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 SLBJ7833V Storage Temperature 2–8 °C

CAS RN 58-08-2

Synonyms: Coffeinum, Guaranine, Methyltheobromine

Product Description

Molecular Formula: C₈H₁₀N₄O₂ Molecular Weight: 194.19

DEA Class: Formulation of a non-controlled substance

Concentration: 1.05 mg caffeine/mL GC grade methanol (concentration verified by UV)

Expiration Date: April 2017

Precautions and Disclaimer

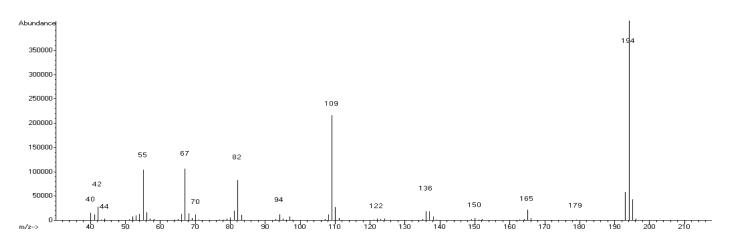
This product is for R&D use only, not for drug, household, or other uses. Please consult the Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability

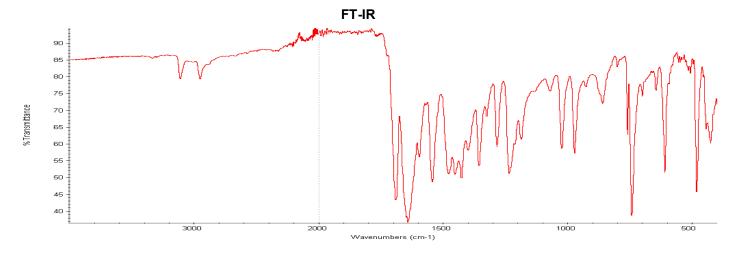
Store the product at 2–8 °C. If stored at 2–8 °C in an airtight container, protected from light, decomposition of the product is less than 1% in 48 months. After opening, concentration may change due to loss of solvent.

CMW,MAM 04/14-1

70 eV Electron Ionization Mass Spectrum



Hewlett-Packard 6890 Series II Gas Chromatograph Hewlett-Packard 5973 Mass Selective Detector Hewlett-Packard G1701DA MS ChemStation (HP-DOS series)



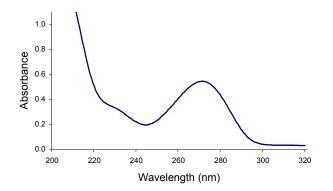
Nicolet 380 FT-IR Smart Orbit (ATR)

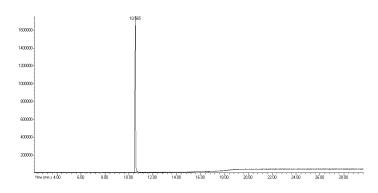
Ultraviolet Spectrum

Peak271.0 nmAbsorbance0.5466Solvent $0.2 \text{ N H}_2\text{SO}_4$ Dilution1:99 (v/v)

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 5973
Mass Selective Detector (70 eV, 40-500 m/z)





Hewlett-Packard 6890

Beckman-Coulter DU 800