

Product Analysis (w/v)
 Zinc (Zn) – 60 g/L
 Sulfur (S) – 30 g/L
 pH – 7.2 to 7.8
 Specific gravity (SG) – 1.24



SENTINEL ZINC

60 g/L Zinc as EDTA Chelate



Wilchem Sentinel:

Wilchem Sentinel is a range of Ethylenediaminetetraacetic acid (EDTA) chelates. EDTA forms hexadentate chelants – they form six bonds to the nutrient to form a “chelate ring”. The chelate ring is stronger than a single ionic bond and protects the nutrient and maintains it in solution. EDTA chelates protect the nutrient from interactions with other crop care products making it the most compatible product on the market.

Uses:

Wilchem Sentinel Zinc is used to correct and prevent zinc deficiency in a wide range of crops. Sentinel Zinc can be applied via fertigation, furrow injection or foliar applications for broadacre, viticultural and horticultural production where zinc deficiency may occur.

Directions for use:

Sentinel Zinc has been formulated to protect the zinc molecule from interactions in tank mixes and in soils. It is best suited to foliar and furrow injection applications where traditional liquid fertilisers are not suitable.

Zinc Deficiency:

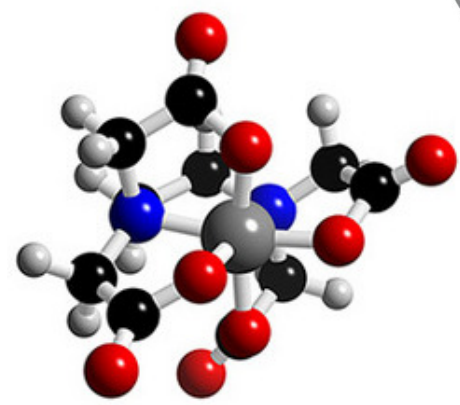
Zinc deficiency mainly occurs in high pH soils, sandy soils that are low in organic matter, organic soils (peats) and in over-limed soils. Uptake of zinc decreases with increased soil pH and can be adversely affected by high levels of available iron (Fe). Cereal crops, potatoes, vines and fruit crops grown on high pH sandy soils are particularly sensitive to zinc deficiency.

Deficiency Symptoms:

- Brown or yellow patches on the new growth
- Patchy appearance of the crop
- Brown necrotic spots on the leaves
- Poor seed set – young tillers may die before setting seed
- Poor yield/low protein

The Function:

Zinc is essential for the formation of chlorophyll and carbohydrates, as well as the production of essential growth hormones such as auxins. It plays a key role in the movement of water in plants, root development and starch formation.



EDTA Structure
 Diagram of the octahedral structure of zinc EDTA forming a hexadentate chelant

Crop Type	Application	Rate L/Ha	Timing	Water L/Ha
Cereals	Foliar	2 to 3	Apply from 3 leaf stage until mid tillering	50 to 80
	Furrow Injection	2 to 6		
Canola	Foliar	2 to 4	Apply at 4 to 9 true leaves	50 to 80
Lucerne, Legumes	Foliar	2 to 4	Apply from 4 to 6 leaf stage and as required	50 to 80
Vegetables	Foliar	2 to 4	Apply when sufficient foliage is present	500
	Fertigation	5 to 7		
Grapevines	Foliar	2 to 4	Apply 2 - 3 time per season when shoots 10 cm, 5 % flowering and post harvest	250
	Fertigation	5 to 7		
Tree crops	Foliar	1 to 2.5	Apply 2 - 3 time per season as required	500 to 1000
	Fertigation	5 to 7		

Note: Any recommendations are a guide and must be adapted to suit local conditions. Adjust rates based on tissue tests, soil tests, local knowledge and the recommendation of your agronomist. Do not exceed a solution of 0.25 % on tree crops.

Compatibility with Agricultural Chemicals:

Sentinel Zinc is compatible with a wide range of crop protection products. It is stable in alkaline soils and in the presence of soluble phosphates. Check the Compatibility Guide as a reference. A jar test should be performed or test application before preparing a full tank mix.

Other Details:

Liquid fertilizers can be corrosive to metals so flush equipment clean after use. Avoid inhaling fumes. Avoid contact with eyes and skin. Wash thoroughly with soap and water after handling. Protect from frost. Do not store for extended periods in direct sunlight.