



wilchem

SIGNATURE RANGE

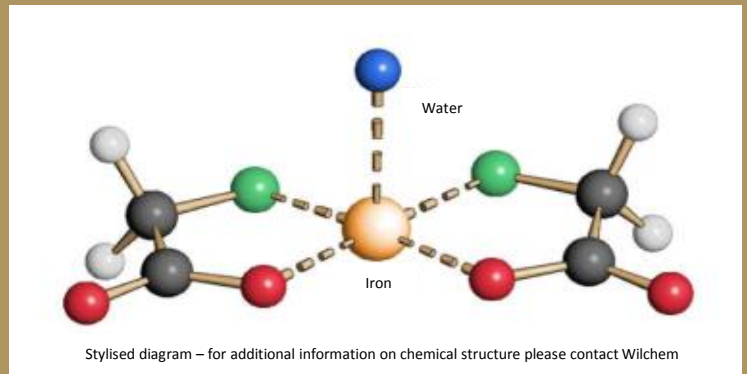
IRON

Analysis (w/v)
 Iron (Fe) – 50 g/L
 Amino Acid (AA) – 163 g/L
 Nitrogen (N) – 26 g/L
 Sulphur (S) – 29
 pH – 4.5 to 5.0
 Specific gravity (SG) – 1.24

IRON AMINO ACID CHELATE

Signature Amino Acid Chelates

Wilchem Signature is a range of amino acid chelates. Amino acids are *bidentate chelants* – they form two bonds to the nutrient to form a “chelate ring”. The chelate ring is stronger than a single ionic bond, which protects the nutrient and maintains it in solution. Amino acid chelates increase nutrient uptake efficiency, leading to increase yield and quality.



Uses:

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

Crop	Rate L/Ha	Timing	Water L/Ha
Cereal	1 – 2	Mid-late tillering	50 – 80
Citrus	3 – 5	Spring flush, repeat applications may be necessary for severe deficiencies.	1000
Tree crops	3 – 5	Apply when deficiency occurs	1000
Grapevines	2 – 3	Apply when deficiency occurs	300 – 800
Vegetables	2 – 4	Apply pre-flowering, repeat if necessary	300 – 800
Pasture	1 – 2	Sufficient foliage, repeat if necessary	50 – 80
Lucerne	2	10-14 days before flowering, earlier if known deficiency	50 – 80
Fertigation	5 – 10	As above	

Directions for use:

Foliar sprays are the most effective way of applying Signature Iron however, it is also suitable for fertigation and furrow injection as chelates reduce reactions in the soil solution making the nutrients more available and for a longer period.

Iron Deficiency:

Iron deficiency occurs mainly in high pH soils, poorly drained soils and in over-limed soils. Low levels of potassium or high levels of zinc, manganese and copper can reduce availability. Vines, tree crops, vegetables and cereals are particularly sensitive.

Deficiency Symptoms:

- Interveinal chlorosis of young leaves
- Veins remain green
- Stunted growth, potentially taller slender trees
- Severe deficiency can cause die back

The Function:

Iron is required for production of chlorophyll within the plant. It assists in the movement of oxygen to the leaves for chlorophyll synthesis. Making it a key part of respiration and photosynthesis. It also aids in the formation of proteins. It is relatively immobile in the plant creating a constant requirement by young leaves.

Compatibility with Agricultural Chemicals:

Signature Iron is compatible with a wide range of agricultural herbicides and pesticides. Check the Compatibility Guide as a reference. Always do a small jar test 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. Amino acids are an organic substance and over time some slight precipitation may occur. Do not store for extended periods in direct sunlight.

Wilchem takes your crop as seriously as you do!