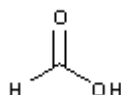


**PRODUCT CODE: 131030**

**Formic Acid 98% for analysis, ACS**

CH<sub>2</sub>O<sub>2</sub>

HCOOH



M.= 46,03

CAS [64-18-6]

EINECS 200-579-1

TARIC 2915 11 00 00

**PHYSICAL DATA:** liquid, Clear, Colourless, Miscible with water • Hygroscopic • D 20/4 1,219 • M.P.: 8,4 °C • B.P.: 100,5 °C • n<sub>20</sub>/D : 1,3714 • Flash P.:50 °C • Ign. T.:520 °C • Vap. press. (20 °C) 43 hPa • Dielec. constant16 °C 58,5 • Heat evap. 100 °C 900 KJ/Kg • Satur. conc. 20 °C 80 g/m<sup>3</sup> • Expl. limit14 %(V)33 %(V) •

**BIBLIOGRAPHY:** Merck Index **13**, 4.265 Sax **FNA000** • Safety **2**, **1735 B** • Römp **8**, **163** • Kühn-Birett **A 51** • Ullmann **(5.)12**, **13** • Beilstein **2**, **8 I**, **7 II**, **3 III**, **3 IV,3** • BRN 506007 • Fieser 1404 **2202 3147 4239 5316 7160 8232 9226 11243 13137** • ACS **XI** • F.C.C **11 12** • Directive 76/463/E.C.E. •

**HAZARDOUS:** C.E: 607-001-00-0 • RTECS: LQ 4900000 • LD50 oral rat 1.100 mg/kg • VLA-EC 10 ppm18 mg/m<sup>3</sup> VLA-ED 5 ppm9 mg/m<sup>3</sup>



H: H314 • H226 • H331 • H302 • EUH071 •

P: P260 • P264 • P280 • P301+P330+P331 • P303+P361+P353 • P501 • P304+P340 • P305+P351+P338 • P310 • P321 • P338 • P363 • P405 • P210 • P233 • P240 • P241 • P242 • P243 • P403+P235 • P370+P378 • P261 • P271 • P270 • P301+P312 • P311 • P330 •

**TRANSPORT REGULATIONS:** UN: 1779 • ADR: 8(3)/II • IMDG: 8(3)/II • IATA: 8(3)/II • PAX: 851 • CAO: 855 • (D/E) •

**WEIGHT/VOLUME INFORMATION:** 1l-1,22 kg 1kg-0,82 l

**SPECIFICATIONS:**

|                         |       |
|-------------------------|-------|
| Minimum assay (Acidim.) | 98,0% |
|-------------------------|-------|

**Maximum limit of impurities**

|                                      |             |
|--------------------------------------|-------------|
| APHA colour                          | 15          |
| Insoluble matter in H <sub>2</sub> O | passes test |
| Non-volatile matter                  | 0,003 %     |
| Chloride (Cl)                        | 0,0005%     |
| Ammonium (NH <sub>4</sub> )          | 0,005%      |
| Sulfate (SO <sub>4</sub> )           | 0,0005%     |
| Sulfite (SO <sub>3</sub> )           | 0,001%      |
| Acetic Acid (CH <sub>3</sub> COOH)   | 0,05%       |
| Heavy metals (as Pb)                 | 0,001%      |

**Metals by ICP [in mg/Kg (ppm)]**

|    |      |
|----|------|
| Ag | 0,02 |
| Al | 0,1  |
| Au | 0,1  |
| B  | 0,05 |
| Ba | 0,05 |
| Be | 0,02 |
| Bi | 0,05 |
| Ca | 0,5  |
| Cd | 0,05 |
| Co | 0,02 |
| Cr | 0,02 |
| Cu | 0,02 |
| Fe | 0,3  |
| Ga | 0,05 |
| Ge | 0,02 |
| Hg | 0,1  |
| In | 0,05 |
| K  | 0,1  |
| Li | 0,02 |
| Mg | 0,1  |
| Mn | 0,05 |
| Mo | 0,02 |
| Na | 1    |
| Ni | 0,05 |
| Pb | 0,02 |
| Pt | 0,1  |
| Sb | 0,02 |
| Si | 0,1  |
| Sn | 0,05 |
| Sr | 0,02 |
| Ti | 0,05 |
| Tl | 0,02 |
| V  | 0,02 |
| Zn | 0,08 |
| Zr | 0,05 |