Manganese EDTA

A trace element supplement for use on a wide range of Agricultural/Horticultural Crops

Contains Chelated Manganese as Manganese EDTA in solution equivalent to 6.4% w/v Mn

Manganese EDTA is marketed by:
Barclay Chemicals Manufacturing Ltd,
Damastown Way, Damastown Industrial Park, Mulhuddart, Dublin 15, Ireland.

STORAGE
Store well away from seeds and animal feeding-stuffs in a safe, dry place. Store Manganese EDTA in temperatures between +5 ºC (41 ºF) to 40 ºC (104 ºF).

PRECAUTIONS
Wash hands thoroughly after handling. Dispose of contents and container safely

Barclay
CROP PROTECTION

IMPORTANT INFORMATION

Manganese EDTA may be used to treat or prevent manganese deficiency in many crops. Deficiency will occur when plant tissue levels of manganese are insufficient. This may be due to crop stress conditions caused by soil, climate, pest or disease. Such periods of stress frequently result in crops failing to achieve optimum quality and yield. Manganese EDTA should be applied at 2.5 l/ha (1.75 pt/ac) as soon as symptoms of manganese deficiency can be seen or when tissue analysis indicates levels are deficient. The following table identifies periods of greatest nutrient demand. However, treatments may be made at any stage of plant growth if the crop shows symptoms of deficiency.

When applications are made as sequences to maintain nutrient availability then the lower doses should be used.

In cases where crops have stopped growing, because of manganese nutrient deficiency, the addition of 2.5 l/ha (1.75 pt/ac) of Manganese EDTA will help both to encourage nutrient uptake and to stimulate plant growth. In the absence of deficiency symptoms, but where a risk of deficiency is present, the table below indicates the timing and dose at which Manganese EDTA should be applied to maintain manganese tissue levels.

Crop	Timing	Dose
Winter cereals	Autumn: Early tillering (ZCK 23) Spring: From the beginning of stem extension to flag leaf emergence (ZCK 30 - 37)	1.5l/ha (1pt/ac)
Spring cereals	From 3 leaves to flag leaf emergence (ZCK 13 - 37)	1.5l/ha (1pt/ac)
Oilseed Rape	From early spring until yellow bud	1.5l/ha (1pt/ac)
Potatoes	From early haulm emergence and throughout periods of active growth as required (usually 10 - 14 day intervals)	1.5l/ha (1pt/ac)
Sugar Beet	From as soon as the crop is large enough to absorb sufficient nutrient - usually from when the first true leaves emerge	1.5l/ha (1pt/ac)
Peas	Usually from when the crop is 7 - 15 cm tall. To reduce marsh spot: At early flowering and 10 - 14 days later	1.5l/ha (1pt/ac) 3l/ha (2pt/ac)
Other arable and vegetable crops	During periods of rapid growth at intervals of 10 - 14 day	1.5l/ha (1pt/ac)
Apples, Pears, Strawberries, Raspberries	From the start of spring growth. Repeat as necessary at 10 - 14 day intervals	1.5l/ha (1pt/ac)

APPLICATION

* Apply the recommended rate in 200-1000 l/ha (20-100 gals/ac) of water.
* Apply as a MEDIUM quality spray (BCPC definition, see NOTES). Satisfactory results will be obtained with Manganese EDTA in sugar beet using 80 l/ha (8 gals/ac) of water, sprayed as a FINE quality spray
* Even foliar cover is essential for reliable results.
* Crop foliage should be dry when sprayed. If the crop is under severe stress, particularly if this is due to moisture defiency or high temperatures, best results are likely from application in early morning or late evening.
* If rain falls within four hours of an application of Manganese EDTA, the benefits of the spray are likely to be reduced.

COMPATIBILITY

Manganese EDTA together with other Barclay products is compatible with a wide range of herbicides, fungicides and insecticides. Full details of compatibility are available on request.

DIRECTIONS FOR USE

1. Use nozzles that produce the recommended spray quality.
2. Check that the sprayer, spray bars and nozzles have been properly washed to remove traces of the previous chemical.
3. Ensure the sprayer has been carefully calibrated.
4. Half fill the spray tank with clean water and start agitating. Add the required quantity of Manganese EDTA and complete filling to final volume.
5. Spray immediately after mixing and maintain agitation until the spray tank is empty.
6. Wash out the sprayer thoroughly with water and liquid detergent immediately after use. Finally wash out with water and drain.