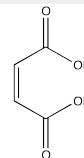


Identification

$C_4H_4O_4$
 M = 116,07 g/mol
 CAS [110-16-7]
 EC number: 203-742-5
 Taric code: 2917 19 90


Synonyms

cis-Butenedioic acid

Applications

synthesis of organic products, manufacturing of synthetic resins, for pharmaceuticals synthesizing, manufacture of dyes, in pharma industry.

Specifications

assay (acidimetric, referred to dried sample).....	99 - 101 %	iron (Fe).....	max. 0,0005 %
identification.....	passes test	residue on ignition.....	max. 0,1 %
appearance of solution (10 %, H ₂ O).....	passes test	water (K.F.).....	max. 2 %
fumaric acid (TLC).....	max. 1,5 %	Residual solvents are analysed according to guideline CPMP/ICH/283/95.	
heavy metals (as Pb).....	max. 0,001 %		

Packaging
Packaging Code

500 g R
 1 kg R

Physical data

- Spec. Density: 1,59 g/cm³
- Bulk density: 750 - 800 kg/m³
- Solub. in water: (25 °C): 788 g/l
- Melting point: 133 °C
- Boiling point: 135 °C (decomposes)
- Flash point: 127 °C
- Vapour pressure: (20 °C) < 0,1 hPa

Safety - GHS

Signal Word: Warning


Hazard Statements:

- H302: Harmful if swallowed.
- H315: Causes skin irritation.
- H319: Causes serious eye irritation.
- H317: May cause an allergic skin reaction.
- H335: May cause respiratory irritation.

Precautionary Statements:

- P261: Avoid breathing dust / fume / gas / mist / vapours / spray.
- P280: Wear protective gloves / protective clothing / eye protection / face protection.
- P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P321: Specific treatment (see on this label).
- P405: Store locked up.
- P501a: Dispose of contents / container in accordance with local / regional / national / international regulations.

Toxicological data

- LD 50 (oral, rat): 708 mg/kg
- WGK: 1
- Poison class CH (Swiss): 4

Transport/storage

- ADR: 8 C4 III • UN 3261 • CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S. (Maleic acid)
- IMDG: 8 III • UN 3261 • CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S. (Maleic acid)
- IATA/ICAO: 8 III • UN 3261 • CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S. (Maleic acid)
- PAX: 822
- CAO: 823
- Store between 15°C and 25°C