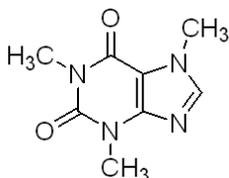


Product Information

Caffeine
Sigma Reference StandardCatalog Number **C1778**
Lot Number 031M8712V
Store at Room TemperatureCAS RN 58-08-2
Synonyms: 1,3,7-Trimethylxanthine**Product Description**Molecular Formula: C₈H₁₀N₄O₂
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 °C for 4 hours before use. Use promptly. Discard unused material.

Storage/Stability

Store in a sealed vial at room temperature.

CMW,MAM 10/11-1

| TEST | USP 34 SPECIFICATIONS | Result Sigma Reference Standard Lot 031M8712V |
|---|---|--|
| 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

