

Frequently Asked Questions on Alesco®

1. How does Alesco® block the effects of ethylene?

All ethylene sensitive plants have ethylene receptors. When ethylene is nearby it binds with the receptor and triggers the process of senescence which causes symptoms like petal shatter, flower wilt, bud abortion, yellowing, etc. However, when the plant is treated with Alesco® the active ingredient binds to the receptor instead of ethylene which blocks those negative symptoms from happening.

2. How does Alesco® protect plants from the negative effects of shipping and transport?

During transport, plants experience a lot of stress and when plants are stressed they can release ethylene. Higher temperatures, enclosed spaces, and damage to the plants increase the ethylene concentrations in the shipping environment. Alesco® protects the plants from these elevated levels of ethylene.

3. Can Alesco® be used to maintain flower quality of plants in case of shipping delays?

Yes, if a shipment is delayed, Alesco® can be sprayed on the crop to slow flower senescence and to maintain quality until plants are ready to be shipped the following week. The plants will not need to be sprayed again with Alesco® before shipping.

4. How long is Alesco® effective after spray application on crop?

The crop will be protected for up to two weeks after being treated with Alesco®. As the plant grows it will create new ethylene receptors. Alesco® is still active in the plant and will bind to these new receptors, but after two weeks the plant has usually grown enough that there is no more Alesco® left in the tissue making the plant receptive to ethylene again.

5. Do you have any results of Alesco® on Poinsettia?

Based on multiple trials from Syngenta Flowers and Chrysal we have found that the use of Chrysal Alesco® on poinsettias before simulated shipping does not extend postharvest life; however, using it has no negative effects. Alesco® does not have any phytotoxic effects on poinsettias when used at the label rate. If choosing to use Alesco® the use of a surfactant is recommended to encourage proper absorption into the waxy cuticle of the bracts and leaves. Allow the plants to dry after spraying to get full absorption. Alternatively, Chrysal also suggests using Leaf Shine and Seal with Alesco® that has the additional benefit of making the bracts look more aesthetically pleasing. Even with these neutral results of using Alesco® on poinsettias we encourage growers to do their own trials especially if they have significant postharvest challenges with their crops.

6. Can Alesco® be applied on cuttings and/or young plants?

Alesco® is not recommended for use on unrooted cuttings since ethylene is necessary for root initiation. Alesco® may delay rooting during propagation of some crops. Ethylene Buster is a better alternative for this application. Alesco® can be applied to liners to protect them for the stresses of shipping, but more trialing needs to be done to provide better insights this application.

7. How long before harvest can I spray Alesco® and still get the benefits?

Spray plants just prior to shipment (1 to 2 days). In some crops such as campanula, research has shown an additional spray 8 to 14 days prior to shipment can be beneficial. The longer between application and shipping, the smaller the effects will be.

8. Is there phytotoxicity on any crops?

No. Chrysal Alesco® showed no phytotoxicity on any of the crops tested when applied at the label concentration of 1ml/L and application frequency.

9. Are multiple treatments to a crop harmful?

If treatments are less than 2 weeks apart there is an increased risk for phytotoxicity.

10. What is the MPS rating for Alesco®?

Alesco® is a post-harvest product is categorised as orange. The product is not included/calculated in the MPS qualification system.

11. Where can I purchase Chrysal Alesco®?

Chrysal Alesco® is sold in the United States via brokers. If you are unable to find a broker please contact Chrysal directly.

12. In which states is Alesco® registered?

Chrysal Alesco® is registered in the following 38 states: Registered in AL, AR, AZ, CA, CO, CT, DE, FL, GA, IA, IL, IN, KS, KY, MA, MD, ME, MI, MN, NC, NH, NJ, NM, NY, OH, OK, OR, PA, RI, SC, SD, TN, TX, UT, VA, VT, WA and WI.

Additional state registration will be added depending on demand. Registration takes 4-8 weeks. Please feel free to contact Chrysal USA, www.chrysal.com, for more information.

13. Is it possible for the runoff to get into the water system?

Spray Alesco® on pot-tight, tray-tight grown crops and spray until just before runoff to prevent Alesco® from getting into the water system.

14. Can I use overhead watering like boom irrigation after applying Alesco®?

Yes, plants can be watered overhead once the solution has dried on the crop.

15. What is the difference between Chrysal Ethylene Buster (1-MCP) and Alesco® (STS)?

The durability and type of application.

a. The situations and crops in which you would use one product or the other will differ. For most bedding and potted plants, Alesco® is most effective because of its long lasting effects protecting new ethylene receptors that are made as the plant continues to grow. Phalaenopsis orchids and unrooted cuttings are better protected by Ethylene Buster than Alesco.

b. Application of Ethylene Buster needs to be done in an enclosed area (e.g., box, truck or treatment chamber) for at least four hours.

16. How is Alesco® different than the STS I mix on my own?

Alesco® is an EPA registered product and thus legal to use. It is easy to mix; one bottle per 50 gallons of water. This is easy and convenient and assures an effective treatment every time .

17. What is the shelf life of Alesco®?

Alesco® is a stable product, the concentrate has a shelf life of 18 months.

18. After mixing Alesco®, how long can the product be kept?

The spray solution can be used up to 3 days after mixing.

19. What PPE is needed when spraying Alesco®?

Like other PGRs prevent direct contact with skin, when mixing solution, spraying, and handling treated plants waterproof gloves, covering up to the forearms, waterproof apron, long-sleeved shirt and long pants, socks, and shoes are needed. Always refer to the product label in case of questions on PPE.

20. Can Alesco® be used on edible crops and/or cut flowers?

No, Alesco® is not registered to be used on edible crops and/or cut flowers. There are no plans to extend the registration for these uses.

21. How do I dispose of leftover solution?/ Is Alesco® harmful to the environment?

Excess Alesco® solution and rinsate should be treated to recover residual silver and then disposed of in accordance with Federal, State and local requirements. Treatment can be accomplished with the enclosed neutralization material using the following procedure:

1. Put the residual Alesco® solution in a container used exclusively for the treatment process (see pictures 1 and 2 below). The drain cock and new drain pipe should be positioned in such a way that the contents of the container can be removed without disturbing the deposit (=silver);
2. Add the contents of one sachet of Chrysal Tecitine and one sachet of Chrysal Flocculine to each 150 liters/159 quarts (40 gals) of residual solution and stir (see picture 3 below);
3. Let the residual solution react with the neutralizing powder for 120 hours. A grey-black deposit will be formed at the bottom (see picture 4 below);
4. Drain off the water above the drainpipe level (see picture 5 below). Contact your State Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional Office for guidance on disposing of this drainage water;
5. Do not drain off the remainder of the water and silt. Send the remaining water and silt to a facility that is authorized to recycle silver (see picture 6 below).

