

Surround®

Crop Protectant

Paying for Water

Calculate the number of pounds of mineral film protection you are buying with liquid products and you'll quickly find that a Surround program provides >2X the number of pounds of protection per acre!

	Typical Liquid Products	Surround
Unit	Gal.	Lbs.
Active Ingredients by Weight	3.4 lbs/gal.	95%
Label Rate /A Two Applications	5 gal.	75 lbs.
Pounds of Protectant Per Acre	17.0	71.25

Performance Comparison, Surround vs. Liquid Sunscreen Products

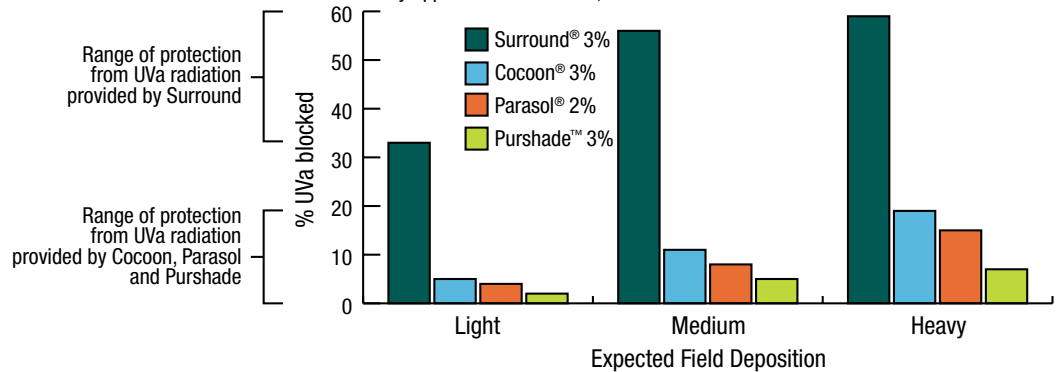
There Are Significant Differences

Light Reflectivity Comparison

Sunburn is caused not by a single wavelength of light, but by a combination of ultraviolet, visible and infrared radiation (heat) reaching the plant surface. Studies show that Surround is far superior at preventing UVa, UVb and near-infrared radiation from reaching plant surfaces than the other tested sunburn protection products.

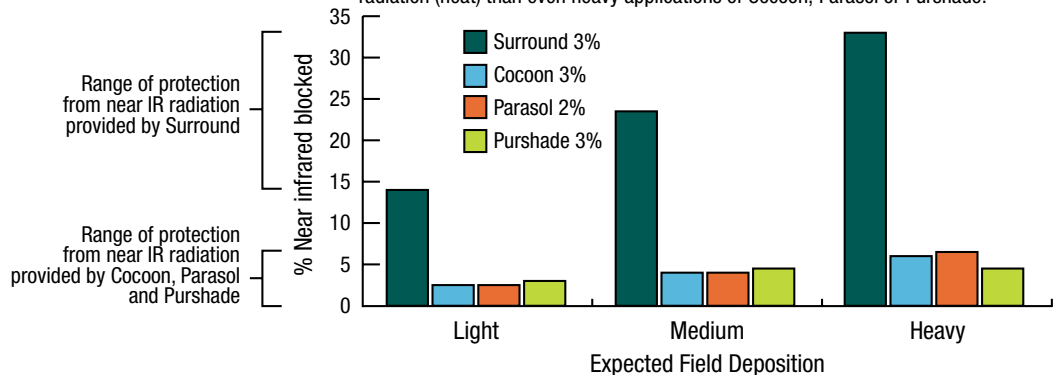
A Comparison of Protection From UVa Radiation

A light deposition of Surround is far more effective reflecting UVa radiation than even heavy applications of Cocoon, Parasol or Purshade.



A Comparison of Protection From Near Infrared Radiation (Heat)

A light deposition of Surround is far more effective reflecting and blocking near infrared radiation (heat) than even heavy applications of Cocoon, Parasol or Purshade.



Low use rate of Surround prevents more than twice the level of UVb radiation; three times the level of UVa radiation; and five times the level of near infrared radiation from reaching plant surfaces compared to similar label rate applications of Cocoon, Parasol and Purshade.

Conclusions

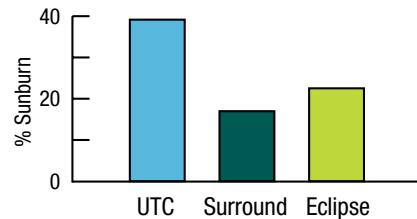
- Surround outperforms all competitors tested.
- Additional applications of Surround add even more protection, whereas additional applications of the competitor products offer minimal increase in protection.



Better Sunburn Protection = Greater Returns

An independent field comparison in Washington state found that the amount of sunburned fruit in a trial in Granny Smith apples was less in a Surround program and the net return per acre was the highest with Surround versus competitive brands tested.

	UTC	Surround®	Eclipse™
Base Bin/A	30	30	30
% Sunburn	40%	13.5%	27.75%
Marketable Bins/A	18	26	22
X \$250/Bin	\$4,500	\$6,500	\$5,500
Less cost/A for materials	—	\$120	\$300
Net return per acre	\$4,500	\$6,380	\$5,200
Net increases over UTC	—	\$1,880	\$700



Surround Proven Winner for Orchard Returns

In Australia, growers are seeing for themselves the difference between Surround and liquid sunscreen products. John Corboy, of Corboy’s Orchard near Merrigum in Victoria’s Goulburn Valley, farms 865 acres (350 hectares) of premium quality pears, apples and stone fruit. The area is one of the hottest pome fruit-growing areas of Australia, with sunburn losses sometimes exceeding 30%, especially on Granny Smith apples. With high-density open trellising and ever higher fruit quality standards by fruit buyers, sunburn damages have placed significant pressure on his bottom line.

Corboy conducted his own comparison of Surround and a liquid calcium carbonate sunscreen product on over 30,000 trees. “Every company comes to you with promises that their product will deliver improved yields and quality. Our management team wanted to test them out on our own orchards and quantify the return on investment when applied side by side in an independently controlled trial.

“The differences were quite significant,” noted Corboy. “Surround was the clear winner, coming out with a net return over \$1,370 per acre (\$3,385 per hectare) in front of the liquid calcium based sunscreen product. There are not many inputs that a grower can utilize that will generate that sort of return.”

Corboy concluded, “Surround is good insurance for your orchard. It is a useful tool to help ensure that our fruit is grown to suit the increasingly high standards required by our customers. Any initiative that improves quality of fruit and therefore pack-out percentage can add a lot to your bottom line. With grower margins being squeezed, value-adding products such as Surround have the potential to mean the difference between the grower making a profit rather than a loss. But I would say to other growers, do what I did, trial it alongside the alternative products on your own orchard and prove it to yourself.”

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

The use of Surround 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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