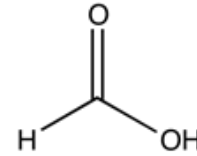


Formic acid, eluent additive for LC-MS

Identification

HCOOH
M = 46,03 g/mol
CAS [64-18-6]
EC number: 200-579-1
Taric code: 2915 11 00

**Synonyms**

Methanoic acid, Formylic acid

Specifications

assay (acidimetric).....	98 - 100 %	manganese (Mn).....	max. 0,05 ppm
aluminium (Al).....	max. 0,05 ppm	nickel (Ni).....	max. 0,05 ppm
barium (Ba).....	max. 0,05 ppm	molybdenum (Mo).....	max. 0,05 ppm
cadmium (Cd).....	max. 0,05 ppm	potassium (K).....	max. 0,1 ppm
calcium (Ca).....	max. 0,2 ppm	silver (Ag).....	max. 0,05 ppm
chromium (Cr).....	max. 0,05 ppm	sodium (Na).....	max. 0,5 ppm
cobalt (Co).....	max. 0,05 ppm	strontium (Sr).....	max. 0,05 ppm
copper (Cu).....	max. 0,05 ppm	thallium (Tl).....	max. 0,05 ppm
iron (Fe).....	max. 0,2 ppm	zinc (Zn).....	max. 0,05 ppm
lead (Pb).....	max. 0,05 ppm		
lithium (Li).....	max. 0,05 ppm	suitability for use in LC-MS.....	passes test
magnesium (Mg).....	max. 0,5 ppm		

Physical data

- Density: 1,22 g/cm³
- Solub. in water: (20 °C): miscible
- Melting point: ~ 8 °C
- Boiling point: 101 °C
- Flash point: 48 °C
- Ignition temperature: 480 °C
- Vapour pressure: (20 °C) 42 hPa
- Refraction index: (n 20 °C/D) 1,3714
- Dielectric const.: (16 °C) 58,5
- Evap. heat: (101 °C) 900 KJ/kg
- Saturation conc.: (20 °C) 80 g/m³
- Expl. limit (upper): 38 Vol%
- Expl. limit (lower): 12 Vol%
- pH(10 g/l H₂O, 20 °C) 2,2

Safety - GHS

Signal Word: Danger

Hazard Statements:

- H226: Flammable liquid and vapour.
H302: Harmful if swallowed.
H331: Toxic if inhaled.
H314: Causes severe skin burns and eye damage.

**Precautionary Statements:**

- P210: Keep away from heat / sparks / open flames / hot surfaces. - No smoking.
P303+P361+P353: IF ON SKIN (or hair): Remove / Take off immediately all contaminated clothing. Rinse skin with water / shower.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310: Immediately call a POISON CENTER or doctor / physician.
P370+P378: In case of fire: Use ... for extinction.
P405: Store locked up.
P501a: Dispose of contents / container in accordance with local / regional / national / international regulations.

Transport/storage

- ADR: 8 CF1 II • UN 1779 • FORMIC ACID
- IMDG: 8 II • UN 1779 • FORMIC ACID
- IATA/ICAO: 8 II • UN 1779 • FORMIC ACID
- PAX: 851
- CAO: 855
- 10°C - 30°C