



## Knowledge grows

# YaraTera™ REXOLIN® APN

## User Recommendation Sheet

YaraTera REXOLIN APN is a combination of the chelated micronutrients Fe, Mn, Cu, Zn and inorganic B, Mo in one single microgranule, developed for the prevention and correction of general micronutrient deficiencies in a wide range of broadacre and horticultural crops. YaraTera REXOLIN APN is developed for usage in hydroponic systems and for soil applications, but can also be used as foliar fertiliser.

YaraTera	Iron (Fe)	Manganese (Mn)	Boron (B)	Zinc (Zn)	Copper (Cu)	Molybdenum (Mo)
REXOLIN APN	6 (DTPA)	2.4	0.85	1.3	0.25	0.25

All nutrients expressed as % w/w

### Why Micronutrients Are Combined

The availability of micronutrients in alkaline and calcareous soils generally decreases. The higher the organic matter content, the more micronutrients are fixed and fewer nutrients are available for the crop. The exception is molybdenum, which becomes more available when pH and organic matter content increase. Also, highly leached sandy soils and soils derived from poor parent rock material have low micronutrient availability. Therefore, the appropriate amounts and proper ratio of micronutrients have to be applied to support profitable crop production.

Soil, substrate or leaf tissue analyses are an important tool for obtaining information about the nutritional status of the crop. Due to interactions of the nutrients in the plant, visual symptoms are not always correct in identifying problems.

In hydroponic systems and when mixed with NPK fertilisers, YaraTera REXOLIN APN prevents interactions of the micronutrients because nutrients are fully chelated.

### Directions for Use

Dissolve and dilute in water before application. YaraTera REXOLIN APN is photodegradable. Keep prepared stock solutions in the dark.

### Application of the Product

The product can be applied in hydroponic systems, to the soil, and as foliar fertiliser.

### Hydroponics

The ratio between the micronutrients in YaraTera REXOLIN APN reflects average plant needs. The preferred pH near plant roots in soilless cultures for most plants is 5.5. However, in practice it may rise to as much as 7.5. That is why DTPA iron rather than EDTA iron is generally preferred. Vegetable crops (tomato, cucumber, etc.) do need 15 µmol/l Fe (0.8 mg/l) in the form of Fe-DTPA continuously, flower crops (roses, gerbera, carnation, etc.) 25-35 µmol/l Fe (1.4-2.0 mg/l).

Consult Table A for equivalents in grams of product.

Never mix YaraTera REXOLIN APN in direct contact with concentrated acids. YaraTera REXOLIN APN is stable between pH 3 and 7.5. Chelation of all the metals in YaraTera REXOLIN APN ensures micronutrient availability. Use the stock solution within one to two weeks. Check the Fe-level after recirculation or disinfection and add extra YaraTera REXOLIN D12 if necessary.

### Foliar Application

Foliar feeding provides a rapid response and is recommended when fast correction is necessary or soil application is impractical or impossible, for example if the soil is extremely wet. Repeated applications are usually necessary. For improving leaf coverage it is advisable to add a wetting agent. Dissolve the product to a suitable concentration and apply with spraying equipment. The pH of final concentration should be lower than 7, the final EC lower than 1. Dose rates for a specific crop should be tested first on a small scale. Preventive treatment is made at the beginning of the growing season, when leaves are emerging. Curative treatment should be made upon early signs of chlorosis. Repeat treatments 2-4 times with 2 weeks interval. To reduce the risk of leaf and fruit scorching avoid application during hot, sunny days. Do not apply when crop is in bloom.

## Soil Application

Best results for soil application are obtained when soil pH is below 7.0. Dissolve YaraTera REXOLIN APN in water and then apply to the actively growing root system via direct soil injection or through fertigation.

## Compatibility

The product can be mixed with most other fertilisers and agrochemicals without inactivation, precipitation or scorching problems. Do not mix with chemicals based on metal compounds. In liquid fertilisers, it is recommended to use the mixture without delay if not ion exchange occurs causing a reduced effect of the nutrients. Test mixed product first on a small scale.

