

# 455 Oil 98.8

A Superior Horticultural Spray Oil

For Insect and Mite Pest Management.

#### **ACTIVE INGREDIENT:**

Mineral Oil*	98.8%
OTHER INGREDIENTS:	1.2%
TOTAL:	100.0%

\*Unsulfonated Residue of Petroleum Distillate is 92% minimum; 50.0% Distillation point of Petroleum Distillate is 455°F; Flash Point is 375°F

Weight per gallon is 7.2 pounds. Contains petroleum distillates.

# CAUTION

See FIRST AID Below

EPA Reg. No. 19713-396 EPA Est. No. 19713-XX-XXX

Net Content:

#### **FIRST AID**

#### IF ON SKIN OR CLOTHING:

- · Take off contaminated clothing.
- Rinse skin immediately with plenty of water for 15 to 20 minutes.
- · Call a poison control center or doctor for treatment advice.

# IF SWALLOWED:

- Call a poison control center or doctor immediately for treatment advice.
- Do not induce vomiting unless told to do so by a poison control center or doctor.
- Do not give any liquid to the person.
- Do not give anything by mouth to an unconscious or convulsing person.

#### IF IN EYES:

- Hold eye open and rinse slowly and gently with water for 15 to 20 minutes.
- Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.
- Call a poison control center or doctor for treatment advice.

# IF INHALED:

- · Move person to fresh air.
- If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible.
- · Call a poison control center or doctor for further treatment advice.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For information on this pesticide product (including health concerns, medical emergencies or pesticide incidents), call the National Pesticide Information Center at 1-800-858-7378.

**Note to Physician:** Contains petroleum distillates, which may pose an aspiration pneumonia hazard.

#### PRECAUTIONARY STATEMENTS

#### **Hazards to Humans and Domestic Animals**

**CAUTION:** Harmful if absorbed through skin. Avoid contact with eyes, skin or clothing. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

#### PERSONAL PROTECTIVE EQUIPMENT (PPE):

Some materials that are chemical-resistant to this product are made of any waterproof material such as barrier laminate or viton. If you want more options, follow the instructions for Category G on an EPA chemical-resistance category selection chart.

Mixers, loaders, applicators, flaggers and other handlers must wear: Long-sleeved shirt and long pants, chemical-resistant gloves, and shoes plus socks.

See engineering controls for additional requirements.

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry. Discard clothing and other absorbent material that have been drenched or heavily contaminated with the product's concentrate. Do not reuse them

#### **ENGINEERING CONTROLS**

Pilots must use an enclosed cockpit that meets the requirements listed in the WPS for agricultural pesticides [40 CFR 170.240(d)(6)].

# **USER SAFETY RECOMMENDATIONS**

**Users should:** 1) Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet. 2) Remove clothing/PPE immediately if pesticide gets inside. then wash thoroughly and put on clean clothing. 3) Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

# **ENVIRONMENTAL HAZARDS**

Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwater or rinsate. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas.

# **DIRECTIONS FOR USE**

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Do not apply this product through any type of irrigation system. Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

Manufactured By:

Drexel Chemical Company
P.O. BOX 13327, MEMPHIS, TN 38113-0327

SINCE 1972

# AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard (WPS), 40 CFR Part 170. This standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, greenhouses and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted entry interval (REI). The requirements in this box only apply to uses of this product that are covered by the WPS.

Do not enter or allow worker entry into treated areas during the REI of 4 hours.

PPE required for early entry to treated areas that is permitted under the WPS and that involves contact with anything that has been treated such as plants, soil or water is: Coveralls, chemical-resistant gloves made of any waterproof material, and shoes plus socks.

#### NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries or greenhouses.

Do not enter or allow others to enter until sprays have dried.

**IMPORTANT:** Do not apply when plants are in or near wilting. Observe all warnings and limitations on labels of products recommended for mixture with oil. DO NOT USE this product in combination with or immediately preceding or following applications of captan, carbaryl, chloropropylate, dichlone, dikar, dyrene, folpet, karathane, morestan, morocide, propargite and sulfur compounds. Check tank mixtures for physical and chemical compatibility. Mix only enough material to do the job.

#### MIXING DIRECTIONS

- Add sufficient water to the mixing tank to allow proper agitation by pump or paddles.
- Add other pesticides that are to be part of the mix, mixing thoroughly prior to the addition of oil.
- 3. Add oil under agitation when three-fourths full, topping off with water to form a milky solution.
- 4. Maintain agitation until solution is used.
- In small equipment lacking agitators, stir or shake diluted spray frequently during application.

