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NY

**INDUSTRY STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

NY 2266-2012

**Water-soluble fertilizers containing calcium and magnesium
(English Translation)**

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1 Scope

This Standard specifies the technical requirements, test methods, inspection rules, marking, packaging, transportation and storage for water-soluble fertilizers containing calcium and magnesium.

This Standard is applicable to solid or liquid water-soluble fertilizers produced and sold within the People's Republic of China that contain the secondary nutrients calcium and magnesium as their main components.

2 Normative References

The following documents are indispensable for the application of this document. In terms of references with a specified date, only the version with that specific date is applicable to this document. In terms of references without a specified date, the latest version (including all the modifications) is applicable to this document.

GB 190 Packing symbol of dangerous goods

GB/T 191 Packaging - Pictorial marking for handling of goods

GB/T 6679 General rules for sampling solid chemical products

GB/T 6680 General rules for sampling liquid chemical products

GB/T 8170 Rules of rounding off for numerical values & expression and judgement of limiting values

GB 8569 Packing of solid chemical fertilizers [Translator's note. Renamed to GB/T 8569]

GB/T 8576 Determination of free water for compound fertilizers - Vacuum oven method

GB/T 8577 Determination of free water for compound fertilizers - Karl Fischer method

NY/T 887 Liquid fertilizers - Determination of density

NY/T 1108 Liquid fertilizers - Tech-regulations of package

NY 1110 Water-soluble fertilizers - Content-limits of mercury, arsenic, cadmium, lead and chromium

NY/T 1117 Water-soluble fertilizers - Determination of calcium, magnesium, sulphur and chlorine content

NY/T 1972 Water-soluble fertilizers - Determination of sodium, selenium, silicon content

NY/T 1973 Water-soluble fertilizers - Determination of water insoluble matter content and pH

NY/T 1974 Water-soluble fertilizers - Determination of copper, iron, manganese, zinc, boron, molybdenum content

NY/T 1978 Fertilizers - Determination of mercury, arsenic, cadmium, lead and chromium content

NY 1979 Fertilizer registration - Tech-regulations of fertilizer labels

Administrative Measures for Product Quality Arbitration Inspection and Product Quality Appraisal

Administrative Measures for Metrological Supervision of Quantitatively Packaged Commodities

3 Terms and Definitions

The following terms and definitions are applicable to this document.

3.1 Water-Soluble Fertilizers

Solid or liquid fertilizers that are dissolved or diluted in water for use in fertigation, foliar fertilization, soilless cultivation, seed soaking, root dipping, etc.

4 Requirements

4.1

The appearance shall be a uniform solid or liquid.

4.2 Technical indicators for solid water-soluble fertilizers containing calcium and magnesium

shall comply with the requirements of Table 1.

Table 1

4.3 Technical indicators for liquid water-soluble fertilizers containing calcium and magnesium

shall comply with the requirements of Table 2.

Table 2

4.4 If trace element components are added to water-soluble fertilizers containing calcium and magnesium, the trace element content shall be no less than 0.1% or 1 g/L, and no higher than

10% of the secondary nutrient content.

NOTE: The trace element content refers to the sum of the contents of copper, iron, manganese, zinc, boron, and molybdenum. Any single trace element with a content of no less than 0.05% or 0.5 g/L shall be included in the trace element content.

4.5 The content-limit indicators for mercury, arsenic, cadmium, lead, and chromium in water-

soluble fertilizers containing calcium and magnesium shall comply with the requirements of NY 1110.

5.1 Appearance

Determination shall be performed using the visual inspection method.

5.2 Determination of Calcium Content

Determination shall be performed in accordance with the provisions of NY/T 1117.

5.3 Determination of Magnesium Content

Determination shall be performed in accordance with the provisions of NY/T 1117.

5.4 Determination of Copper Content

Determination shall be performed in accordance with the provisions of NY/T 1974.

5.5 Determination of Iron Content

Determination shall be performed in accordance with the provisions of NY/T 1974.

5.6 Determination of Manganese Content

Determination shall be performed in accordance with the provisions of NY/T 1974.

5.7 Determination of Zinc Content

Determination shall be performed in accordance with the provisions of NY/T 1974.

5.8 Determination of Boron Content

Determination shall be performed in accordance with the provisions of NY/T 1974.

5.9 Determination of Molybdenum Content

Determination shall be performed in accordance with the provisions of NY/T 1974.

5.10 Determination of Sulphur Content

Determination shall be performed in accordance with the provisions of NY/T 1117.

5.11 Determination of Chlorine Content

Determination shall be performed in accordance with the provisions of NY/T 1117.

5.12 Determination of Sodium Content

Determination shall be performed in accordance with the provisions of NY/T 1972.

5.13 Determination of pH

Determination shall be performed in accordance with the provisions of NY/T 1973.

5.14 Determination of Water Insoluble Matter Content

Determination shall be performed in accordance with the provisions of NY/T 1973.

5.15 Determination of Moisture Content

Determination shall be performed in accordance with the provisions of GB/T 8576 or GB/T 8577. GB/T 8577 is the arbitration method.