



SEQUEL[®]

Chelated micronutrients

Nutrition management plays very vital role in getting higher yields and better quality of farm produce. Amongst the sixteen elements required for healthy plant growth, micronutrients or trace elements are required in very small quantities. The six main micronutrients are Iron (Fe), Manganese (Mn), Zinc (Zn), Copper (Cu), Molybdenum (Mo) and Boron (B). A deficiency of any of these micronutrients can cause important yield and quality loss. Deficiency can be caused by either their deficiency in the soil or due to high pH levels which cause their precipitation in the soil or water. Particularly Iron is not available at higher pH levels.

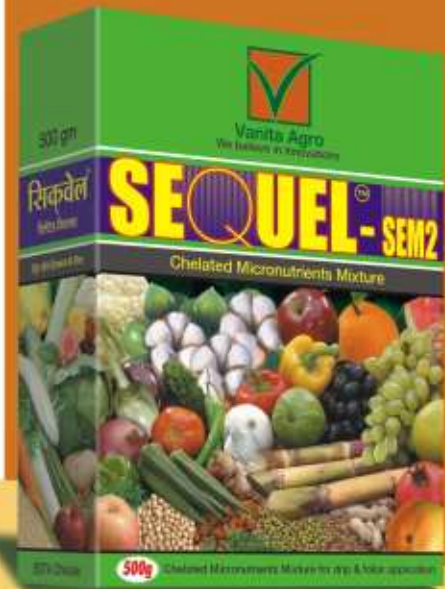


CHART-1

pH stability range of Chelated Iron

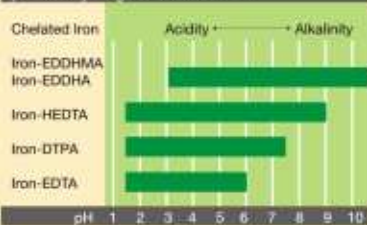
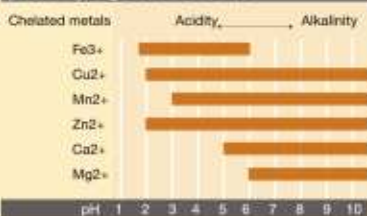


CHART-2

pH stability range of EDTA Chelates



• What are chelates ?

Chelated elements (chelates) are compounds of metal ions & chelating agents (large organic molecules). Chelating agents protect metal ions from outside environment & the metal ion remains in mobile form in soil or in water. This facilitates movement of metals to the roots or in the plant body. Chelates thus solve the availability problem of micronutrients, especially in alkaline water & soils.

Some of the well known chelating agents are EDTA, DTPA, EDDHA or natural organic compounds like humic acids, tannins, lignosulphonates, etc.

• pH stability of various chelates :

Chart 1 shows pH stability range of iron chelated with various chelating agents. Soils having pH more than 7.5 should be treated with EDDHA-Fe for iron deficiency but, in such a case, EDTA-Fe can be used for foliar applications.

Chart 2 shows the pH stability range of various elements chelated with EDTA. For alkaline soils, it invariably pays off to use metal chelates for soil as well as foliar application.



SEQUEL[®]

Chelated micronutrients

SEQUEL[®] is a series of our speciality chelated micronutrients, developed indigenously & manufactured in our factory at Takawade, INDIA. Various chelates manufactured include single nutrient chelates of Fe, Mn, Zn, Cu, Ca, Mg and the mixtures. Chelating agents used are EDTA & DTPA. In DRIFTER-Fe, iron is chelated with EDDHA.

SEQUEL[®] being most pure, it passes international EC and pH criteria. SEQUEL[®] being granular, it is free flowing and free from dust and user friendly. SEQUEL[®] is 100 % water soluble and most safe to use by foliar application or by fertigation. It offers best guarantee for healthy crop growth.



Application :

SEQUEL[®] can be applied to plants by fertigation or by foliar spray. The effect of foliar application is not long lasting, hence requires frequent spraying. Chelated fertilizers are more cost effective if applied through foliar spray. SEQUEL[®] gives best result if used with desired water soluble fertilizer (NPK).

Dosages

- For foliar spray 0.5 to 1 gm per litre.
- Frequency of foliar sprays to be decided based on the severity of the deficiency.
- For fertigation 50 gm per day per acre of SEQUEL[®] mixture for healthy crop.

Packing

- 20 kg, HDPE open mouth containers & 100 gm, 250 gm, 500 gm pouch in corrugated box.

Storage

SEQUEL[®] being hygroscopic should be stored in a cool & dry place in an airtight container. If kept open, forms hard lumps, although its application value is not altered.

No.	Name	Chelating agent	Physical appearance	Metal content	pH stability	pH of 1% soln.
1.	SEQUEL - Fe	EDTA	Yellow granules	Fe 13 %	3.0 - 6.0	4.5
2.	SEQUEL - Fe 11	DTPA	Yellow granules	Fe 11 %	3.0 - 7.5	6.5
3.	SEQUEL - Mn	EDTA	Light pink granules	Mn 13 %	3.0 - 10	6.5
4.	SEQUEL - Zn	EDTA	White granules	Zn 15 % & Zn12 %	3.0 - 10	6.5
5.	SEQUEL - Cu	EDTA	Blue granules	Cu 15 %	3.0 - 10	6.5
6.	SEQUEL - Ca	EDTA	White granules	Ca 10 %	5.0 - 10	6.5
7.	SEQUEL - Mg	EDTA	White granules	Mg 6 %	6.0 - 10	6.5
8.	SEQUEL-SEM 2	EDTA	Green granules	Fe 2.5 %, Mn 1.0 % Zn 3.0 %, Cu 1.0 %, Mo 0.1 %, B 0.5 %	3.0 - 6.0	5.5 -6.0
9.	SEQUEL-GEM 7	EDTA	Green granules	Fe 3.5 %, Mn 3.0 % Zn 4.0 %, Cu 0.5 %, Mo 0.1 %, B 1.2 %, Mg 1.2 %	3.0 - 7.5	5.5-6.0
10.	DRIFTER - Fe	EDDHA	Dark brown	Fe 6 %	3.0 - 11	7.5- 8.0

SEQUEL SEM -2 & SEQUEL GEM-7 are chelate mixtures.

Disclaimer

Careful tests have proven that our products are suitable for the recommended purposes when used in accordance with our instructions. However, since storage and use of these products are beyond our control & we are unable to foresee all circumstances arising there from, we are only liable for a consistent quality of the product, but the risk of its storage & use is not borne by us.

For best results, we recommend to use our products in pure form without mixing with other crop care compounds. However, if it is required to mix these products with other compounds for application, it is advisable to make a sample of the intended mixture and study effect of the same on a small portion of the crop and then only decide about application on the entire crop area.

For more details log on to - www.vanitaagro.com



Vanita Agrochem (India) Pvt. Ltd.

7, Kamgar Bank Building, Station Road, Ichalkaranji - 416115.
Maharashtra State, INDIA. Tel : +91-230-2439177, 2430893
e-mail : vanchem@sancharnet.in, vanchemind@dataone.in
Web : www.vanitaagro.com