

Honeywell Burdick & Jackson®

1953 South Harvey Street
Muskegon, MI 49442

**ACETONITRILE
(LC-MS Grade)**

Product Number LC015
Packaged in 2.5L and 1L Glass Bottles

Specifications:

Water: Less than 0.01%

UV Cutoff: 190nm

Refractive Index(20°C): 1.3440 ± 0.0006

Residue: Less than one mg/L

GC Purity: 99.9% min

HPLC Gradient Elution: No UV absorbing peak greater than 0.001 absorbance unit (1 cm path length) at 254 nm, or 0.005 absorbance unit at 215nm in a gradient from 70% water to 100% acetonitrile on a 15 x 0.46 cm column with 5 μ HLD C8 packing.

LC-MS positive mode: No greater than 50 ppb as reserpine and 100 ppb as caffeine

LC-MS negative mode: No greater than 50 ppb as 4-nitrophenol

Fluorescence: No impurity greater than 0.3 ppb as quinine base

Trace metals:

Ag, Ba, Cd, Co, Cr, Cu, Fe, Mn, Ni, Pb, Sn	5ppb max
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K, Mg	10ppb max
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Ca, Na, Al	50ppb max
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Note: Ca and Na levels may increase with time due to leaching from the glass bottle.

Physical Properties:

Molecular weight: 41.05

Boiling point: 81.6°C(178.9°F)

Vapor pressure: 73mm Hg at 20°C

Freezing point: -43.8°C

Refractive index: 1.3441 at 20°C

Density: 0.7822 g/mL (6.527 lb/gal) at 20°C
0.7766 g/mL (6.481 lb/gal) at 25°C

Dielectric constant: 37.5 at 20°C

Dipole moment: 3.44 D at 20°C

Solvent group: 6

Polarity index (P'): 5.8

Eluotropic value on alumina: 0.65

Eluotropic value on octadecylsilane: 3.1

Eluotropic value on silica: 0.52

Viscosity: 0.38 cP at 15°C

Surface tension: 19.10 dyn/cm at 20°C

Solubility in water: Miscible in all proportions

Regulatory and Safety Data:

DOT Hazard Class: 3, UN1648, Pkg Grp II, Flammable Liquid

Store in an area designed for flammable storage, or an approved metal cabinet, away from direct sunlight and sources of heat and ignition.

EPA applicable waste codes: D001 & U003

Flash point: 42°F (6°C) by closed cup

Lower explosive limit: 3.0%

Upper explosive limit: 16.0%

Time Weighted Average: 20 ppm ACGIH

Refer to Material Safety Data Sheet for additional regulatory, health and safety information.

Suggested Applications:

For LC-MS, HPLC and spectrophotometry.