## SIGMA-ALDRICH®

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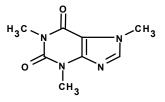
3050 Spruce Street, St. Louis, MO 63103 USA Tel: (800) 521-8956 (314) 771-5765 Fax: (800) 325-5052 (314) 771-5757 email: techservice@sial.com sigma-aldrich.com

# **Product Information**

Caffeine solution 1.0 mg/mL±5% in methanol analytical standard, for drug analysis

Catalog Number **C6035** Lot Number 081M8704 Storage Temperature 2–8 °C

CAS RN 58-08-2 Synonyms: Coffeinum; Guaranine; Methyltheobromine



**Product Description** Molecular Formula: C<sub>8</sub>H<sub>10</sub>N<sub>4</sub>O<sub>2</sub> Molecular Weight: 194.19

DEA Class: Formulation of a non-controlled substance

Concentration: 0.97 mg of caffeine/mL of GC grade methanol (concentration verified by UV)

Expiration Date: May 2014

#### **Precautions and Disclaimer**

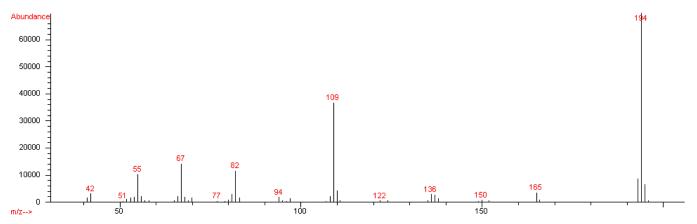
This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

#### Storage/Stability

Store the product at 2–8 °C.

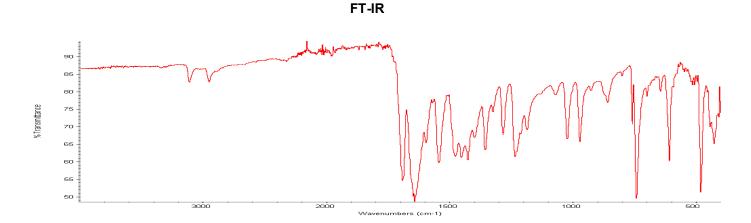
If stored at 2-8 °C in an airtight container, protected from light, decomposition of the product is less than 1% in 48 months. After opening, concentration may change due to loss of solvent.

#### CMW,MAM 07/11-1



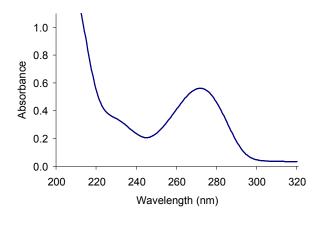
### 70 eV Electron Ionization Mass Spectrum

Hewlett-Packard 5890 Series II Gas Chromatograph Hewlett-Packard 5971 Mass Selective Detector Hewlett-Packard G1034C MS ChemStation (HP-DOS series)





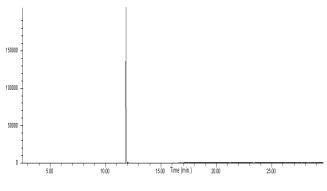
	Ultraviolet Spectrum
Peak	271.5 nm
Absorbance	0.5136
Solvent	0.2 N H <sub>2</sub> SO <sub>4</sub>
Dilution	1:100 (v/v)



Beckman-Coulter DU 800

Capillary Gas Chromatography

Column Supelco SPB-1 (Catalog Number 24162) I.D. 0.20 mm Length 15 m Film Thickness 0.20 μm Oven Temperature 50 °C (2 minutes), then 15 °C/minute to 300 °C, hold 11 minutes Injector Temperature 250 °C, Split Detector Hewlett-Packard 5971 Mass Selective Detector (70 eV, 40-500 m/z)



Hewlett-Packard 5890

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