

# **MESOTRIONE 4SC**

EPA Reg. No. 42750-315

# POME FRUIT (apple, crabapple, pear, quince, cultivars, varieties and/or hybrids of these)

(Not for use in California)

## DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. This label must be in the possession of the user at the time of pesticide application.

**Note:** All applicable directions, restrictions, and precautions on the MESOTRIONE 4SC container label must be followed. This labeling contains supplemental instructions and restrictions for use of this product which may not appear on the container label. Read and follow all precautionary statements and all other information appearing on the product label.

#### AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR, Part 170. Refer to label booklet under "Agricultural Use Requirements" in the Directions for Use section for information about this standard.

#### **PRECAUTIONS**

- To avoid crop injury, apply the spray to the orchard floor and to the weeds, avoiding contact with crop foliage, stems or fruit. Contact of MESOTRIONE 4SC with the crop may result in bleaching injury that is typically temporary. Use trunk guards to protect plants until adequate bark has developed.
- 2. Specified rates are based on broadcast treatment. For band applications around trees in fruit plantings, reduce the broadcast rate of MESOTRIONE 4SC and carrier per acre in proportion to the area actually sprayed. (See Banded Applications Section.)

#### **RESTRICTIONS:**

- MESOTRIONE 4SC can only be applied in pome fruit trees that have been established for a minimum of 12 months.
- Do not apply in orchards that are stressed due to poor weather or other abiotic factors.
- Do not exceed a total of 12 fl oz per acre (0.376 lb ai/A) of MESOTRIONE 4SC per year or in a 12-month period.
- Do not exceed 6 fl oz per acre (0.188 lb ai/A) of MESOTRIONE 4SC for the first application.
- Do not exceed 3 applications per year or in a 12-month period.
- Allow at least 5 months between applications of MESOTRIONE 4SC at 6 fl oz/A, and at least 6
  weeks between applications of 6 fl oz/A, and subsequent applications of 3 fl oz/A. (Applications must
  follow one of the four programs listed in Table 6 below.)
- Do not harvest pome fruit trees within 30 days after application.
- Do not use on soils with greater than 20% gravel.
- Do not apply MESOTRIONE 4SC through any type of irrigation system.
- Do not apply MESOTRIONE 4SC by air.



## **Spray Additives**

For application to emerged weeds, the use of crop oil concentrate (COC) type adjuvant at 1% v/v or non-ionic surfactant (NIS) at 0.25% v/v is recommended. Addition of ammonium sulfate or other nitrogen-based adjuvants will increase efficacy when used in combination with COC or NIS. For more information see Spray Additives section on this label.

## **Banded Applications**

When applying a row or banded treatment of MESOTRIONE 4SC, the following formula may be used to calculate the amount per acre:

<u>band width in inches</u> X broadcast rate per acre = Amount needed per acre of field row width in inches

#### **Tank Mix Instructions**

It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

MESOTRIONE 4SC may be mixed and applied in combination with most commonly used herbicides registered for use in the approved crops in order to expand the postemergence. These tank mixtures can be used to help control or manage the development of resistant weeds. The application of mixtures or sequences of effective herbicides, with different sites of action, can provide the diversity needed for management of herbicide resistance.

Refer to individual product labels for precautionary statements, restrictions, rates, approved uses and a list of weeds controlled.

MESOTRIONE 4SC provides both postemergence and preemergence control of susceptible weeds. Best control is obtained if postemergence applications are made before weeds reach 5 inches in height (Table 1) or before germination of seed for preemergence control (Table 2). Rainfall or irrigation soon after application will enhance preemergence activity.

Table 1. Weeds Controlled With Postemergence Applications of MESOTRIONE 4SC

Weed Common Name	Weed Scientific Name	MESOTRIONE 4SC 3 fl. oz./A	MESOTRIONE 4SC 2.5-3.0 fl. oz./A + Atrazine <sup>1</sup>
Common Name	Scientific Name	Apply to Weeds <5 Inches Tall <sup>2</sup>	
Amaranth, palmer	Amaranthus palmeri	PC <sup>3</sup>	$^{\circ}_{\omega}$
Amaranth, powell	Amaranthus powellii	С	С
Amaranth, spiny	Amaranthus spinosus	С	С
Atriplex	Chenopodium orach	С	О
Broadleaf signalgrass	Urochloa platyphylla	C <sub>3</sub>	$c^3$
Buckwheat, wild	Polygonum convolvulus	PC	PC
Buffalobur	Solanum rostratium	С	С
Burcucumber	Sicyos angulatus	PC	$^{\circ}_{\omega}$
Carpetweed	Mollugo verticillata	С	С
Carrot, wild	Daucus carota	PC	С
Chickweed, common	Stellaria media	С	С
Cocklebur, common	Xanthium strumarium	С	С



