

MANAGE SPROUTS EFFECTIVELY TO MAINTAIN QUALITY IN STORAGE

SmartBlock[®] plant growth regulator is a post-harvest sprout inhibitor featuring a unique mode of action to safely, quickly and effectively burns off “peeping” sprouts and restores dormancy to all varieties of potatoes without affecting potato quality.

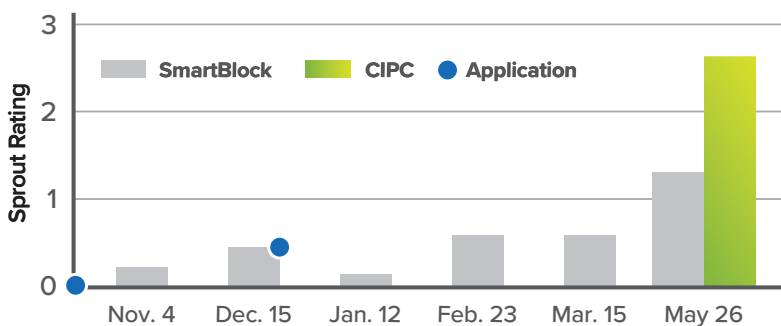
Key Features:

- **Naturally Occurring:** Contains 98% pure 3-decen-2-one, a naturally occurring molecule found in many foods, including yogurt, mushrooms, fermented soy, ham and tuna.
- **Approved Direct Food Additive:** Classified by the U.S. Food and Drug Administration (FDA) as an approved direct food additive and by the U.S. Environmental Protection Agency (EPA) as a biopesticide.
- **Disease Suppression:** Can suppress certain post-harvest diseases and prevent disease spread inside storage facilities.
- **High Vapor Pressure:** Ensures penetration inside potato piles and boxes. SmartBlock features the highest vapor pressure among all registered sprout suppressants.

Proven Performance

Studies show that SmartBlock can be highly effective in providing excellent sprout control.

Long-term Sprout Control On Gold Rush Potatoes



No Sprout	Peep - 1 mm	1-5 mm	> 5 mm
0	1	2	3

Dr. A. J. Bussan, University of Wisconsin 2009. One application of SmartBlock at 4.2 oz/ton and CIPC at 22 g/ton were made as indicated by the blue points. Potatoes were stored at 39.0 °F (3.9 °C). Trial No. 09-WI-AMV1018-06

Potato Quality:

SmartBlock provides an excellent long-term sprout control solution for fresh market and processing potatoes, improving shelf life.

- Storages treated with SmartBlock have a distinct smell, which rapidly dissipates and does not taint fresh or processed potatoes or affect taste.
- Treated tubers exhibit enhanced turgidity for better storage and reduced pressure bruising.
- Soon after treatment, tuber respiration increases, which rapidly metabolizes reducing sugars. SmartBlock restores fry color and dormancy to potatoes.



SmartBlock Treated (left) vs. Untreated Potatoes (right)

Photo courtesy of Dr. Lisa Knowles, Washington State University

APPLICATION INFORMATION

SmartBlock can be applied as a stand-alone treatment or in use with other sprout inhibitors.

Use Rate

Use up to 4.2 fl oz per ton of potatoes. Low-rate mixtures with chlorpropham (CIPC) can enhance overall efficacy. Please refer to the SmartBlock label for complete rate recommendations.

Timing:

- Broad flexibility for timing of application. Unlike chlorpropham (CIPC), prophylactic applications are not needed.
- Treat when approximately 75% of tubers show visible signs of sprouting (peeping) or signs of early dormancy break (swollen buds). Ideally, sprouts should be less than 0.25 inches at the time of treatment.
- Repeat treatment when re-sprouting occurs.
- Maintain a minimum reapplication interval of 7 days.
- Do not apply more than 16.8 fl oz per ton of potatoes per storage season.
- Generally, when fresh-pack potatoes are stored at 40–43 °F, one application will be adequate for 6–7 months storage. When tubers are stored at 46 °F or higher, for medium to short dormancy varieties, around 2–3 months of sprout control can be expected.

Rescue Treatment:

- SmartBlock is the only product that can effectively control large sprouts (up to 1 inch). Use SmartBlock at the rate up to 4.2 fl oz per ton. Do not store beyond 30 days after treatment.

Additional Information:

Safe to store seed potatoes in storages where SmartBlock was applied the previous season. Do not use directly on seed potatoes.



Well Suited for Combination Programs

- SmartBlock enhances overall activity when mixed with other sprout control agents.
- Can be fully integrated with existing sprout control programs with CIPC or maleic hydrazide (MH).
- Enhances and maximizes low-rate CIPC sprout control programs.*
- Distributes CIPC more evenly throughout the pile with its superior vapor action.
- Re-solubilizes CIPC particles inside plenums, fans and ducts for easy post-treatment cleanup.

*Covered by SmartBlock patent numbers 6,855,669, 8,258,081 and 8,999,419.

See our entire line of products at [AMVAC.com](https://www.amvac.com)