

| REV | DATED |
|-----|----------------|
| 3 | April 5, 2024 |
| 1 | April 14, 2023 |
| 2 | Aug 21, 2023 |

MALIC ACID POWDER

MALIC ACID - USP/NF and Ph Eur

Formula: C₄H₆O₅
CAS Number: 6915-15-7
EC Number: 230-022-8
E Number E296
Molecular weight: 134.09 g/mol

DESCRIPTION: White or nearly white crystals with a smooth tart taste.

SPECIFICATION:

Identification by IR: Positive for Malic Acid
Assay (As Is): 99.0 – 100.5%
Assay (Anhydrous) 99.0 – 101.0%
Fumaric Acid: 1.0% max.
Maleic Acid: 0.05% max.
Any Other Impurity (HPLC): 0.1% max.
All Other Impurities (HPLC): 0.5% max.
Water (Ph Eur): 2.0% max.
Residue on Ignition (Sulfated Ash): 0.1% max.
Water Insoluble Matter: 0.1% max.
Optical Rotation: -0.10° to +0.10°
Clarity of a 20% Solution: Clear and Colourless

Particle Size: Through a US #60 mesh screen (249 micron) – 90.0% min.

PACKAGING: Multi-wall, paper bags and/or Super Sacks
Wooden pallet
Shrink-wrap

PRODUCTION SITE: Stoney Creek, Ontario, Canada

STORAGE: Clean, dry (<75% RH), ambient conditions.

SHELF LIFE: 24 Months from the date of production under recommended storage conditions.