

# Surround<sup>®</sup>

## Crop Protectant

### Plant Surface Protection From Sun and Heat for Melons

Field studies and years of commercial use show that use of Surround Crop Protectant on melons can dramatically reduce sunburn, thereby boosting yields. Data also suggests that brix can be higher and grower experience shows larger melons and more uniform ripening.

#### Surround Offers Two Breakthrough Opportunities

The specially engineered kaolin particles reflect harmful infrared and ultraviolet radiation. Fruit remain cooler. With less radiation and cooler fruit there is less sunburn damage. For reducing sunburn damage, Surround should be applied at 75 kg/ha one week before harvest.

A second practice, demonstrated in field trials, is to treat melon plants from transplant to near harvest. This has been shown to provide both sunburn protection and enhanced yield. Applications of 12.5 kg/ha are made approximately weekly, starting immediately after transplant. Some growers simply add a single 12.5 kg bag of Surround per hectare to the other crop inputs they spray each week. The initial benefit is the protection of the transplant from transplant shock, resulting in fewer transplant losses and faster initial establishment. Applications throughout the season keep the plants cooler. This has been shown to enhance plant vigor and photosynthesis, and to increase yield by producing larger caliber melons.

#### Turning Down the Heat

The benefits of Surround have been demonstrated in trials conducted around the world. Proven in several crops, plants exposed to too much heat and sunlight show reduced photosynthesis. Stomates on the leaf close when temperatures rise above certain thresholds. With stomate closure the plant takes in less CO<sub>2</sub>. By reflecting away significant amounts of ultraviolet and infrared radiation, plants remain cooler, with stomates open for more hours per day. Therefore, more CO<sub>2</sub> is taken into the plant for photosynthesis.

Research indicates that melon growth reaches an optimum at approximately 35°C (95°F). Of course, fruit under full sunlight often reach temperatures well above ambient air temperature. Treated plants and fruits are typically up to 5°C (9°F) or more cooler than untreated plants.

*(continued)*

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## Creating Value Through Innovative Solutions

Surround is marketed by NovaSource, a business unit of Tessenderlo Kerley, Inc., Phoenix, Ariz. NovaSource was created to develop and market off-patent and novel crop protection products. Our mission is to create value for our customers by providing innovative solutions for their crop protection needs. We employ a global network of formulation technologists, active ingredient suppliers and specialized marketing partners, all with unique capabilities to develop exceptional product offerings. Concentrating on niche segments, we serve the agriculture, horticulture, turf, forestry and aquatic markets. Our goal is to deliver products that provide a sound business benefit to our customers.



**Important:** Always read the label before buying and follow label instructions when using this product.

The use of Surround WP in agricultural crop protection applications is covered by US Patents 6,027,740; 6,069,112; 6,110,867 and 6,156,327.

### CONDITIONS OF SALE – LIMITED WARRANTY AND LIMITATIONS OF LIABILITY AND REMEDIES

Failure to strictly follow label directions may cause injury to crops, animals, man or the environment. Tessenderlo Kerley, Inc. (TKI) warrants that the product conforms to the chemical description on the label and is reasonably fit for the purpose referred to in the directions for use when properly applied in normal weather conditions. TKI makes no other warranty or representation of any kind, express or implied, concerning the product, including no implied warranty of merchantability or fitness for any particular purpose. The exclusive remedy against TKI for any cause of action relating to the handling or use of the product is a claim for actual out-of-pocket damages, and in no event shall TKI be liable for special, indirect, incidental or consequential damages or expense of any nature, including, but not limited to, loss of profits or income, whether or not based on the negligence of TKI, breach of warranty, strict liability in tort, or any other cause of action. TKI and the seller offer the product, and the buyer and users accept it, subject to the foregoing conditions of sale and limitations of warranty, liability and remedies.

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