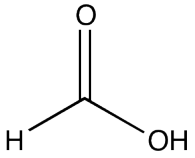
Formic acid, 98 - 100%, for analysis, ExpertQ®, ACS, Reag. Ph Eur

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

Applications

analytical chemistry, synthesis of organic products, in the rubber industry, acidifying agent, cosmetics.

Specifications

assay (acidimetric)	min. 98 %
colour (Hazen)	max. 10
density (20°/20°)	1,217 - 1.223
acetic acid (CH3COOH)	max. 0,05 %
dilution test	passes test
chlorides (Cl)	max. 0,0005 %
sulfates (SO_4)	max. 0,0005 %
sulfites (SO3)	passes test
aluminium (Al)	max. 0,05 ppm
ammonium (NH4)	max. 0,001 %
barium (Ba)	max. 0,05 ppm
beryllium (Be)	max. 0,02 ppm
bismuth (Bi)	max. 0,1 ppm
cadmium (Cd)	max. 0,05 ppm
calcium (Ca)	max. 0,2 ppm
chromium (Cr)	max. 0,05 ppm
cobalt (Co)	max. 0,02 ppm
copper (Cu)	max. 0,02 ppm
germanium (Ge)	max. 0,05 ppm
heavy metals (as Pb)	max. 0,001 %
iron (Fe)	max. 2 ppm
lead (Pb)	max. 0,02 ppm
lithium (Li)	max. 0,02 ppm
magnesium (Mg)	max. 0,5 ppm
manganese (Mn)	max. 0,05 ppm
molybdenum (Mo)	max. 0,02 ppm
nickel (Ni)	max. 0,05 ppm
potassium (K)	max. 0,1 ppm
silver (Ag)	max. 0,02 ppm
sodium (Na)	max. 0,5 ppm
strontium (Sr)	max. 0,02 ppm
thallium (Tl)	max. 0,05 ppm
titanium (Ti)	max. 0,1 ppm
vanadium (V)	max. 0,05 ppm
zinc (Zn)	max. 0,05 ppm
zirconium (Zr)	max. 0,1 ppm
residue on evaporation	max. 0,001 %

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/m^3
- Expl. limit (upper): 38 Vol%
- Expl. limit (lower): 12 Vol%
- pH(10 g/l H_2O, 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