Technical Data Sheet

SPROUTMAXX® WITH BA TECHNOLOGY

GENERAL INFORMATION

Category

Growth Regulator

Guarantee of Composition

	Content % w/v
Benzylaminopurine	20,000 ppm
q.s. to complete	100% (1 L)

Key feature

SproutMAXX® with **BA** technology is a growth regulator based on the cytokinin 6-Benzylaminopurine designed with BA technology to stimulate cell division in buds, flower buds, flowers and young fruits, thereby promoting their growth and final size. It can also be used in crops such as apple trees to thin fruit. It should be used at the doses, times and crops recommended here.

Manufacturer / Formulator / Distributor

IQ Chemicals & Labs S.A. de C.V.
IQ Chem & Labs S.A. de C.V.
Agroenzymas México S.A. de C.V.

Registration

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MODE OF ACTION AND EFFICACY:

SproutMAXX® with **BA** technology it has the following characteristics and mode of action :

- **Cytokinin biological activity.** Benzylaminopurine (BAP) is the aromatic adenine-type cytokinin hormone that exhibits the highest biological activity among natural cytokinins, ensuring consistent effects on increasing fruit growth and size via cell division, when applied during this process (from bud to small fruit). Likewise, at recommended doses for some crops (such as apple), it can be used for fruit thinning in conjunction with materials such as ANA (naphthaleneacetic acid) or carbaryl.
- **Sustainable.** The active ingredient in **SproutMAXX®** with **BA** technology is a natural molecule, which allows the signal to be rapidly perceived by the plant and subsequently degraded, making its use environmentally safe.
- **BA technology.** Advanced formulation technology allows the BAP cytokinin to have adequate penetration, translocation, and action capacity for effective and consistent bioactivity.

METHOD OF APPLICATION:

SproutMAXX® with **BA** technology is designed to be applied via foliar spray on crops, focusing primarily on young organs (buds, flower buds, flowers, and early-growing fruits), where it can stimulate cell division and thus fruit size. At recommended doses and times, when combined with materials such as ANA or Carbaryl, it can safely and efficiently stimulate thinning in apple trees. It is completely water-soluble, and it is recommended to dilute it with the amount of water necessary to achieve full crop coverage.

For preparation, it is recommended to fill the container to 50% of the level, add **SproutMAXX®** with **BA** technology, and top up with the required amount of water.

SPECIAL PRECAUTIONS:

SproutMAXX® with **BA** technology, it is a growth regulator with the cytokinin Benzylaminopurine, so it can be re-applied 24 hours after application. If applied in conjunction with other materials, review the re-entry period and time of these.

GENERAL RECOMMENDATIONS

To optimize the effectiveness of **SproutMAXX®** with **BA** technology on increasing fruit size, it is important to consider:

- **Application stage.** Due to its cytokinin activity, **SproutMAXX®** with BA technology should be applied to organs undergoing rapid cell division, such as buds, flowers, and young fruit. If fruit thinning is desired in apples, apply to fruits 5–15 mm in diameter.
- **Application frequency.** Single applications of **SproutMAXX®** with **BA** technology can be made as often as necessary, depending on the presence of flower buds, flowers, and fruits considered commercially important and where growth through cell division is desired. Depending on the crop, applications every 10–15 days or more can be considered during the fruit cell division stage. For fruit thinning in apples, one to three applications can be made starting with 5 mm fruits and up to 20 mm, depending on the cultivar.
- **Managed dose.** It is recommended to apply at the recommended doses to achieve the desired biological effectiveness. It is not recommended to exceed or underdose the recommended dose to achieve the desired effect.
- **Mixing with other agrochemicals.** It is recommended to mix **SproutMAXX®** with **BA** technology with foliar fertilizers or biostimulants such as plant extracts to stimulate the proper supply of nutrients during cell division. **SproutMAXX®** with **BA** technology can be mixed with all currently registered agrochemicals. When mixed with other growth regulators, small-scale biological effectiveness testing is recommended to detect undesirable results.

