

49668-4 11-5-2001 1/5

PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS & DOMESTIC ANIMALS
CAUTION

Harmful if swallowed. Avoid breathing vapors or spray mist. May cause irritation of nose, throat or skin. Avoid contact with eyes, skin and clothing. Do not contaminate food or feed products. Keep out of reach of children.

PERSONAL PROTECTIVE EQUIPMENT

Applicators and other handlers must wear: Long-sleeve shirt and long pants
Waterproof gloves
Shoes plus socks
Protective eyewear

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

USER SAFETY RECOMMENDATIONS

User should:
Wash hands before eating, drinking, chewing gum, using tobacco, or using toilet.
Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
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

This product is toxic to fish and wildlife. Do not apply directly to water, to areas where surface water is present, or to inter-tidal areas below the mean high water mark. Do not apply where runoff is likely to occur. Do not apply where weather conditions favor drift from areas treated. Do not contaminate water when disposing of rinsate or equipment washwater.

DIRECTIONS FOR USE

It is violation of Federal Law to use this product in a manner inconsistent with its labeling. 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.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and 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. The requirements in this box only apply to uses of this product that are covered by the Workers Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 24 hours. PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water is: Coveralls

Waterproof gloves
Shoes plus socks
Protective eyewear

GENERAL INFORMATION

Apply this product only as specified on this label. Do not use this product for any uses other than those specified on this label. EM-53 Liquid Sulphur is formulated for use in water as a spray on fruit, vegetable and ornamental crops for the control of certain fungus diseases and mites. It may be combined in the spray tank with most of the commonly used fungicides and insecticides. Pour the specific amount of this product on surface of water in nearly filled spray tank. Keep agitator running during filling and spraying operations. Do not allow mixture to stand in spray equipment. Sulphur is highly corrosive and equipment should be cleaned thoroughly after each day's spraying.

HOMEOWNER USE

1 level teaspoon per gallon of water is equivalent to 1 pint per 100 gallons. Make application according to specific instructions given below for those crops where rates are given in pints/hundred gallons. (For Example: 2 pints per 100 gallons are equivalent to 2 level teaspoons per gallon) 1 level teaspoon per 100 sq. feet is equivalent to 4 pints per acre. Make application according to specific instructions given below for those crops where rates are given in pints/acre. (For example: 4 pints per acre are equivalent to 1 level teaspoon per 100 sq. ft.)

CHEMIGATION

Refer to supplemental labeling entitled "REDBALL EM-53 LIQUID SULPHUR: CHEMIGATION INFORMATION" for use directions for chemigation. DO NOT APPLY THIS PRODUCT THROUGH ANY IRRIGATION SYSTEM UNLESS THE SUPPLEMENTAL LABELING ON CHEMIGATION IS FOLLOWED.

RECOMMENDATIONS

FRUIT TREE CROPS: Unless otherwise specified for specific crops, dosage rates are given as pints per 100 gals. water for use in a thorough coverage spray. The total amount of sulphur per acre should be 1 to 4 gals. depending on the size of the trees. Because of variations in the types of spray equipment used, a range of low and high rates is listed. For high volume sprayers (output 20 to 300 gals. spray per acre) use the high rates per 100 gals. Apply in sufficient water for thorough coverage.
For Aerial Application: Use a minimum of 5 gals. of finished spray per acre.



EM-53
LIQUID SULPHUR
FOR CONTROL OF FUNGAL DISEASES,
MITES, AND PLANT PESTS

ACTIVE INGREDIENT:

SULPHUR 53.0%

INERT INGREDIENTS 47.0%

TOTAL 100.00%

This product contains 6 lbs. of Sulphur per gallon.

KEEP OUT OF REACH OF CHILDREN

CAUTION

See Replacement

IF ON SKIN: wash immediately with soap and water.
IF IN EYES: immediately flush eyes with plenty of clean water for at least 15 minutes.
IF SWALLOWED: drink 1 or 2 glasses of water and induce vomiting by touching back of throat with finger. Do not induce vomiting or give anything by mouth to an unconscious person. Get medical attention.
See Side Panel For Additional Precautionary Statements.