## Mixing

Add the required amount of product to a half filled sprayer tank, then complete the filling process. Ensure that sprayer nozzles are adequate for 200-1000 litres water/ha. Use the higher volume under dry conditions, when treating larger crops and at dense foliage.

## Precautions

- Store in original box, keep tightly closed and store in cool dry place.
- Store away from children, pets, livestock and foodstuff.
- Wear gloves and wash hands after application and before meals.

No health hazards are involved in normal handling of YaraTera REXOLIN APN but it is advisable to follow the above precautions.

## Packing and Storage

Contact Yara for information regarding packaging. Shelf life of the product is greater than 3 years. When the humidity barrier of the package has been broken, seal the package as well as possible after usage. Atmospheric humidity may cause lumps. Ultraviolet light causes deterioration but is believed to be of low significance to the shelf life of the product. Store the product in its original package.

Product produced by Nouryon. REXOLIN® is a registered trademark of Nouryon or one of its affiliated companies in one or more territories. YaraTera® is a registered trademark of Yara International or one of its affiliated companies.

The information provided is accurate to the best of Yara's knowledge and belief. Any recommendations are meant as a guide and must be adapted to suit local conditions. Always read the label before use.

For more application rates information please contact your local sales agronomist or visit the website [www.yara.com.au](http://www.yara.com.au).

While Yara Australia has taken all reasonable care in the preparation of this Technical Sheet, the information is a guide only. It is advised that potential users read the products Safety Data Sheet prior to using the product, which is available on [www.yara.com.au](http://www.yara.com.au). There are no warranties, express or implied by operation of law or otherwise, including but not limited to any warranty as to merchantability or fitness for any particular purpose.

## Dose Rates

The degree of deficiency is governed by crop, variety, soil conditions and plant status. The following dosages can be used as guidance. Always adapt to the crop and cultivar involved and to the local circumstances.

### A. Glasshouse Crops

Crop	Deficient soil/ compost	Soilless culture*	Foliar application
		For every watering	2 wks
Cut flowers	30-80g/1000l	23-32g/1000l	0.2-1g/l
Potted flowers, pot plants		14g/1000l	0.2-0.8g/l
Vegetables	30-55g/1000l	14g/1000l	0.2-1g/l

\* For dose rate of a 1m<sup>3</sup> tank, 100 times concentrated: multiply the amount of grams mentioned by 100

### B. Broadacre Crops and Open Field Horticultural Crops

Crop	Dose rates	Application method
<b>Soil application, broadacre crops</b>	5kg/ha	Apply pre-drilling or pre-planting to bare soil in a convenient volume of water, cultivate after spraying.
<b>Soil application, horticultural crops</b>	5-10kg/ha	Apply through the irrigation system. Use enough water to wet the top 10cm of the soil. Use clean water immediately afterwards to wash the foliage. Or use the last 5 minutes of the foliar application rate.
Fruit crops	5-15kg/ha	
Vegetables	3-6kg/ha	
<b>Foliar application</b>	1-1.5kg/ha	
Apple, citrus	2-4 appl.	Apply in a water volume that gives adequate coverage to the crop (200-1000l). Do not exceed 1g/l for fruit trees and 10g/l for broadacre crops unless tested. Use 1-1.5 kg/ha per application, but lower amounts for fruits with soft peel.
Canola	1-3 appl.	
Cereals	3 appl.	
Cotton, maize	1-2 appl.	
Grapes	2 - 3 appl.	
Lucerne, forage crops	After each cutting 2-3 appl. 0.5-1kg/ha	

### Main characteristics

- EC (1 g/l): 0.40 mS/cm
- Chloride free

Yara Australia Pty Ltd  
Toll Free: 1800 684 266  
Email: [au.contact@yara.com](mailto:au.contact@yara.com)  
[www.yara.com.au](http://www.yara.com.au)

