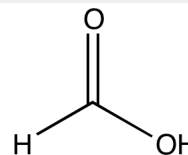


Identification

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 %	heavy metals (as Pb).....	max. 0,001 %
colour (Hazen).....	max. 10	iron (Fe).....	max. 2 ppm
density (20°/20°).....	1,217 - 1.223	lead (Pb).....	max. 0,02 ppm
acetic acid (CH ₃ COOH).....	max. 0,05 %	lithium (Li).....	max. 0,02 ppm
dilution test.....	passes test	magnesium (Mg).....	max. 0,5 ppm
chlorides (Cl).....	max. 0,0005 %	manganese (Mn).....	max. 0,05 ppm
sulfates (SO ₄).....	max. 0,0005 %	molybdenum (Mo).....	max. 0,02 ppm
sulfites (SO ₃).....	passes test	nickel (Ni).....	max. 0,05 ppm
aluminium (Al).....	max. 0,05 ppm	potassium (K).....	max. 0,1 ppm
ammonium (NH ₄).....	max. 0,001 %	silver (Ag).....	max. 0,02 ppm
barium (Ba).....	max. 0,05 ppm	sodium (Na).....	max. 0,5 ppm
beryllium (Be).....	max. 0,02 ppm	strontium (Sr).....	max. 0,02 ppm
bismuth (Bi).....	max. 0,1 ppm	thallium (Tl).....	max. 0,05 ppm
cadmium (Cd).....	max. 0,05 ppm	titanium (Ti).....	max. 0,1 ppm
calcium (Ca).....	max. 0,2 ppm	vanadium (V).....	max. 0,05 ppm
chromium (Cr).....	max. 0,05 ppm	zinc (Zn).....	max. 0,05 ppm
cobalt (Co).....	max. 0,02 ppm	zirconium (Zr).....	max. 0,1 ppm
copper (Cu).....	max. 0,02 ppm	residue on evaporation.....	max. 0,001 %
germanium (Ge).....	max. 0,05 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:

- H314: Causes severe skin burns and eye damage.
H226: Flammable liquid and vapour.


Precautionary Statements:

- P210: Keep away from heat / sparks / open flames / hot surfaces. - No smoking.
P241: Use explosion-proof electrical / ventilating / lighting / equipment.
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.
P405: Store locked up.
P501a: Dispose of contents / container in accordance with local / regional / national / international regulations.

Toxicological data

- LD 50 (oral, rat): 730 mg/kg
- MAK: 5 ml/m³, 9,5 mg/m³
- WGK: 1
- Poison class CH (Swiss): 3

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
- Store between 15°C and 25°C