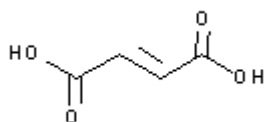


**PRODUCT CODE: 142344****Fumaric Acid (USP-NF) pure, pharma grade**



M.= 116,07

CAS [110-17-8]

EINECS 203-743-0

TARIC 2917 19 80 90

SYNONYMS: Butenedioic Acid, trans-1,2-EthylenedicarboxylicAcid**PHYSICAL DATA:** Small crystals, White, Soluble in water 6,3 g/l at 20 °C M.P.: 300 °C • pH(5 g/l)2,1 • Ign. T.:630 °C •**BIBLIOGRAPHY:** Merck Index **12**, 4.309 13, 4.803 Sax **FOU**500 • Safety **2** , **1749 A** • Römp **8** , **414** • Ullmann **(5.)**8 , 534 • Beilstein **2** , **737 I** , **299 II** , **631 III** ,**1890 IV** , **2202** • BRN 605762 • Fieser **5319** • USP **-NF 36** • F.C.C **10 11** • BOE **243**(8-10-2009) • Regulation (EU) n° 231/2012 •**HAZARDOUS:** C.E: 607-146-00-X • RTECS: LS 9625000 • LD L0 oral rbt 5.000 mg/kg • LD50 oral rat 9.300 mg/kg • LD L0 ipr rat 587 mg/kg

H: H319 •

P: P264 • P280 • P305+P351+P338 • P337+P313 •

SPECIFICATIONS:

Assay (Acidim.) calc. a.d.s.

99,5-100,5%

Identity :
Identity according to Pharmacopoeias: passes test

Maximum limit of impurities

Insoluble matter in H ₂ O	0,05 %
Residue on ignition (as SO ₄)	0,1 %
Chloride (Cl)	0,005%
Sulfate (SO ₄)	0,01%
Residual solvents (Ph.Eur/USP)	passes test
Maleic Acid (HPLC.)	0,1%
Water (H ₂ O)	0,5 %
Heavy metals (as Pb)	0,001%

Fe	0,001	%
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Elemental impurities (ICH Q3D):

Class 1

Cd	0,5 ppm
Pb	0,5 ppm
As	1 ppm
Hg	1,5 ppm

Class 2A

Co	5 ppm
V	10 ppm
Ni	10 ppm

Class 2B

Tl	5 ppm
Au	10 ppm
Pd	10 ppm
Ir	10 ppm
Os	10 ppm
Rh	10 ppm
Ru	10 ppm
Se	15 ppm
Ag	15 ppm
Pt	10 ppm

Class 3

Li	55 ppm
Sb	120 ppm
Ba	140 ppm
Mo	25 ppm
Cu	10 ppm
Sn	600 ppm
Cr	25 ppm