

TECHNICAL SHEET – DEFENDER CALBOR

1. Product Name

DEFENDER CALBOR

Fertilizer– Deficiency corrector

2. Manufacturer / Country of Origin

Futureco Bioscience S.A.

Av. Del Cadi 19-23 08799-Olèrdola-Barcelona

España

3. Chemical Composition and Declared Content

GUARANTEED CONTENT	(%P/P)
Free Amino Acids ¹	5,0
Total Nitrogen	3,0
Water-soluble calcium (CaO)	5,0
Water-soluble boron (B)	1,0
¹ Standard Aminogram (%p/p): Glycine 1%, Glutamic acid 1,5%, Lysine 2,5%	

4. Physico-Chemical Properties

PHYSICO-CHEMICAL PROPERTIES	
Physical State	Soluble liquid
Colour	Amber
Smell	Odourless
pH (Room temperature)	5.0 – 6.0
Solubility	Fully soluble in water

5. Product Description

DEFENDER CALBOR is a nutritional product rich in calcium and boron, complexed with amino acids. Its rapid absorption allows these elements to be translocated to flowers and fruits, main organs where they are required. Due to its composition, **DEFENDER CALBOR** promotes good structural development and quality of flowers, prevents floral abortion, improves fruit setting and favours its attachment. Regarding the quality of the fruits, it increases the weight and size, and improves the consistency of the fruit. It also improves post-harvest life by extending shelf life.

The boron in **DEFENDER CALBOR** promotes cell elongation and cell wall strength, thus improving pollen grain viability and pollen tube elongation. In consequence, boron promotes good flowering, fertilization and fruit setting. In addition, it controls sugars and starches movement from leaves to fruits, improving their quality. It is also involved in calcium absorption and metabolism, being accumulated in cell wall bound to pectins, giving elasticity and firmness to tissues.

Due to its calcium content, **DEFENDER CALBOR** improves the integrity of cell walls and membranes, allowing plant tissues to be more resistant and preventing the entry of pathogens. The application of calcium decreases the appearance of physiological imbalances such as apical rot, bitter pit and black heart. Calcium generally improves fruit quality since it helps to maintain its firmness (avoiding cracking), consistency and size, as well as guaranteeing their shelf life.

In conclusion, **DEFENDER CALBOR**'s use ensures a good process of pollination, fertilization, and of flowers and fruits setting, increasing yield and final crops production.

6. Recommendation and Mode of use

It is recommended to use the product by foliar application, during the phases of the phenological cycle in which a supply of calcium and boron is necessary, especially during fruit filling (from fruit setting to ripening).

Crop	Doses (l/ha)	Application
Solanaceae	0.5-1	2 applications during fruit filling. Every 2 weeks during the cutting period.
Cucurbits	0.5-1	2 applications during fruit filling. Every 2 weeks during cutting period.
Cruciferae	0.3-0.6	1-2 applications during inflorescence development. 2 to 3 applications during the development of harvestable parts.
Onions, garlic, leek	0.5-1	1 application during bulb formation. 1-2 applications during bulb filling.
Potato and tubers	0.5-1	1 application during tuber formation. 1 to 2 applications during tuber filling.
Legumes	0.5-1	From the beginning of flowering to fruit ripening, every 15-20 days.
Cereals	0.5-1	2 applications during grain filling.
Vineyard	0.5-1	From start of flowering to fruit ripening, every 15-20 days.
Strawberry, berries	0.5-1	2 applications during fruit filling.
Citrus, avocado, mango	0.5-1	From start of flowering to fruit ripening, every 15 - 20 days.
Fruit Trees	0.5-1	From start of flowering to fruit ripening, every 15 - 20 days.
Coffee, cocoa	0.5-1	From start of flowering to fruit ripening, every 15 - 20 days.
Papaya	0.3-0.6	-3 aplicaciones durante el desarrollo del tallo floral hasta 15 días antes de corte.
Banana	0.3-0.6	2-3 applications every 2 weeks during flowering and bunch ripening.
Asparagus	0.5-1	2 applications during the development of the harvestable parts.
Artichoke	0.5-1	2 applications during the development of the harvestable parts.
Ornamentals	0.5-1	Every two weeks during flower stalk development.

7. Compatibility

This product is compatible with most plant protection products and nutritional products. It is advisable to perform a pre-compatibility test.

The high solubility of **DEFENDER CALBOR** in any type of water guarantees an application without residues or clogging problems.

8. Precautions for use

P102: Keep out of reach of children.

P270: Do not eat, drink or smoke when using.

P411+ P235: Store at temperatures not exceeding 35°C.