



express® MANGANESE

Premium manganese amino acid chelate

pH 7.25

SG 1.26

Product	N	P	K	S	Ca	Mg	Fe	Si	C	Zn	Mn	Cu	Mo	B	Co	HUMIC ACID	FULVIC ACID	AMINO ACID
	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
express® MANGANESE	2.8			4.6							8							17.2

Typical uses and benefits include:

- **Helps correct and prevent manganese deficiency.**
- **Suitable for foliar, in-furrow and fertigated applications.**
- **Small molecule, readily absorbed by the leaf via stomata and tissue.**

Express® MANGANESE is used in a wide range of crops to correct and prevent manganese deficiency. For horticultural, broadacre and viticulture production where manganese deficiency may occur, Express® MANGANESE can be applied via foliar, in-furrow or fertigated.

Manganese is vital for photosynthesis and chlorophyll production. It also plays a key role in carbohydrate and nitrogen metabolism, as well as oxidation-reduction.

The most effective way to apply Express® MANGANESE is via foliar application; however, it is suitable for in-furrow and fertigated applications as well as chelates, which minimise reactions in the soil solution, resulting in available nutrients for a longer period.

fertiliser for life

AVAILABLE IN 20L, 200L, IBC & BULK

For alternative applications or to arrange a soil/plant test please contact your Ecogrowth® nutritional expert.



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APPLICATION RATES

Crop	Rate	Water L/ha	Notes
BEANS / PEAS / LUPINS	2-3L/ha	50-80	10-14 days before flowering, earlier if there is a known deficiency.
CANOLA	2-3L/ha	50-80	At 4-9 true leaves.
CITRUS	3-5L/ha	500-1,000	At Spring-Summer-Autumn flush.
GRAPEVINES	3-5L/ha	200-800	When flower buds are visible and when flower buds separate.
PASTURE	2-5L/ha	50-80	When there is sufficient foliage.
LUCERNE	3L/ha	50-80	10-14 days before flowering.
CEREAL	2-3L/ha	50-80	At 3-5 leaf stage.
TREE CROPS	1-3L/ha Foliar 2-5L/ha Fertigated	400-1,000	Apply regularly (or as required), every 2-3 weeks during active growth.
TURF	2L/ha 20ml/100m ²	300-800	As required during active growth.

Manganese deficiency:

Manganese deficiency most commonly occurs in sandy soils, soils with low organic matter that has been limed and soils with high pH. Manganese availability may be reduced when there are low levels of potassium and high levels of copper, iron and zinc. Crops particularly sensitive to manganese deficiency are tree crops, vines, legumes, vegetables and cereals.

Manganese deficiency symptoms include:

- “Grey flecks” in oats.
- Yellowing chlorosis between broad leaf veins, leaving a small green band of tissue around them.
- Symptoms typically appear on young, recently matured leaves.