

Title	Demonstrate knowledge of nutrients, and the implications for handling and applying nutrients		
Level	3	Credits	3

Purpose	People credited for this unit standard are able to: demonstrate knowledge of nutrients; describe nutrient compounds, blends, and mixtures, and their compatibility; and describe nutrient specifications and the implication for nutrient handling.
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Classification	Agriculture > General Agriculture
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Available grade	Achieved
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Guidance Information

Legislation, regulations and/or industry standards relevant to this unit standard include but are not limited to the:

- Agricultural Compounds and Veterinary Medicines Act 1997;
- Hazardous Substances and New Organisms Act 1996;
- Health and Safety at Work Act 2015;
- Land Transport Act 1998;
- Resource Management Act 1991;
- The *Spreadmark Code of Practice*, available from [Groundspread NZ](#).

Any new, amended or replacement Acts, regulations, standards, codes of practice, guidelines, or authority requirements or conditions affecting this unit standard will take precedence for assessment purposes, pending review of this unit standard.

Refer to *The Spreadmark Code of Practice* for acceptable use of industry specific terms, unless stated otherwise. For information on the use and content of *The Spreadmark Code of Practice*, contact Groundspread NZ.

Outcomes and performance criteria

Outcome 1

Demonstrate knowledge of nutrients.

Range includes but is not limited to – solid, organic, compost, liquid.

Performance criteria

1.1 Identify types of nutrients.

1.2 Describe forms of available nutrients.

1.3 Describe major constituent nutrients and trace elements.

Range nutrients must include but are not limited to – nitrogen, phosphate, potassium, sulphur;
trace elements may include but are not limited to – selenium, copper, magnesium.

1.4 Describe nutrient content relative to bulk.

1.5 Describe properties and applications of nutrients.

Outcome 2

Describe nutrient compounds, blends, and mixtures, and their compatibility.

Range evidence is required for at least two compounds, two blends, and two mixtures.

Performance criteria

2.1 Describe the usage of nutrient compounds, blends, and mixtures.

2.2 Describe chemical and physical compatibility of nutrient compounds, blends, and mixtures, and their implications for handling and transport.

2.3 Describe chemical and physical compatibility of nutrient compounds, blends, and mixtures, and their implications for nutrient application.

Outcome 3

Describe nutrient specifications and the implication for nutrient handling.

Performance criteria

3.1 Describe nutrient specifications in terms of their significance for equipment adjustment.

Range particle size (SGN), bulk density (BD), uniform index (UI).

3.2 Describe nutrient specifications in terms of the methods of measurement in the field using sieve and volume boxes.

Range SGN, BD.

Planned review date	31 December 2028
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Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	19 April 2002	31 December 2022
Rollover	2	20 May 2008	31 December 2022
Review	3	27 January 2022	31 December 2022
Reinstatement	4	28 September 2023	N/A

Consent and Moderation Requirements (CMR) reference

0052

This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.

Comments on this unit standard

Please contact Muka Tangata - People, Food and Fibre Workforce Development Council qualifications@mukatangata.nz if you wish to suggest changes to the content of this unit standard.