EPA REG. NO. 49668-4

EPA EST. NO. 49668-TX-1

INTERNATIONAL SULPHUR, INC.

P.O. BOX 611

MT. PLEASANT, TX 75456-0611

NET CONTENTS 5 GALLONS

CAUTION: Do not use sulphur in combination with oil or within two weeks of an oil spray, or on citrus within 21 days of an oil application. Do not use sulphur on apples or other sensitive crops when shade temperatures exceed, or likely to exceed 90° F. Do not apply or allow sulphur to drift to Cucurbits (cucumbers, cantaloupe, melon, squash) or fung. To do so may result in severe fruit and leaf injury.

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal.

STORAGE: Store unused product in original container only in a cool, dry area out of reach of children and animals

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

CONTAINER DISPOSAL: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, by incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

WARRANTY STATEMENT

INTERNATIONAL SULPHUR, INC. warrants that this product in its unopened package conforms to the chemical description on the label and is reasonably fit for the purposes set forth on the label when used according to directions under normal use conditions on the crops specified. There are no other warranties, expressed or implied, concerning the use of this product other than indicated on the label. This warranty does not extend to the handling or use of this product contrary to label instructions or under abnormal conditions or conditions not reasonably foreseeable to seller and buyer assumes all risk of any such use.

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RECOMMENDATIONS (CONTINUED)

APPLE, PEAR:

Scab: Pre-bloom through calyx sprays 1 1/2 to 3 1/2 pints
Cover Sprays 3/4 to 2 pints
Powdery Mildew: Pre-bloom through calyx sprays..... 3 pints
Cover Sprays..... 2 pints

CHERRY, PLUM, PRUNE: Brown Rot, Leafspot:

Pink and bloom sprays..... 1 1/2 to 3 1/2 pints
Petal fall, shuck and cover spray 3/4 to 1 3/4 pints

CITRUS: Rust Mite, Clover Mite:

Apply sprays November thru May 3/4 to 4 1/2 pints

THRIPS: (Early spring treatment for the reduction of thrips population.) Apply 1 to 2 gallons per acre in sufficient water for thorough coverage. Make application after spray flush has made 3 inch growth. Repeat if necessary. Do not apply within 21 days of an oil application.

PEACH, NECTARINE: Powdery Mildew, Brown Rot, Scab, Thrips:

Pink and bloom sprays..... 1 1/2 to 3 1/2 pints
Petal fall, shuck and cover sprays..... 2/3 to 3/4 pints

Applications to mature nectarines may cause discoloration.

FIELD AND VINE CROPS: Unless otherwise specified for specific crops, dosage rates are given as pints of EM-53 Liquid Sulphur per acre. This product should be applied by ground equipment, aircraft or sprinkler irrigation systems in sufficient water to provide thorough coverage.

BEANS: (Dry, Colored, Green, Snap, Lima) Powdery Mildew, Rust: Apply 8 pints per acre in sufficient water for thorough coverage. Begin application at the first sign of disease. Repeat at 7 to 14 day intervals to keep new growth protected.

COTTON: Mites, Thrips, Fleahoppers: Apply 2 pints for early season control and up to 1 gallon for mid to late season control.

GRAPES: Powdery Mildew: Apply 1 to 2 pints per 100 gallons water, maximum of 8 pints per acre in spring and summer. Make first application when shoots are 6 to 8 inches long, second when shoots are 12 to 15 inches long, and third about bloom stage. The timing, rate, and number of applications will vary with local conditions. Consult State Agricultural Extension Service or State Agricultural Experiment Stations in your own region for specific information. Follow the USE PRECAUTIONS on this label.

PEANUTS: Rust: Apply 2 to 4 pints per acre in enough water for good coverage. Begin 40 to 60 days after planting. Use 7 to 14 day intervals as long as needed to control rust.

SUGAR BEETS, TABLE BEETS: Powdery Mildew, Mites: Apply 8 to 16 pints per acre in sufficient water as needed. Repeat applications should be made at 10-30 day intervals as necessary throughout the season.

