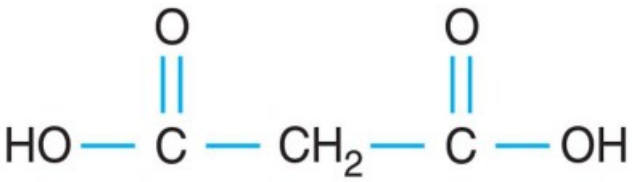
3.4 M Sodium malonate pH 7.0 - 200 ml

Crystallization grade Sodium malonate for formulating screens or for optimization



Product codes:

Reference: HR 2707

Product gallery:

Product description:

- Sterile filtered solution
- Formulated in Type 1+ ultrapure water: 18.2 megaohm-cm resistivity at 25°C, 5 ppb Total Organic Carbon, bacteria free (1 Bacteria (CFU/ml)), pyrogen free (0.03 Endotoxin (EU/ml)), RNase-free (0.01 ng/mL) and DNase-free (4 pg/µL)

The Sodium malonate offered by Hampton Research is Malonic acid (CAS Number 141-82-2) titrated to pH 4.0-8.0 using Sodium hydroxide as described in the publication "A comparison of salts for the crystallization of macromolecules. Alexander McPherson. Protein Science (2001), 10:418-422.". In this same publication, Sodium malonate was reported to be more successful than any other salt, resulting in the crystallization of 19 of the 23 macromolecules, almost twice as effective as the next most successful salt, which was a draw between sodium acetate, sodium tartrate, sodium formate, and ammonium sulfate. The high success rate of Sodium malonate in producing crystals was even more impressive when an overall unique success rate with individual macromolecules was considered.

The use of Sodium malonate in place of Ammonium sulfate has been reported in one instance to improve the reproducibility of crystals and improve resistance to physicochemical shocks. Sodium malonate also acted as a good cryoprotectant (Xing and Xu 2003).

One may combine the four different sodium malonate stocks to create a pH versus sodium malonate concentration grid for screening or optimization. Refer to the pH/Dilution Table for

Sodium malonate.

Based on the structure of malonic acid titrated with sodium hydroxide, there are no chiral carbons so it is not characterized as having enantiomeric structures, such as D or L.

Synonyms: Propanedioic acid or Malonic acid
C3H4O4 (before titration with NaOH)
Mr 104.06 (before titration with NaOH)
CAS Number 141-82-2
EC Number 205-503-0
Beilstein Registry Number 1751370
Merck 14,5710
RTECS OO0175000
MDL Number MFCD00002707
Purity > 99.0%
pKa1 2.8
pKa2 5.7

HR2-747 Measured Conductivity Range: 72.1 - 75.3 mS/cm at 25°C
HR2-747 Measured Refractive Index Range: 1.38365 - 1.38425 at 20°C

HR2-749 Measured Conductivity Range: 76.3 - 78.0 mS/cm at 25°C
HR2-749 Measured Refractive Index Range: 1.39240 - 1.39300 at 20°C

HR2-751 Measured Conductivity Range: 73.1 - 75.2 mS/cm at 25°C
HR2-751 Measured Refractive Index Range: 1.39920 - 1.39973 at 20°C

HR2-707 Measured Conductivity Range: 71.0 - 73.7 mS/cm at 25°C
HR2-707 Measured Refractive Index Range: 1.40062 - 1.40110 at 20°C

HR2-807 Measured Conductivity Range: 71.8 - 75.0 mS/cm at 25°C
HR2-807 Measured Refractive Index Range: 1.40106 - 1.40115 at 20°C

Per maggiori informazioni visita il sito https://hamptonresearch.com/

Product features:

CRF - TIPO: Sodium malonate