

Messrs. **JJD ENTERPRISES**

FUSO CHEMICAL CO., LTD.

NISSEI FUSHIMI-MACHI BLDG, SHINKAN 9-10,

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CERTIFICATE OF ANALYSIS

Jan. 19, 2018

Invoice No. : E1801011
Order No. : JJD / M. ACID / 17 - 18 / 03

Product Name : DL-Malic Acid Particle Size : Fine Granular
Lot No. : 18006
Description : White or nearly white, crystalline powder or granule.

Total quantity : 5,000 kg Destination : NHAVA SHEVA

TEST ITEM	SPECIFICATION	RESULT
Identification	To pass test	Pass
Assay	99.0 - 100.5%	100.0
Residue on Ignition (JSFA)	NMT 0.05%	0.00
Water Insoluble Matter	NMT 0.1%	Pass
Specific Rotation $[\alpha]_D^{25}$	-0.10 - +0.10°	0.00
Fumaric Acid	NMT 1.0%	0.6
Maleic Acid	NMT 0.05%	0.02
Arsenic (as As ₂ O ₃)	NMT 2 mg/kg	Pass
Heavy Metals (as Pb)	NMT 5 mg/kg	Pass
Lead	NMT 2 mg/kg	Pass
Copper	NMT 50 mg/kg	Pass
Zinc	NMT 25 mg/kg	Pass
Mercury	NMT 1 mg/kg	Pass
Sulphated Ash (FCC)	NMT 0.1%	Pass
Water	NMT 0.3%	0.2
Melting Point	127 - 132°C	130
Manufacturing Date		Jan. 09, 2018
Expiry Date		Jan. 08, 2023
Quantity	25 kg x 200	B/G

Conformed to the specification of Food Chemicals Codex X

We hereby certify that the above test results are true and correct.

Inspected by :

M. Minamide

Deputy Department Manager, Quality Assurance Dept.