POTATOES, PEAS, BROCCOLI, BRUSSEL SPROUTS, CABBAGE, CAULIFLOWER: Powdery Mildew, Mites: Apply 2 to 7 pints per acre. Start in early leaf stage. Repeat as necessary.

STRAWBERRIES: Powdery Mildew: Apply 2 pints at first sign of infection and repeat at 3 week intervals. For strawberries that will be canned, discontinue application of sulphur well before harvest in accordance with local canner's recommendations.

TOMATOES: Tomato Russet Mite: Apply 1/2 to 1 gallon per acre depending on the size of the plants. Use full coverage sprays.

ONIONS, CARROTS: Mites, Powdery Mildew: Apply 2 to 12 pints at first sign of mites or disease and repeat as necessary.

WHEAT, OATS, BARLEY, RYE, SORGHUM, CORN, SOYBEANS: Mites, Powdery Mildew: Apply 4 to 20 pints per acre. Repeat as necessary.

WALNUTS: Mites: Apply 8 to 28 pints per acre. Repeat as necessary. CAUTION: Certain varieties of walnuts are sensitive to sulphur sprays.

ORNAMENTALS: (Aster, Carnations, Cherry Laurel, Chrysanthemums, Crepe Myrtle, English Ivy, Gladiolus, Hollyhock, Laurel, Petunia, Sage, Sunflowers, Sweet Peas, Violets, Zinnias): Powdery mildew and leaf spots caused by fungi imperfecti and ascomycetes: Apply 4 to 8 pints per 100 gallons. Begin when disease first appears and repeat at 5 to 10 day intervals.

ROSES: Black Spot, Brown Canker, Leaf Spot, Powdery Mildew, Rust: Apply 4 to 8 pints per 100 gallons. Begin when disease first appears and repeat at 5 to 10 day intervals.

CHIGGER CONTROL: For control of chiggers in yard, spray entire lawn, flower garden, shrubs, and any place chiggers may hide. This should be done 1-2 days before protection is desired and should be repeated at weekly intervals. Apply approximately 10 gallons per acre. One gallon will cover 2,000-2,500 sq. ft.

See Insert No. 1

FOR USE AS SOIL SPRAY FOR THE CORRECTION OF SULPHUR DEFICIENCY IN ALL PLANTS

RECOMMENDATIONS

For the correction of sulphur deficiencies in crops, EM-53 Liquid Sulphur is effective when placed as a soil application. It is important to treat the sulphur deficiency before visual symptoms appear to insure proper results. EM-53 can improve water penetration, lower soil pH, and increase nutrient availability. Rates of applications will vary depending upon the climate, soil type, and method of applications. Consult your State Agricultural Experiment Station or Extension Specialist for advice in selecting treatments from this label to best fit local conditions.

FOR USE ON TURF GRASSES: Apply 1 pint to 10 gallons of water per 1,000 sq. ft. Begin applications in early spring and make 4 treatments per year. Do not exceed 10 pints per 1,000 sq. ft. per application. Application should be made in early morning or late evening. Avoid application during temperatures greater than 90° F.

RECOMMENDATIONS ON SOIL APPLICATIONS: EM-53 Liquid Sulphur can be mixed and applied with liquid fertilizer or water. For most crops sulphur requirements can be determined on the basis of nitrogen and phosphate fertilizer usage.

When nitrogen, and nitrogen/phosphorus fertilizers are applied, 1/6 gallon of EM-53 should be added for every 5 to 7 pounds of nitrogen.

When only phosphorus and sulphur are being applied, 1/6 gallon of EM-53 should be added for every 1.3 pounds phosphorus.

APPLICATIONS: EM-53 Liquid Sulphur can be applied in a band of planting time or as a side dressing shortly after planting.

