

TAMAX-TDS-01 — TAMAX 95 Hydrated Lime

TAMAX VENTURES LTD. — TECHNICAL SPECIFICATION SHEET

- **Document ID:** TMX-TDS-01
- **Company:** Tamax Ventures Ltd. (Kansarawdo Mampong Road, Yankey Junction, Takoradi, Ghana)
- **Latest Revision:** July 2026 (Ref: v1.0)

1. Product Description & Applications

TAMAX 95 Hydrated Lime is a premium, high-purity, fully-hydrated lime (Calcium Hydroxide) in the form of a fine, high-whiteness dry powder.

Key Applications

- **Water Treatment:** Primarily utilized for pH correction, chemical precipitation, softening, and municipal wastewater treatment.
- **Chemical Industry:** Acts as an essential catalyst, neutralizer, and alkaline reactant.
- **Civil Construction:** Used in the manufacture of premium breathable plasters (including Dampness Proofing renders), masonry mortars, and soil stabilization.
- **Agriculture:** Soil conditioner for neutralizing acidity and introducing essential calcium nutrition.

2. Chemical Specifications (Mean Values on Dry)

Chemical Parameter	Test Method	Value	Unit
Total Calcium Hydroxide — $\text{Ca(OH)}_2 \text{ \textit{ tot} }$	Calculated	96.50	%
Available Calcium Hydroxide — $\text{Ca(OH)}_2 \text{ \textit{ av.} }$	ASTM C25	94.50	%
Active Neutralizing Value — $\text{CaO \textit{ equivalent} }$	Neutralizing	71.50	%
Moisture / Loss on Ignition (LOI) at 105°C	Dry Oven	0.70	%
Carbon Dioxide — CO_2	Calculated	1.50	%
Magnesium Oxide — MgO	ICP	0.80	%
Silicon Dioxide — SiO_2	ICP	0.50	%
Aluminium Oxide — Al_2O_3	ICP	0.08	%
Iron Oxide — Fe_2O_3	ICP	0.15	%
Sulphur — S	LECO	0.20	%

3. Physical & Granulometric Properties

Chemical Characteristics

- **Molecular Weight:** 74.09 g/mol
- **Solubility in Water (25°C):** 1.64 g/l
- **Aspect / Appearance:** Fine, odorless white powder

Physical Analysis Parameters

Physical Parameter	Test Method	Mean Value	Unit
Tamped Apparent Density	ASTM C110	0.65	g/ml
Poured Apparent Density	ASTM C110	0.35	g/ml
Passing Mesh #200 (75 µm)	Dry Sieving ISO 8.6.1.02	95.0	%

4. Packing, Logistics & Compliance

- **Production Facility:** Supply Operations Site, Takoradi, Ghana.
- **Reference Standards:** ASTM C25, ASTM C110, ISO 8.6.1.02.
- **Packaging Options:**
 - 25kg moisture-resistant paper sacks (palletized).
 - 1-ton polypropylene jumbo bags with interior liners.
 - Loose bulk delivery via pneumatic dry-bulk tankers.
- **Storage Guidelines:** Must be stored in completely dry, covered silos or warehouses, protected from atmospheric moisture and carbon dioxide (CO₂) to prevent product degradation.

[!IMPORTANT] Safety Warning: Although hydrated lime is not classified as an environmental hazard, it is highly alkaline (pH 12.4 in saturated solution) and is an irritant to eyes, skin, and the respiratory tract. Consult the official safety datasheet (**TMX-SDS-01**) before handling.