

PRIMARY PRODUCTS

INGREDIENTS AMERICAS LLC

F/K/A/ TATE & LYLE INGR AMERICAS LLC

Certificate of Analysis

Supplier's Shipment Date

00/00/0000

Truck/Trailer/Container

Delivery Item
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Order Item

Customer Number Customer Reference No

Material Our Reference / Your Reference

2800000615021 MALIC ACID FINE GRAN 50 LB BAG /

Produced by : 1111 PL: Primary Products 110 Spring Street 55808 Duluth MN US
Ingredients Duluth

Batch : DU22L92911 / Quantity : 0 Internal Ref field :

Production Date : 29-DEC-22 Best Before Date : 28-DEC-27

Inspection Lot : 40000597648

Parameter	Value	Lower Limit	Upper Limit	Method
APPEARANCE	Pass	Pass	-	Appearance - TN20550
MALIC ACID(%)	99.68	99	100.5	Malic - TN20925
MOISTURE(%)	0.14		0.5	Moisture - TN20705
IDENTITY	Pass	Pass	-	Malic Identity - TN20635
FUMARIC ACID(%)	0.2		1	Fumaric - TN20690
MALEIC ACID(%)	0.014		0.05	Maleic - TN20691
ON US#25 (710µm)(%)	0		1	Particle Size - RoTap TN20745R
THRU US#100 (150µm)(%)	1.5		5	Particle Size - Gradex TN20745G
ROTATION		Pass	-	Specific Rotation - TN20895
CLARITY		Pass	-	Clarity - TN20599
RESIDUE ON IGNIT(%)	0.03		0.1	Sulfated Ash - TN20910
WATER INSOLUBLES(%)	0.01		0.1	Insolubles - TN20945
HEAVY METALS(ppm)			5	Heavy Metals as Lead - TN20630
LEAD, FCC			2	Lead by AA - TN20680
ARSENIC(ppm)			2	Arsenic - TN20560
CHLORIDES(ppm)			40	Chloride - TN20596
MELTING POINT(°C)		127	132	MELTING POINT - TN20693
ODOR	Complies	Complies	-	Odor - TN20882
TASTE	Complies	Complies	-	Sensory Evaluation - TN20922

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When a parameter is not mentioned or when no result is entered for a parameter, Primient certifies that the product contained in this shipment meets all of the requirements of the contractually agreed upon specification.

This product meets the requirements of the current edition of the Food Chemical Codex.

Katherine Stephenson
Quality Assurance Manager

