

## Identification

HF  
M = 20,01 g/mol  
CAS [7664-39-3]  
EC number: 231-634-8  
Taric code: 2811 11 00

## Applications

analytical chemistry, acidifying agent, dissolution agent for silicates.

## Specifications

|   |                |                           |               |
|---|----------------|---------------------------|---------------|
| assay (acidimetric).....  | min. 40 %      | heavy metals (as Pb)..... | max. 1 ppm    |
| colour (Hazen).....   | max. 10        | iron (Fe).....            | max. 0,1 ppm  |
| hexafluorosilicic acid (H <sub>2</sub> SiF <sub>6</sub> ) ..... | max. 0,005 %   | lead (Pb).....            | max. 0,02 ppm |
| chlorides (Cl).....   | max. 0,0001 %  | lithium (Li).....         | max. 0,02 ppm |
| phosphates (as PO <sub>4</sub> ).....                           | max. 0,00005 % | magnesium (Mg).....       | max. 0,1 ppm  |
| sulfates (SO <sub>4</sub> ).....                                | max. 0,0002 %  | manganese (Mn).....       | max. 0,03 ppm |
| sulfites (SO <sub>3</sub> ) .....                               | max. 0,0002 %  | molybdenum (Mo).....      | max. 0,02 ppm |
| aluminium (Al).....   | max. 0,05 ppm  | nickel (Ni).....          | max. 0,02 ppm |
| arsenic (As).....   | max. 0,05 ppm  | potassium (K).....        | max. 0,1 ppm  |
| barium (Ba).....  | max. 0,05 ppm  | silver (Ag).....          | max. 0,02 ppm |
| beryllium (Be).....   | max. 0,02 ppm  | sodium (Na).....          | max. 0,2 ppm  |
| bismuth (Bi).....   | max. 0,02 ppm  | strontium (Sr) .....      | max. 0,02 ppm |
| cadmium (Cd).....   | max. 0,01 ppm  | thallium (Tl).....        | max. 0,02 ppm |
| calcium (Ca).....   | max. 0,2 ppm   | titanium (Ti).....        | max. 0,02 ppm |
| chromium (Cr).....  | max. 0,02 ppm  | vanadium (V).....         | max. 0,02 ppm |
| cobalt (Co).....  | max. 0,02 ppm  | zinc (Zn).....            | max. 0,05 ppm |
| copper (Cu).....  | max. 0,02 ppm  | zirconium (Zr).....       | max. 0,02 ppm |
| germanium (Ge).....   | max. 0,02 ppm  | residue on ignition.....  | max. 0,0005 % |

## Physical data

- Density: 1,13 g/cm<sup>3</sup>
- Solub. in water: (20 °C): miscible
- Melting point: ~ -44 °C
- Boiling point: ~ 112 °C
- pH(20 °C) < 1

## Safety - GHS

**Signal Word:** Danger

### Hazard Statements:

- H310: Fatal in contact with skin.  
H330: Fatal if inhaled.  
H314: Causes severe skin burns and eye damage.



### Precautionary Statements:

- P260: Do not breathe dust / fume / gas / mist / vapours / spray.  
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.  
P320: Specific treatment is urgent (see on this label).  
P405: Store locked up.  
P501a: Dispose of contents / container in accordance with local / regional / national / international regulations.

## Transport/storage

- ADR: 8 CT1 II • UN 1790 • HYDROFLUORIC ACID
- IMDG: 8 II • UN 1790 • HYDROFLUORIC ACID
- IATA/ICAO: 8 II • UN 1790 • HYDROFLUORIC ACID
- PAX: 809
- CAO: 813
- 10°C - 30°C