BRANDT

TriTek®

Three Levels of Crop Protection: Unique, Effective & Reliable
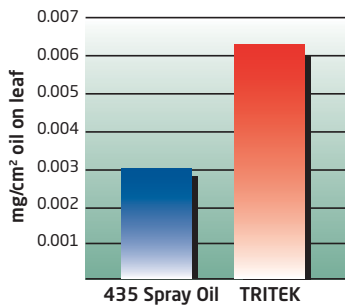
Spray Oil Emulsion
Fungicide, Insecticide and Miticide

The Difference.

TriTek is unique. No insecticidal oil compares in either physical attributes or performance.

Safe and Effective

The proven leader in pesticidal performance and reliability, TRITEK is a unique concentrate of pre-emulsified highly refined, high paraffinic, low aromatic oil. TRITEK provides effective pest and disease control on a broad range of crops and ornamentals. TRITEK is OMRI listed and meets or exceeds most worldwide standards for agricultural spray oils.

Agricultural spray oils are effective pest control mechanisms, but their efficacy, as well as hazards, are directly related to how long the oil remains on the plant. Most light oils (boiling point less than 179° C) are considered to be less effective or non-pesticidal because they don't remain on the plant long enough to suffocate the pests, while most heavy oils (boiling point greater than 296° C) are considered to be hazardous to plants.

TRITEK is in the optimal "narrow" range, providing superior pesticidal activity and durability without the hazards known to heavier oils.

Why is TriTek Pre-Emulsified?

TRITEK is pre-emulsified to produce more stable and effective results. Under high speed shearing, the *BRANDT* process breaks down the oil droplets, reducing them from typically 700 microns in diameter to approximately 50 microns (1/14th its original size). To keep these droplets apart, two emulsifiers are added at the critical moment along with water. This process creates a stable creamy emulsion that keeps the droplets apart, and allows for easy and stable dilution in the spray tank.

These smaller oil droplets assure that only a very thin, even coating of oil will be applied to the plant. Thin and even coverage enables TRITEK to be more effective in killing insects as well as being safer for the plant. Remember, the oil droplet is reduced to approximately 1/14th its original size, but without proper emulsification, these oil droplets would coalesce back into larger droplets like conventional products, and be at higher risk for emulsification breaks and phytotoxic results.

mg/cm² oil on leaf

0.007
0.006
0.005
0.004
0.003
0.002
0.001

435 Spray Oil   TRITEK

In aerial field trials, TRITEK and 435 Spray Oil were applied at the rate of 9.5 liters per hectare. Thornton Laboratories detected .003 mg/cm² of 435 Spray Oil to have been deposited on the leaves, while .0067 mg/cm² of TRITEK were found on both the top and bottom of the leaves (more than twice as much coverage).

Conventional spray oil droplet

TRITEK droplet
14 times smaller than conventional spray oil droplet

Benefits of Pre-Emulsification

Mixing
TRITEK, already emulsified, dilutes with water more easily and thoroughly than conventional spray oils. Emulsifying with hard water is not a problem for TRITEK.

Stability
Even after dilution, TRITEK won't separate for many hours in a spray tank. Many conventional oil products begin to break apart into their separate oil and water phases immediately after mixing; TRITEK does not. The stable emulsion of TRITEK lasts longer than all other oil products ensuring that the spray application is consistent from beginning to end.

Reliability
When conventional oil emulsions break apart (shown at right), the oil separates and floats to the surface of the tank. If applied at that point, the solution drawn from the bottom of the tank provides little plant protection, while the remainder may cause phytotoxicity.

Safety
Manufactured using the finest "narrow range" oils and emulsifiers, TRITEK doesn't put your crop at risk by using heavy oils known for their phytotoxic risk. The unique formulation of TRITEK provides excellent coverage and durability with little risk of phytotoxicity.

Conventional spray oil mixture
Separates and rises to top
in minutes

TRITEK
Stays mixed for up to 3 hours

Applications

Range of Applications
TRITEK, used alone or in combination with other products, is a highly effective control for a broad range of crops and pests. TRITEK's mode of action is primarily through the suffocation of eggs, larvae, nymphs and adults of soft bodied insects. TRITEK controls a wide range of mite and insect pests in the egg stage such as: spider and eriophyid mites, armored and soft scales, mealy bugs, psyllids, whiteflies, aphids, leafrollers, leaftiers, webworms, cankerworms, plant bugs, leafhoppers, and adelgids.