#### **METHODS OF APPLICATION**

**Dilute Applications:** Apply specified rate of this product in 100 to 800 gallons of water per acre. Higher spray volumes may be used only for applications to Citrus. See specific directions for applications to Citrus.

**Concentrate Applications:** Apply specified rate of this product in 50 to 150 gallons of water per acre.

**Aerial Applications:** Apply specified rate of this product in 10 to 20 gallons of water per acre.

#### **SPRAY DRIFT MANAGEMENT**

# For All Spray Applications:

A variety of factors, including weather conditions (e.g., wind direction, wind speed, temperature, relative humidity) and method of application (e.g., ground, aerial, airblast) can influence pesticide drift. The applicator and grower must evaluate all factors and make appropriate adjustments when applying the product.

WIND SPEED: Do not apply at wind speeds greater than 15 mph at the application site.

TEMPERATURE INVERSIONS: If applying at wind speeds less than 3 mph, the applicator must determine if a) conditions of temperature inversion exist, or b) stable atmospheric conditions exist at or below nozzle height. Do not make applications into areas of temperature inversions or stable atmospheric conditions.

DROPLET SIZE: Apply as a medium or coarser spray (ASABE standard 572), and the minimum volume mean diameter (VMD) for spinning atomizer nozzles.

#### **Applications Using Ground-Spray Equipment:**

RELEASE HEIGHT: Apply using a nozzle height of no more than 4 feet above the ground or crop canopy.

WIND SPEED: Do not apply at wind speeds greater than 15 mph at the application site.

DROPLET SIZE: Apply as a medium or coarser spray (ASABE standard 572), and the minimum volume mean diameter (VMD) for spinning atomizer nozzles.

#### **Airblast Applications:**

For airblast applications, turn off outward pointing nozzles at row ends and when spraying outer row. To minimize spray loss over the top in orchard applications, spray must be directed into the canopy.

#### **Aerial Spray Applications:**

RELEASE HEIGHT: For aerial applications of agricultural products, do not release spray at a height greater than 10 feet above the ground, top of crops, or above the orchard canopy.

BOOM LENGTH: The boom length must not exceed 75% of the wingspan or 90% of the rotor blade diameter.

SWATH ADJUSTMENT: When applications are made with a crosswind, the swath will be displaced downwind. The applicator must compensate for this displacement at the downwind edge of the application area by adjusting the path of the aircraft upwind. Leave at least one swath unsprayed at the downwind edge of the treated field.

WIND SPEED: Do not apply at wind speed greater than 15 mph at the application site.

DROPLET SIZE: Apply as a medium or coarser spray (ASABE standard 572), and the minimum volume mean diameter (VMD) for spinning atomizer nozzles.

## **PESTS CONTROLLED**

This product can control mite and insect pests in the egg stage, including: adelgids, aphids, armored scales, soft scales, cankerworms, leafhoppers, leafrollers, leaftiers, mealybugs, plant bugs, psyllids, spider mites, eriophyid mites, webworms and whiteflies. This product also will kill other immature forms if the spray covers the insect.

#### TIMING THE TREATMENT

See the "Time of Application" column in the rate tables of this label. You must determine final timing to fit local growth and climatic conditions

DO NOT EXCEED MAXIMUM RATES OR APPLY LATER THAN SPECIFIED ON THIS LABEL.

Crop	Pest	Application Rate of This Product (Gals./100 gals. of Dilute	Time of Application (Stage of Development)
Almonds	Aphid eggs, Scales	Spray)	Summer
	Spider mites	1 to 1.5	Dormant
Apples	Apple red bug	2	Dormant
	European fruit lecanium scale	2 2	Dormant
	Fruit tree leafroller	3	Dormant
	European red mite	2	Green Tip to Delayed Dormant 0.5" Green
	San Jose scale	2	Delayed Dormant 0.5" Green
	Scurfy scale	3	Delayed Dormant 0.5" Green
Figs	Scale (Severe)	3 gals. per acre OR 2 gals. per 100 gals. of water	Dormant / Delayed Dormant
Grapes	Mealybugs	1 gal. per acre	Dormant
Olives	Scales	1.5 gals. per 100 gals. of water	Pre-bloom or Post-bloom to Buckshot
			(Continued)

