{10}N_4O_2$

Formula Weight: 194.19

CAS No: 58-08-2

Synonyms: 1*H*-Purine-2,6-dione, 3,7-dihydro-
1,3,7-trimethyl-
1,3,7-Trimethylxanthine.

Product Description

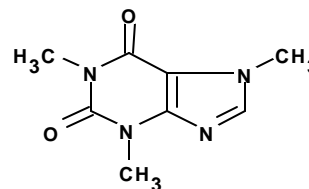
This product meets or exceeds USP specifications (Current through USP 24, 1st Supplement), and is traceable to USP Reference Standard lot I.

Store in sealed vial at room temperature. Dry a portion at 80 degrees for 4 hours before using. Use promptly. Discard un-used material.

TEST	USP 24 SPECIFICATIONS	Result Sigma R.S. 109H8813
Infrared absorption spectrum Mineral Oil dispersion (197 M)	compares to standard	conforms to USP RS lot I
Identification B	color change as described	passes
Melting range (741)	between 235° and 239°	235.0° - 237.5°
Water <i>Method III</i> (921)	not more than 0.5%	passes
Residue on ignition (281)	not more than 0.1%	passes
Heavy Metals <i>Method II</i> (231)	< 0.001%	passes
Readily carbonizable substances (271)	no more color than <i>Matching Fluid D</i>	passes
Organic volatile impurities <i>Method I</i> (467)	meets requirement	meets requirement
Other alkaloids	no precipitate is formed	passes
Chromatographic Purity	not more than 0.1% of any individual impurity is found and the total of for all impurities is not more than 0.1%	passes
Assay (621)	not less than 98.5% and not more than 101.0% on the anhydrous basis	101.0%

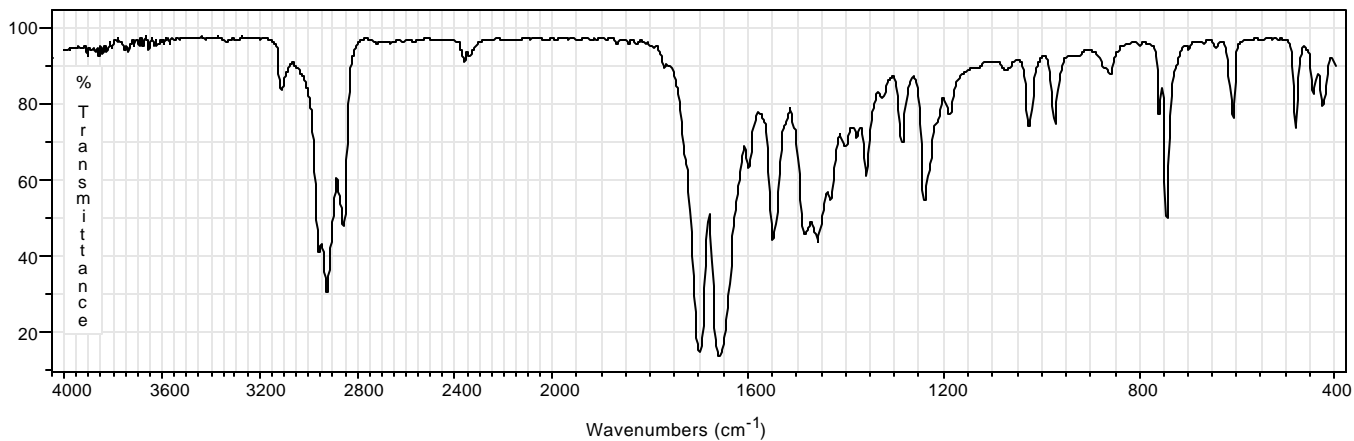
See reverse side for IR spectrum of Sigma Reference Standard.

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Lot 109H8813



INFRARED SPECTRUM

Mineral Oil dispersion



6/2000

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Sigma-Aldrich, Inc. warrants that its products conform to the information contained in this and other Sigma-Aldrich publications.
Purchaser must determine the suitability of the product(s) for their particular use. Additional terms and conditions may apply.
Please see reverse side of the invoice or packing slip.