

TAMAX-TDS-03 — TAMAX Agricultural Lime 40-12

TAMAX VENTURES LTD. — TECHNICAL SPECIFICATION SHEET

- Document ID:** TMX-TDS-03
- Company:** Tamax Ventures Ltd. (Kansarawdo Mampong Road, Yankey Junction, Takoradi, Ghana)
- Latest Revision:** July 2026 (Ref: v1.0)

1. Product Description & Applications

TAMAX Agricultural Lime 40-12 is a high-performance, finely ground agricultural soil conditioner. It comprises a highly structured, synergistic blend of:

- Limestone** (Calcium Carbonate — CaCO_3)
- Dolomite** (Double Calcium-Magnesium Carbonate — $\text{CaCO}_3 \cdot \text{MgCO}_3$)
- Hydrated Lime** (Calcium Hydroxide — Ca(OH)_2)

Key Applications

- Soil Acidity Correction (Liming):** Rapidly increases soil pH to reduce toxic aluminium and iron availability, optimizing fertilizer efficiency and crop yield.
- Nutritional Intake:** Delivers dense, highly plant-available Calcium (Ca) and Magnesium (Mg) minerals necessary for root and cell development.
- Soil Structure Improvement:** Enhances clay soil flocculation, porosity, aeration, and water infiltration.

2. Chemical Specifications (Mean Values)

Chemical Parameter	Minimum Specification	Target Mean Value	Unit
Active Calcium Oxide Equivalent — CaO \text{ eq.}	≥ 40.0	42.5	%
Active Magnesium Oxide Equivalent — MgO \text{ eq.}	≥ 12.0	13.5	%
Neutralizing Value (NV)	≥ 58.0	60.0	%
Product pH Range	—	10.5 – 12.0	pH
Moisture Content (Humidity)	—	< 2.0	%

3. Physical & Granulometric Sizing (Mesh Sieve Analysis)

Physical Characteristics

- **Product Sizing Range:** 0 – 2 mm (Finely ground dry powder)
- **Sizing Profile (Mean Values passing standard screens):**

Sieve Aperture Size	Target Sieve Standard	Mean Value Passing	Unit
< 4.75 mm	Sieve Test standard	99.41	%
< 2.36 mm	Sieve Test standard	94.44	%
< 2.00 mm	Sieve Test standard	92.29	%
< 1.70 mm	Sieve Test standard	89.91	%
< 1.18 mm	Sieve Test standard	85.09	%
< 0.85 mm	Sieve Test standard	80.37	%

4. Packing, Storage & Ghana Regulatory Certifications

Official Compliance & Registrations

- **Ghana PPRSD Certified:** Formally approved and registered in Ghana by the **Plant Protection and Regulatory Services Directorate (PPRSD)** as a certified agricultural fertilizer product.
- **CRI Ghana Tested:** Fully tested, validated, and certified by the **Crop Research Institute (CRI) of Ghana** for agricultural soil rehabilitation.

Storage & Sacks Guidelines

- **Storage Tips:** Keep sacks away from direct moisture, wet soils, and high humidity to prevent caking. Product bags must be sheltered from direct, intensive sun exposure (UV rays), which can degrade woven packaging materials over time.
- **Packaging Options:** Supplied in durable 25kg moisture-proof multi-walled bags and 1-ton bulk builder bags.

*[!WARNING] **Handling Precautions:** Agricultural lime is an alkaline, mildly corrosive mineral. Ensure handlers wear protective dust masks (to prevent inhalation of fine particles), safety goggles, and sturdy gloves. If contact occurs with eyes or mucous membranes, rinse thoroughly with fresh running water immediately.*