



GROW-CAL®

17% Calcium, 10% Nitrogen, 4% Magnesium, 0.1% Boron



Soybean shatter



Blossom End Rot of tomato



Magnesium & Calcium deficiency in peppers

The ultimate long term solution for Soybean Shatter

High analysis calcium with added magnesium, boron and nitrogen, for strengthening of cell walls in soybean, fruit and vegetables.

SOYBEAN SHATTERING

Shattering in soybeans occurs when the pods split and soybean seeds fall to the ground while plants are standing in the field or during harvest operations. Shattering can result in great yield losses if not confronted on time.

GROW-CAL® application with optimal content of Calcium (Ca) in combination with the Nitrogen (N), Magnesium (Mg) and Boron (B), results in improved plant resistance to biotic diseases and abiotic factors, giving higher quality and more nutritious crops. **Calcium (Ca) in Soybean:** Adequate available calcium levels are very important in growing high quality soybeans. Calcium is vitally important for cell division, root hair growth, enzyme functions and strong cell walls. The formation of strong cell walls in soybean bean pods leads to minimized shattering during the harvesting period.

Calcium (Ca) and Magnesium (Mg) are connected in plant usage. Magnesium is required as part of chlorophyll and in nucleic acids, cell membranes and protein-producing structures. In the soil, calcium and magnesium "compete" for plant absorption. Too much magnesium upsets the plant's use of calcium and potassium, giving rise to low quality crops, plus in some soils, excess magnesium leads to hard, crusty conditions. **GROW-CAL®** with its balanced content of Calcium and Magnesium combined with foliar application ensures that the plants receive the required amount of nutrients for a long residual solution of shattering problem!





PRODUCT CHARACTERISTICS

Specific Gravity : 1.51

Colour : Clear emerald

ANALYSIS	% W/V
Calcium (Ca)	17.0
Nitrogen (N)	10.0
Magnesium (Mg)	4.0
Boron (B)	0.1

Important Note:

The Indicated Crops and Recommended Rate of application on this Product informative sheet may not be applicable in country where the product is intended to be uses. User must refer and use the product only as per the officially Register and approved uses by the ministry of Agriculture authorized authorities. The supplier cannot be held responsible or liable if the use of this product is preform on Crops which are not listed on the official label as approved the ministry of Agriculture authorized authorities.

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BENEFITS OF GROW-CAL®

- Improved quality and firmness through improved cell strength and structure.
- Added Magnesium to improve chlorophyll production.
- Premixed in carefully controlled ratios so the crop receives the essential nutrients specific to its growth stage.
- Completely soluble and plant available delivering the required amount of nutrient with low application rates.
- Can be applied with a wide range of other agricultural chemicals, reducing the number of spray applications needed.
- Free flowing formulation makes it easy to decant into spray equipment, mixing tanks and irrigation.

THE ROLE OF CALCIUM

Calcium is critical for the strength and integrity of cell walls. It plays an important role in cell division and growth development, protects cells from toxins and slows the aging process.

Calcium has poor mobility and most symptoms are seen at the growing stages. Crops become 'spongy' as cell walls breakdown.

Typical symptoms include:

- Tip burn in lettuce
- Blossom end rot in tomatoes
- Bitter pit in apples
- Soybean shatter

Directions for use

Agitate contents well before dilution Suitable for application by:

Aerial

Foliar Spray

CROP	RATE/HA	Min. DILUTION	COMMENTS
Soybeans	3-5L	1:100	Apply 1L/150L with first post blossom spray. Continue with every second pesticide spray (up to 40L/season) at 6L/1000L. For the prevention of soybean shaterring.
Groundnuts	3-5L	1:50	Start application at 4-6 leaf stage. If necessary, repleat application with 10-14 day intervals. Apply in 30-200 I water/Ha.
Vegetables	2-4L	1:100	Monthly in a tank mix with usual crop sprays.
Nuts (Macademias, Pecans)	3-5L	1:50	Start application 7 days after petal fall. Repeat if necessary with 10-14 day intervals. Do not apply within one month before harvest. Apply in 1000-2000L water /Ha.
Field Crops (cotton, peas, hops, sunflowers, potatoes, peanuts, tobacco, etc.)	3-5L	1:50	With normal crop sprays. Suitable for aerial application.
Bananas	2-5L	1:100	3L every 2 weeks or monthly in a tank mix with usual crop spray.
Cereals	3-5L	1:50	Apply with crop sprays to assist growth and prevent trace element deficiencies.
Tomatoes	3L	1:100	Monthly or with normal crop sprays.
Tropical Fruit	2.5-5L	1:200	Spray before blossom, further applications with normal spray programme as required.
Vines & Ornamentals	2-4L	1:100	Apply prior to flowering with further applications at regular intervals
Turf	200ml/100m ²	1:10	As required. For bent grass under hot conditions, use 1:200

WATER RATIO: A dilution of 1 : 100 means 1 part product : 100 parts water.
In hot weather, use the higher dilution rate where applicable.

** AERIAL APPLICATION: use maximum practical water rates