Compatibility
TRITEK is compatible with most commonly used insecticides and fungicides. Read and follow all precautions and limitations on labeling of all products used in tank mixtures. Do not use in combination with or immediately before or after spraying fungicides such as captan, folpet, oxythioquinox or any product containing sulfur. Also do not use with carbaryl or dimethoate. Do not use with any product whose label does not recommend the use of oils. Do not use in combination with NPK foliar fertilizer applications.

- Uniform coverage to smother pests without causing burn or stress to plants
- Effective in high or low pressure applications
- Excellent compatibility with pesticides labeled for use with oil
- Penetrates dense spots in canopy
- Requires much less agitation to maintain homogenous mix

RATE RECOMMENDATIONS

1-2% of TRITEK per spray solution (1-2 liters of TRITEK per 100 liters of water).

TREE CROPS

Almond, Apricot, Cherry, Nectarine, Peach, Pecan, Plum, Prune: Aphids, Fruit Tree Leaf Roller, Mites, Scales, Whiteflies
Apple (all varieties): Aphids, Bugs (including Apple Red Bug), Fruit Tree Leaf Roller, Mites (including European Red Mite), Powdery Mildew, Scales (hard, soft, scurfy), Whiteflies
Avocado, Banana, Cocoa, Coffee, Macadamia, Papaya: Bugs, Leafhoppers, Leaf Rollers, Scales, Sigatoka, Thrips
Citrus: Blackfly, Greasy Spot, Mites, Scales (Glover, Chaff, Purple, Yellow, Red, Snow, Brown and California), Sooty Mold, Whiteflies
Hops: Aphids, Leaf Roller, Mites, Powdery Mildew, Scales, Whiteflies
Pear (all varieties): Aphids, Fruit Tree Leaf Roller, Mites (including Pear Leaf Blister Mite), Pear Psylia, Powdery Mildew, Scales, Whiteflies
Pineapple: Aphids, Mealybugs, Mites, Scales
Fig, Kiwi, Olive, Pistachio, Walnut: Aphids, Mites, Scales

VEGETABLE AND FIELD CROPS

Asparagus, Bean, Cucumber, Eggplant, Melon, Peanut, Pepper, Pumpkin, Radish, Squash, Tomato: Aphids, Beetle Larvae, Leafhoppers, Leaf Miners, Mites, Thrips, Powdery Mildew, Whiteflies
Cabbage, Cauliflower, Celery, Cole Crops, Lettuce, Onion: Aphids, Leafhoppers, Leaf Miners, Loopers, Mites, Plant Bugs, Thrips, Whiteflies
Corn (sweet, field, seed), Popcorn, Potato, Sweet Potato, Sugar Beet: Aphids, Leaf Miners, Mites, Whiteflies
Cotton: Aphids, Bollworm eggs and larvae, Leafhoppers, Loopers, Mites, Plant Bugs, Thrips, Whiteflies
Grasses (grown for seed): Mites, Powdery Mildew, Rust
Tobacco: Leaf Miners, Mites, Whiteflies

SMALL FRUIT

Bushberries, Caneberries, Strawberry: Aphids, Mites, Powdery Mildew, Rust, Sawfly, Scales, Whiteflies
Grapes: Botrytis, Leafhoppers, Leaf Miners, Mealybugs, Mites, Powdery Mildew, Scales, Whiteflies

GREENHOUSE/ORNAMENTALS

Azalea, Camellia, Carnation, Fuschia, Gladiola, Hibiscus, Iris, Lily, Mums, Orchids, Poinsettia, Rhododendron, Rose, Vines: Aphids, Fungus Gnat, Leaf Miners, Mealy Bugs, Mites, Powdery Mildew, Rust, Scales, Thrips, Whiteflies

SHADE TREES, SHRUBS, ORNAMENTALS,* FLOWERS AND FOLIAGE

Conifers, Flower Foliage and Bedding Plants, Ornamentals*, Shade Trees, Shrubs, Christmas Trees*
Aphids, Black Spot, Leaf Miners, Mites, Plant Bugs, Powdery Mildew, Psyllids, Rust, Sawflies, Scales, Whiteflies

* Ornamentals, Christmas Trees - Oil might remove the glaucous (blue) bloom from such evergreens as Colorado Blue Spruce and Koster Spruce. Use with caution and reduced dosage for summer applications on Japanese Red Maple, Amur Maple and Black Walnut, and for dormant application on Sugar Maple and Redbud.

ACTIVE INGREDIENTS	BY WEIGHT
Mineral Oil	80.0%
Other Ingredients	20.0%

Unsulfonated Residue of Mineral Oil 92% min.   EPA Reg. No. 48813-1

BRANDT®