ACCEPTED
NOV 5 2001
Under the Federal Insecticide,
Fungicide, and Rodenticide Act,
as amended, for the pesticide
registered under
EPA Reg. No. 49665-4

INSERT NO. 1 - EM-53 LIQUID SULPHUR - EPA Reg. No. 49668-4:

FIRST AID	
If Swallowed	<ul style="list-style-type: none">• Call poison control center or doctor for treatment advice.• Do not induce vomiting unless told to do so by the poison control center or doctor.• Have person sip a glass of water if able to swallow.• Do not give anything by mouth to an unconscious person.
If In Eyes	<ul style="list-style-type: none">• Hold eye open and rinse slowly and gently with water for 15-20 minutes.• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.• Call a poison control center or doctor for further treatment advice.
In On Skin Or Clothing	<ul style="list-style-type: none">• Take off contaminated clothing.• Rinse skin immediately with plenty of water for 15-20 minutes.• Call a poison control center or doctor for further treatment advice.
HOT LINE NUMBER - CHEMTREC (800) 424-9300 (24 hours)	
Have the product container or label with you when calling a poison control center or doctor or going for treatment.	
<i>See side panels for additional precautionary statements</i>	

INSERT NO. 1 - EM-53 LIQUID SULPHUR - EPA Reg. No. 49668-4:

CHIGGERS: For control of chiggers in yard, cover entire lawn, flower garden, shrubs and any place chiggers may hide. This should be done one or two days before protection is desired and should be repeated at weekly intervals. Use approximately 2-4 pints per 1000 sq. ft. in enough water for thorough coverage.

ANIMAL AND POULTRY HOUSES:

DO NOT STOP AGITATION WITH SULFUR IN SUPPLY TANK. SULFUR IS HIGHLY CORROSIVE AND EQUIPMENT SHOULD BE CLEANED THOROUGHLY.

ANIMALS - Dogs and domestic livestock (equine, cattle, swine, sheep and goats):

To control fleas and ticks, apply 20 gallons per 20,000 square feet as a spray (1-2 gallons per 100 gallons of water). Apply thoroughly to all interior surfaces of quarters. Force spray into cracks and crevices. Repeat application as needed.

POULTRY HOUSES - Chickens, Turkeys, Ducks, Geese, Game Birds, and Pigeons:

General Information: This product is not a substitute for good litter practices. The houses should be opened and the litter dried out according to normal practice. Wet, sticky, or caked areas may have to be replaced. Litter replacement is not required for the product to be effective. However, a grower may choose to add a thin layer of new litter on the prepared surface. A minimum of 48 hours is required before the introduction of chicks to allow the water to evaporate. For best results, apply 72 to 96 hours in advance.

Mites: To control depluming mites, apply 20 gallons per 20,000 square feet as a spray (1-2 gallons per 100 gallons of water). Apply thoroughly to all interior surfaces of quarters. Force spray into cracks and crevices. Repeat application as needed.

Darkling Beetles: To control darkling beetles, apply 1 gallon per 600 square feet with enough water for thorough coverage. Houses should be closed and heated a minimum of 48 hours to allow water to evaporate. Ventilate houses before introduction of flock.

pH Amendment: This product is a water-based dispersion of elemental sulfur with an average particle size less than 3 microns. These micron size particles are highly reactive on the litter, reducing the pH and free ammonia present. The result is reduced stress in the flock, which can be measured in reduced mortality over the first 14 days, as well as improved food conversion.

The ammonia reduction can be measured by testing the atmosphere. Reduction and rate of reduction is dependent upon sulfur reactivity (particle size and type of S content), soil, soil temperature and moisture content. Amount required to reach optimum pH levels will vary. Thirty gallons per house is generally sufficient to control and maintain desired pH.

Apply 1 gallon per 600 square feet of brood area. Three pails (15 gallons) is sufficient per 10,000 square feet. Water ratio should be 10:1. For best results, add approximately 1/2 water to the mix tank and then add product. Recirculation should be used at all times to insure proper mixing and uniformity in application. Equipment similar to a poultry house wash machine is sufficient. Screens should be clean and size should be 250 microns minimum. Using moderate pressure, set the machine so that sprays are directed onto the litter at approximately a 30° angle. The spray should "fluff" the litter on impact, assuring penetration. Avoid excess application in tractor turning areas. Avoid exposed metallic and concrete surfaces. Application equipment can be cleaned with plain water.