

# Kool Ray™ Liquid Greenhouse Shading Concentrate FAQ

## What is Kool Ray?

Kool Ray is a liquid greenhouse shading concentrate designed to be diluted with water and then sprayed onto the outside of greenhouses.

## Why would I use Kool Ray?

Kool Ray is used to lower the internal temperature of a greenhouse during the peak growing season.

## How long has Kool Ray been around?

Continental Products invented Kool Ray back in 1953. Kool Ray was the first-ever specialty coating designed to be used as liquid greenhouse shading.

## What's in Kool Ray?

Kool Ray contains a proprietary blend of environmentally friendly ingredients designed to wash off naturally throughout the growing season. While we won't tell you exactly what's in it, we will tell you that the ingredient that makes Kool Ray bright white is the naturally-occurring pigment titanium dioxide.

## How much does Kool Ray cost?

We sell our products through specialty distributors actual retail pricing may vary. Contact a Continental Products [Distributors](#) for current pricing.

## Can I use Kool Ray right out of the container?

We wouldn't recommend it. Kool Ray Liquid Greenhouse Shading Concentrate is meant to be diluted with water to achieve the desired level of shading for your greenhouse. Sure, you could paint Kool Ray on right out of the can, but it's incredibly thick and not all that easy to spread. You'd probably have a heck of a time getting it off at the end of the season, since it wouldn't wear off like it's supposed to either. Basically, we're saying that it's best to follow the directions and mix your Kool Ray with water before you use it.

## What is the best way to apply Kool Ray?

Kool Ray may be applied with a brush or roller, but best results are given when Kool Ray is spray-applied. Spray application is typically more efficient, and it will generally result in a more uniform shade density. Kool Ray that is applied with a sprayer will also wear more evenly lessening the chances for spotty shade distribution throughout the season. We recommend spray tip sizes between 0.03 and 0.08 with an angle between of 65°- 85°. When spraying Kool Ray it's best to start at the top of the greenhouse and work down, making sure to keep the spray nozzle about 12" away from the surface to limit running.

### **How much coverage will I get out of a gallon of Kool Ray liquid greenhouse shading?**

It depends. Kool Ray coverage rates will vary based upon how it's applied, who is applying it, the type of surface it's being applied to and even the temperature of the shading compound itself. Just to give you a rough idea, when spray-applied to glass, our studies have shown that you'll typically get about 175ft<sup>2</sup>(16.3 m<sup>2</sup>) per gallon of diluted concentrate.

Example: A typical 1:8 dilution (1 volume of Kool Ray to 8 volumes of clean, room temperature water) yields a total of 9 volumes of ready-to-apply liquid shade. Multiply the total volumes of ready-to-apply liquid shade by 175 for estimated coverage in ft<sup>2</sup>and by 16.3 for estimated coverage in m<sup>2</sup>.

$$1:8 = 9 \times 175 = 1575 \text{ ft}^2$$

*or*

$$1:8 = 9 \times 16.3 = 148\text{m}^2$$

### **How often do I need to apply Kool Ray to my greenhouse?**

When properly applied, Kool Ray should only have to be applied once per season. Because Kool Ray is designed to wear off on its own throughout the season, if you experience a particularly rainy year you may have to reapply as necessary. If you wish to prolong the lifetime of your Kool Ray application, we also offer [\*\*X-Tra Stick™ Adhesive Additive\*\*](#).

### **Is Kool Ray toxic?**

Kool Ray should never be ingested or, if atomized, inhaled. It is best to wear gloves, eye protection and a dust mask when spraying Kool Ray or any type of industrial coating. Kool Ray will not harm you if you get it on your skin, but it's best to limit exposure whenever possible. If you get Kool Ray on your skin, just rinse it

off with water. If Kool Ray gets into your eyes, rinse with running water and seek medical attention. If for some reason you or someone you know drinks Kool Ray, get them to a hospital. For more information please consult the Kool Ray Safety Data Sheet [here](#)(link to the Kool Ray SDS).

### **Do I need to mix Kool Ray before I use it?**

Yes. While Kool Ray liquid greenhouse shading concentrate does have a very thick consistency the ingredients will separate out upon setting. Care should always be taken to properly mix the Kool Ray concentrate thoroughly (a drill mixer for 5 minutes should do the trick) prior to blending it with water.

After determining the amount of shade you require (consult our [Kool Ray Shading Density Guide](#)) select a suitable size vessel for mixing. Kool Ray will not blend properly with cold water and the resulting application will be uneven and splotchy. To insure a uniform mixture and even coverage. Water temperature should be no lower than 60°F (16°C). To achieve thorough and even blending, be sure to add the Kool Ray concentrate into the water slowly while mixing constantly.

### **Is Kool Ray freeze/thaw stable?**

No. Kool Ray should be stored in a tightly sealed container in a location that is not prone to wide swings in temperature between 40°F – 120°F. Kool Ray should never be frozen and any Kool Ray that has been frozen or is suspected of being frozen (it'll look like curdled milk) should not be used and should be disposed of safely and in according with state and local regulations. Do not dump unused or damaged Kool Ray down the drain or into storm sewers.

### **What is the shelf-life of Kool Ray?**

If stored in a climate-controlled environment in the original, unopened containers, Kool Ray has a shelf-life of one year from the date that it was made. Any Kool Ray that doesn't mix properly, has an off odor or color, or just generally doesn't look right, is probably beyond its acceptable shelf life limit. If you're unsure about the age of your Kool Ray, contact the place of purchase or Continental Products at [info@continentalpaints.com](mailto:info@continentalpaints.com).

### **How do I remove Kool Ray if I don't want it on my greenhouse anymore?**

Kool Ray is designed so that it doesn't need a separate removal step. As such, we don't manufacture a remover for Kool Ray nor do we recommend the use of any other chemicals as a remover. If you would like to remove Kool Ray prematurely

from your greenhouse you will need to use either a pressure washer or water and a scrub brush.

### **Where can I buy Kool Ray?**

Kool Ray is only available through one of our amazing horticultural products distributors. If you want to find one near you click [here](#).