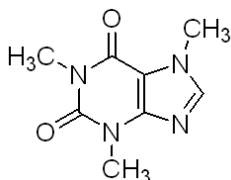


## Product Information

**Caffeine**  
**Sigma Reference Standard**Catalog Number **C1778**  
Lot Number 031M8712  
Store at Room TemperatureCAS RN 58-08-2  
Synonyms: 1,3,7-Trimethylxanthine**Product Description**Molecular Formula: C<sub>8</sub>H<sub>10</sub>N<sub>4</sub>O<sub>2</sub>  
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&amp;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 °C for 4 hours before use. Use promptly. Discard unused material.

**Storage/Stability**

Store in a sealed vial at room temperature.

CMW,MAM 09/11-1

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

# Infrared Spectrum KBr Dispersion