Crop	Pest	Application Rate of This Product (Gals./100 gals. of Dilute Spray)	Time of Application (Stage of Development)
Pears	Fruit Tree Leaf Roller	3	Dormant
	Pear leaf blister mite	3	Dormant
	Pear psylla	3	Late Dormant
Pecans	Obscure scale	3	Dormant
Peaches	Cottony peach scale	3	Dormant
Plums & Prunes	European red mite	2	Dormant to Delayed Dormant
	European fruit lecanium scale	2	0.5" Green
Nectarines	San Jose scale	2	Dormant
Cherries (sweet & tart)	San Jose scale	2	Dormant
Blueberries	San Jose scale	2	Dormant
	Putnam scale	3	Dormant
Sweet Corn	Earworms	2	Summer
Field Corn	Fall armyworms, Corn rootworms	2	Early Spring
Sugar Beets	Mites, Leafminers	2 gals. per acre	As Needed

Crop	Pest	Dilute Application Rate of This Product (Gal. / 100 Gals.)	Concentrate* (Gals./ A)
Citrus	Citrus Rust Mite, Scale Insects, Greasy Spot Disease	1	10
	Spider mites, Whiteflies, Sooty mold (to loosen)	0.5	5

\* Apply in sufficient water and manner to assure even distribution. **USE RESTRICTIONS:** Do not apply more than 22.1 gallons (159 lbs.) of this product per acre (maximum 1,500 gallons of spray mix per acre) in Texas and Florida, and 29.4 gallons (212 lbs.) of this product per acre (maximum 2,000 gallons of spray mix per acre) in California (based on thorough coverage spray, with 1.5 gallons of this product mixed in 100 gallons of water).

#### **ORNAMENTAL PLANTS**

Oil might remove the glaucus (blue) bloom from such Evergreens as Colorado blue spruce and Koster spruce. Use with extreme care and reduce dosage for Summer application on Amur maple, Black maple and Japanese red maple. Use with extreme care and reduce dosage for dormant application on Sugar maple and Redbud.

		Application	
Crop	Pest	Rate of This Product (Gals./ 100 gals. of Dilute Spray)	Time of Application (Stage of Development)
Azalea	Azalea bark scale, European red mite	2	Dormant to Bud break
Flowering Crabapple	Azalea bark scale, European red mite	2	Dormant to Bud break
Flowering Cherry	Azalea bark scale, European red mite	2	Dormant to Bud break
Dogwood	Dogwood scale, San Jose scale	2	Dormant to Bud break
Euonymus	San Jose scale	2	Dormant to Bud break
Holly	Holly scale	2	Dormant to Bud break
Hawthorn	San Jose scale	2	Dormant to Bud break
Juniper	Juniper scale	2	Dormant to Bud break
Lilac	San Jose scale	2	Dormant to Bud break
Pines	Pine needle scale	2	Dormant to Bud break
Privet	White peach scale	3	Dormant to Bud break
Rhododendron	Azalea bark scale	2	Dormant to Bud break
Rose	Rose scale	2	Dormant
Spirea	San Jose scale	2	Dormant to Bud break

# STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage and disposal. **PESTICIDE STORAGE:** Store in a cool, dry, locked area out of the reach of children. Keep oil container tightly closed in storage to prevent entry of water.

**PESTICIDE DISPOSAL:** Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

#### **CONTAINER DISPOSAL:**

Nonrefillable Container (rigid material; less than 5 gallons): Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container one-fourth full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Dispose of empty container in a sanitary landfill or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

Nonrefillable Container (rigid material; 5 gallons or greater): Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill container one-fourth full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Dispose of empty container in a sanitary landfill or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

Refillable Containers: Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10% full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. Dispose of empty container in a sanitary landfill or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

#### WARRANTY—CONDITIONS OF SALE

THE DIRECTIONS FOR USE of this product are based upon tests believed reliable. Follow directions carefully. Timing and method of application, weather and crop conditions, mixtures with other chemicals not specifically indicated and other influencing factors in the use of this product are beyond the control of the Seller. To the extent consistent with applicable law, Buyer assumes all risks of use, storage and handling of this material not in strict accordance with directions given herein.

To the extent consistent with applicable law, in no case shall the Manufacturer or the Seller be liable for consequential, special or indirect damages resulting from the use or handling of this product when such use and/or handing is not in strict accordance with directions given herewith. The foregoing is a condition of sale by the Seller and is accepted as such by the Buyer.