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EFFECTS ON CROPS:

SproutMAXX® with **BA** technology, due to its cytokinin action, it regulates the following processes in plants:

- Stimulates cell division. The growth regulator contained in **SproutMAXX®** with **BA** (benzylaminopurine) technology is the most active natural cytokinin at stimulating cell division when applied to flower buds, flowers, and young fruits, thereby increasing fruit size.
- Increased fruit size. Young organs that come into contact with **SproutMAXX®** with **BA** technology increase the cell division process, while simultaneously stimulating the formation of cytokinins generated in the plant, thereby increasing this process, resulting in fruits that are more uniform in size and quality.
- Increased Brix levels. Cell division stimulates the concentration of sugars in the fruit.
- Increased fruit firmness. The increased number of cells that give fruit size increases the compaction of the pulp tissues, as growth occurs via cell division.
- Thinning of young fruit. Specifically, and exclusively for apple and pear trees, it induces the partial fall of young fruits to avoid competition in their development, resulting in larger and more uniform fruits at harvest, and favoring floral induction to avoid alternating production.

PHYTOTOXICITY:

SproutMAXX® with **BA** technology it is not phytotoxic to crops and recommended doses.
NOT RECOMMENDED FOR OTHER CROPS, it is designed exclusively for the crops mentioned in this document.
Do not contaminate water, food, or animal feed when storing or handling the product. Keep it in its original container. • Storage: Keep in a cool place. • Product disposal: If the material is not used in its entirety, keep it in its original container until it is used. • Do not remove the label or repackage the product. Container disposal: Do not reuse the container. Do not refill the container. Take to collection centers. Triple wash as follows: Empty the remaining contents into a waste tank for 10 seconds until the container begins to drip. Fill the container 1/4 full, with water and shake. Shake for 10 seconds. Pour the rinse into the waste container, repeat the operation from side to side, and repeat a third time from top to bottom.

COMPATIBILITY:

SproutMAXX® with BA technology should only be mixed with registered products, considering the following points:

- Mixing with products with a strong alkaline reaction is not recommended. If necessary, a small-scale test should be performed to verify that the mixture does not curdle (formation of lumps, separation of compounds, etc.).
- SproutMAXX® with BA technology is compatible with fungicidal materials, insecticides, and other fertilizers. If there is any doubt about the origin of the material to be mixed, a compatibility test is recommended to determine that the mixture is not toxic to the crops of interest.
- Mixing with other bioregulators is not recommended.
- Mixing with amino acids is not recommended.
- Handling adjuvants. It is recommended that SproutMAXX® with BA technology be accompanied by a penetrant dispersant.

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CROP	DOSE (L/ha)	APPLICATION PERIOD
Apple	1.0 2.5-7.5	To stimulate fruit size, apply during full bloom or when fruits are 5 mm in size. For fruit pruning. Apply when fruit size reaches an average of 10-15 mm in diameter. Apply when temperatures do not fall below 15 °C after application. Use high doses on varieties that are difficult to thin, which can be combined with ANA (naphthaleneacetic acid) or Carbaryl at recommended doses. Apply low doses on varieties that are easy to thin or sensitive, and can be mixed with Carbaryl at recommended doses. Use water volumes of no less than 1000 L/ha.
Walnut	1.0-2.5	To stimulate lateral sprouting, apply once sprouting has begun. If necessary, repeat after 15 days to ensure uniformity. For fruit size, begin applications on flower buds, flowers, and young growing fruits. Subsequently, apply every 20-30 days, targeting the flowers and fruits until the outer skin hardens.
Avocado	1.0-2.5	Start applications on flower buds, flowers, and young growing fruits. Subsequently, apply every 20-30 days, targeting flowers and young fruits.
Melon	1.0	Start applications on flower buds, flowers, and young growing fruits, and apply a second time 15 days later. If necessary, apply a third time on commercially important fruits.
Watermelon and cucumber	1.0	Start applications on flower buds, flowers, and young growing fruits. Repeat every 10-15 days, directing the solution toward flowers and young fruits.
Chili pepper and tomato	1.0-2.0	Start applications on flower buds, flowers, and young growing fruits. Repeat every 15 days, directing the solution toward flowers and young fruits.
Persian lemon, Mexican lemon, orange	2.5	Start applications on flowers and young growing fruits 5 mm in diameter. Make a second application when the fruits are 15-20 mm in diameter and repeat after 20-30 days.
Pineapple	2.5-3.5	Start applying the product once the flower petals have dried. Then apply twice more, 30 days and 60 days later.