



BARTEK Ingredients Inc.

A Taste for Today and Tomorrow

DL-MALIC ACID REGULAR, USP/NF and PhEur GRADE complaint

FORMULA: $C_4H_6O_5$
CAS Number: 6915-15-7
EINECS Number: 230-022-8
EC Number: 296

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

SPECIFICATIONS:

Identification by IR:	Positive for Malic Acid
Assay:	99.0 - 100.5%
Fumaric Acid:	1.00% max.
Maleic Acid:	0.05% max.
Heavy Metals:	10 ppm max.
Residue on Ignition:	0.10% max.
Water Insoluble Matter:	0.10% max.
Moisture:	0.30% max.
Organic Volatile Impurities:	ND
Melting Point:	128 - 132°C
Appearance of Solution:	Clear, Colourless
Optical Rotation:	-0.10° to +0.10°

Particle Size:
On a US mesh screen #25 (710 micron) - 1.0% max.
Through a US mesh screen #100 (150 micron) - 5.0% max.

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.

Date Issued: July 5, 2011
Supersedes: November 5, 2009