## **KOOL RAY CLASSIC - 5 GAL. (18.925 Liters)**

## **DIRECTIONS FOR USE**

Intended for Professional Use Only - NOT FOR SALE TO THE GENERAL PUBLIC

**DESCRIPTION:** KOOL RAY CLASSIC is a concentrated liquid shade designed to be diluted with water at various ratios. KOOL RAY CLASSIC is specifically designed to lower inside greenhouse temperatures during the warmer spring & summer growing seasons. During the course of the year, KOOL RAY CLASSIC's environmentally friendly ingredients will slowly wear off (weather permitting) allowing for increased light levels as the daylight decreases. KOOL RAY CLASSIC works best when spray applied.

**COVERAGE:** Coverage will vary according to application, applicator, & dilution ration. Spray will normally provide the best coverage of approximately 175 sq. ft. per gal. after dilution.

Example: a standard 1:8 dilution of 1 gallon of KOOL RAY CLASSIC to 8 gallons of water yields 9 gallons of shade. A denser shade at a 1:5 ration (1 gallon KOOL RAY CLASSIC to 5 gallons of water) yields 6 gallons. Multiply the diluted amount by 175 to determine coverage.

1:8 = 9 gallons x 175 = 1575 square feet.

1:5 = 6 gallons x 175 = 1050 square feet.

Note: Higher dilution ratios (less concentrated) will result in a lighter shade. Lower dilution ratios (more concentrated) will result in a darker shade. To determine amount of shade for your particular growing requirements, consult the table below\* & use only as a guide. Because so many variables will affect actual shade density, light meter readings are recommended to determine if adjustments are needed in dilution ratios or in application technique to achieve the desired shade.

## \*LIGHT REDUCTION STUDY

KOOL RAY CLASSIC	Shading Density (Footcandles)	Reduction of Light
Ambient Light	29	0
Clear Glass	26	10.34%
1 to 8	20	31.03%
1 to 3	16	44.83%
1 to 1	10	65.52%

Ratios indicate 1 part of KOOL RAY CLASSIC mixed into various parts of water.

HOW WE TESTED: KOOL RAY CLASSIC was applied over standard greenhouse glass. Data was obtained through controlled laboratory findings & are intended as a guide only. The light source was fluorescent lighting measured 55" from the greenhouse glass. Light was measured in footcandles with a GE 214 light meter. Many factors will affect ACTUAL SHADING DENSITY & light transmission in the field. The intent of the study was to provide a relative value of KOOL RAY CLASSIC's shading capacity for the grower to use as a reference only. KOOL RAY CLASSIC's shading density is influenced by other variables including accuracy in measurement & mixing of KOOL RAY CLASSIC & application technique. Additionally, plastic glazing is translucent & has inherent light diffusing characteristics that should be taken into account when calculating shade requirements.

MIXING: After determining mixing ratios, select a suitable size vessel for mixing. COLD WATER TEMPERATURES WILL PREVENT A GOOD BLENDING OF KOOL RAY CLASSIC & result in an uneven & splotchy application. To insure a uniform mixture & even coverage, water temperature should be no lower than 60°F (16°C). To achieve a thorough blending, add KOOL RAY CLASSIC into a PARTIAL amount of water & mix well. Then add the remainder amount of water & mix thoroughly.

**APPLICATION:** May be applied by brush, roller or spray. Spray application is usually more time saving & will generally result in a more uniform shade density & will wear more evenly. Spray tip sizes of 0.03 – 0.08 & angles of 65° - 85° work well. Apply to top of greenhouse peak & work down each side.

TIME, TEMPERATURE & WEAR: Best to apply in the morning above 50°F (10°C), after dew has lifted or in late afternoon. Application within 12-24 hours of rain may result in premature wash off. Frost & snow will also loosen shade. Residues on new plastic can act as a release agent causing lack of adhesion & early wash off of KOOL RAY CLASSIC. A mist coat of KOOL RAY CLASSIC over new plastic followed by a regular application has proven effective in promoting normal adhesion & wear. Application during hot, midday sun over plastic will tend to more firmly bond the KOOL RAY CLASSIC to the surface & as a result last longer. In addition, plastic glazing heated by the sun and/or worn by time & weather is more porous & will promote greater adhesion. Rate of wear is also dependent on weather conditions.

USE Continental's XTRA STICK BINDER to increase adhesion & extend wear of KOOL RAY CLASSIC. XTRA STICK is a special adhesive additive, when used with KOOL RAY CLASSIC will increase adhesion, wear & overall life. XTRA STICK is primarily used when shading glass greenhouses. XTRA STICK can be used for plastic, but caution should be taken because of the possibility of removal problems when used over

plastic surfaces.

To insure a uniform blending of the XTRA STICK BINDER with the KOOL RAY CLASSIC, it is best to add the XTRA STICK BINDER after partially diluting the KOOL RAY CLASSIC with water. Mix thoroughly. Then add the remaining amount of water & continue mixing until thoroughly blended.

## RECOMMENDED XTRA STICK ADDITIONS:

- <u>Light Adhesion</u> Add **4 ounces** of XTRA STICK BINDER to each gallon of KOOL RAY CLASSIC concentrate used.
- Medium Adhesion (similar to KOOL RAY Regular) Add 8 ounces of XTRA STICK BINDER to each gallon of KOOL RAY CLASSIC concentrate used.
- Strong Adhesion (similar to KOOL RAY Super Stick) Add 12 ounces of XTRA STICK BINDER to each gallon of KOOL RAY CLASSIC concentrate used.

Note: Only calculate XTRA STICK additions to the corresponding amount of concentrate used BEFORE dilution with water.

XTRA STICK ADDITIONS FOR USE OVER PLASTIC: In most instances XTRA STICK BINDER is NOT needed when shading plastic glazing with KOOL RAY CLASSIC. However, if longer wear over plastic is desired, it is recommended to first start out at the Light Adhesion amount of 4 ounces of XTRA STICK for each gallon of KOOL RAY CLASSIC concentrate used in order to lessen potential removal problems later.

Note: Be careful to avoid adding too much XTRA STICK to KOOL RAY CLASSIC (unless removal is not a concern) when shading plastic. Otherwise removal of KOOL RAY CLASSIC by mechanical and/or chemical means may be necessary which could cause damage to the plastic.

**KEEP FROM FREEZING:** KOOL RAY CLASSIC is not freeze thaw/stable. Freezing will ruin KOOL RAY CLASSIC & make it unmixable. If frozen, the damaged KOOL RAY CLASSIC will have a curdled appearance similar to cottage cheese.

CONTINENTAL PRODUCTS LIMITED WARRANTY: Our recommendations for use of this product are based upon measurements believed to be reliable. The use of this product being beyond the control of the manufacturer, no guarantee, expressed or implied is made. If KOOL RAY CLASSIC is shown to be defective due to material or workmanship, replacement of the material or refund of the purchase price will be made at the manufacturer's option with proof of purchase. In no event shall the manufacturer be responsible for damages in excess of the purchase price. This warranty does not cover any labor costs or indirect, direct, incidental, special or consequential damage incurred, including but not limited to repair & reapplication labor, crop loss claims, etc. This warranty gives you specific legal rights & you may also have other rights which vary from state to state. To make a claim under this warranty, contact the distributor KOOL RAY CLASSIC was purchased from or Continental Products Ltd., 1150 East 222nd St., Euclid, Ohio 44117.

DO NOT TAKE INTERNALLY!
CLOSE CONTAINER AFTER USE!
KEEP OUT OF REACH OF
CHILDREN
KEEP FROM FREEZING
ROTATION OF STOCK NECESSARY



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