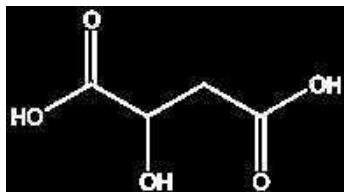


DL-MALIC ACID

AC1420 DL-Malic acid, extra pure, Phampur®, Ph Eur, BP, NF



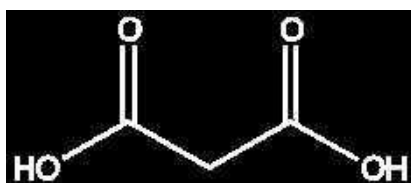
- Synonyms: DL-Hydroxysuccinic acid, DL-Malate
- $C_4H_6O_5$
- $M = 134,09 \text{ g/mol}$
- CAS [6915-15-7]
- EINECS-No.: 230-022-8
- Solub. in water: (20 °C): ~ 530 g/l
- Melting point: 127-130 °C
- Boiling point: 150 °C (decomposes)
- Flash pt. 203 °C
- Ignition temp.: 349 °C
- GHS-signal word: Warning
- GHS-H sentences: H315 - H319
- GHS-P sentences: P280 - P305 + P351 + P338 - P321 - P362 - P332 + P313 - P337 + P313
- Tariff number: 2918 19 80 20
- Applications: in biochemistry, for pharmaceutical use, synthesis of organic products, in pharma industry.

assay (acidimetric, referred to dried sample) 99,0 - 101,0 %
 assay (acidimetric) 99,0 - 100,5 %
 identification passes test
 appearance of solution clear and colourless
 water-insoluble substances max. 0,1 %
 specific rotation ($[\alpha]_{20}^{20}$;
 $c = 20, H_2O$) - 0,10° - + 0,10°
 related substances passes test
 residue on ignition max. 0,1 %
 water (K.F.) max. 2,0 %
 Elemental impurities are analysed according to guideline CHMP/ICH/353369/2013.
 Residual solvents are analysed according to guideline CPMP/ICH/283/95.

ART. NO.	VOLUME	CONTAINER
AC14200500	500 g	Ⓟ
AC14201000	1 kg	Ⓟ

MALONIC ACID

AC1430 Malonic acid, EssentQ®



- Synonyms: 1,3-Propanedioic acid
- $C_3H_4O_4$
- $M = 104,06 \text{ g/mol}$
- CAS [141-82-2]
- EINECS-No.: 205-503-0
- Solub. in water: (20 °C): 735 g/l
- Melting point: 136 °C
- Flash pt. 157 °C
- LD 50 (oral, rat): 1310 mg/kg
- GHS-signal word: Warning
- GHS-H sentences: H302 - H319
- GHS-P sentences: P280 - P264 - P270 - P305 + P351 + P338 - P337 + P313 - P501a
- Tariff number: 2917 19 10 00
- Applications: synthesis of organic products, for pharmaceutical use.

assay (acidimetric) min. 99 %
 identity (IR-spectrum) passes test

ART. NO.	VOLUME	CONTAINER
AC14300250	250 g	Ⓟ

MALTOSE MONOHYDRATE

MA0100 Maltose monohydrate, for microbiology



- Synonyms: Maltobiose, 4-O- α -D-Glucopyranosyl-D-glucose
- $C_{12}H_{22}O_{11} \cdot H_2O$
- $M = 360,32 \text{ g/mol}$
- CAS [6363-53-7]
- EINECS-No.: 200-716-5
- Solub. in water: (20 °C): 1080 g/l
- Melting point: 160 - 165 °C
- Tariff number: 1702 90 10 90

Assay (HPLC, referred to dried sample) min. 92 %
 appearance of solution passes test
 pH (10 %, H_2O) 4,0 - 6,5
 heavy metals max. 0,002 %
 glucosemax. 3,0 %
 residue on ignition max. 0,1 %
 water (K.F.) 4,5 - 7,0 %

ART. NO.	VOLUME	CONTAINER
MA01000500	500 g	Ⓟ

MANGANESE

MA0120 Manganese, powder, EssentQ®

- Mn
- $M = 54,94 \text{ g/mol}$
- CAS [7439-96-5]
- EINECS-No.: 231-105-1
- Solub. in water: (20 °C): insoluble
- Melting point: 1260 °C
- Boiling point: 1900 °C

- LD 50 (oral, rat): 9000 mg/kg
- Tariff number: 8111 00 11 00
- Applications: laboratory reagent, synthesis of organic products, inorganic salts, metal alloys, in building materials.

assay (complexometric) approx. 99 %

ART. NO.	VOLUME	CONTAINER
MA01200250	250 g	Ⓟ