Weed	Weed	MESOTRIONE 4SC 3 fl. oz./A	MESOTRIONE 4SC 2.5-3.0 fl. oz./A + Atrazine <sup>1</sup>
Common Name	Scientific Name	Apply to Weeds <5 Inches Tall <sup>2</sup>	
Crabgrass, large	Digitaria sanguinalis	C <sup>3</sup>	c <sup>3</sup>
Dandelion	Taraxacum officinale	NC	PC
Dock, curly	Rumex crispus	PC	PC
Galinsoga	Galinsoga parviflora	С	С
Hemp	Cannabis sativa	С	С
Horsenettle	Solanum carolinense	PC	С
Jimsonweed	Datura stramonium	С	С
Horseweed (marestail)	Conyza canadensis	PC	С
Knotweed, prostrate	Polygonum aviculare	PC	PC
Kochia	Kochia scoparia	PC <sup>3</sup>	c <sup>3</sup>
Lambsquarters, common	Chenopodium album	C	C
Mallow, Venice	Hibiscus trionum	NC	C
Morningglory, entireleaf	Ipomoea hederacea	PC	C
Morningglory, ivyleaf	Ipomoea hederacea	PC	C
Morningglory, pitted	Ipomoea lacunosa	PC	С
Mustard, wild	Brassica kaber	С	С
Nightshade, black	Solanum nigrum	С	С
Nightshade, Eastern black	Solanum ptycanthum	С	С
Nightshade, hairy	Solanum sarrachoides	С	С
Nutsedge, yellow	Cyperus esculentus	PC	PC
Pigweed, redroot	Amaranthus retroflexus	С	С
Pigweed, smooth	Amaranthus hybridus	С	С
Pigweed, tumble	Amaranthus albus	С	С
Pokeweed, common	Phytolacca americana	PC	PC
Potatoes, volunteer	Solanum spp.	С	С
Pusley, Florida	Richardia scabra	c <sup>3</sup>	c <sup>3</sup>
Ragweed, common	Ambrosia artemisiifolia	PC	С
Ragweed, giant	Ambrosia trifida	c <sup>3</sup>	С
Sesbania, hemp	Sesbania exaltata	С	С
Sida, prickly (teaweed)	Sida spinosa	NC	c <sup>3</sup>
Smartweed, ladysthumb	Polygonum persicaria	c <sup>3</sup>	C
Smartweed, pale	Polygonum lapathifolium	c <sup>3</sup>	С
Smartweed, Pennsylvania	Polygonum pensylvanicum	c <sup>3</sup>	С
Sunflower, common	Helianthus annuus	С	С
Thistle, Canada	Circium arvense	NC	PC
Velvetleaf	Abutilon theophrasti	С	С
Waterhemp, common	Amaranthus rudis	c <sup>3</sup>	С
Waterhemp, tall	Amaranthus tuberculatus	c <sup>3</sup>	С

<sup>&</sup>lt;sup>1</sup>MESOTRIONE 4SC tank mixture with atrazine is approved only for use on corn and sugarcane.

<sup>&</sup>lt;sup>2</sup>Under certain situations weeds can be controlled at larger than listed sizes, however to protect crop yield, manage weed resistance and provide consistent control, treat weeds before they exceed 5 inches in height.

<sup>&</sup>lt;sup>3</sup>Apply before weed exceeds 3 inches in height.



C = Control PC = Partial Control NC = Not Controlled

Table 2. Weeds Controlled With Preemergence Applications of MESOTRIONE 4L

0	6 1 1 1 6 1	MESOTRIONE 4L	MESOTRIONE
Common Name	Scientific Name	Applied Alone	4L + Atrazine <sup>1</sup>
Amaranth, palmer	Amaranthus palmeri	С	С
Amarath, powell	Amaranthus powellii	С	С
Amaranth, spiny	Amaranthus spinosus	С	С
Broadleaf signalgrass	Urochloa platyphylla	PC	PC
Buffalobur	Solanum rostratum	С	С
Burclover, California	Medicago polymorpha	С	-
Carpetweed	Mollugo verticillata	С	С
Carrot, wild	Daucus carota	С	-
Chickweed, common	Stellaria media	С	С
Chickweed, mouseear	Cerastium vulgatum	С	-
Cocklebur, common	Xanthium strumarium	PC	С
Crabgrass, large	Digitaria sanguinalis	PC	PC
Dandelion, common (seedling)	Taraxacum officinale	С	-
Deadnettle, purple	Lamium purpureum	С	-
Dock, curly	Rumex crispus	С	-
Eveningprimrose, cutleaf	Oenothera laciniata	С	-
Fiddleneck, coast	Amsinckia intermedia	С	-
Filaree, redstem	Erodium cicutarium	С	-
Filaree, whitestem	Erodium moschatum	С	-
Fleabane, hairy	Conyza bonariensis	С	-
Galinsoga	Galinsoga parviflora	С	С
Geranium, Carolina	Geranium carolinianum	С	-
Groundcherry, smooth	Physalis subglabrata	С	-
Groundsel, common	Senecio vulgaris	С	-
Henbit	Lamium amplexicaule	С	-
Horsenettle	Solanum carolinense	PC	-
Horseweed/marestail	Conyza canadensis	С	-
Jimsonweed	Datura stramonium	С	С
Kochia	Kochia scoparia	PC	С
Lambsquarters, common	Chenopodium album	С	С
Lettuce, prickly	Lactuca serriola	С	-
Mallow, common	Malva neglecta	С	-
Mayweed, chamomile	Anthemis cotula	С	-
Morningglory, entireleaf	Ipomoea hederacea	PC	С
Morningglory, ivyleaf	Ipomoea hederacea	PC	С
,	·	PC	<b>+</b>



		MESOTRIONE 4L	MESOTRIONE
Common Name	Scientific Name	Applied Alone	4L + Atrazine <sup>1</sup>
Nettle, burning	Urtica urens	С	-
Nightshade, eastern black	Solanum ptycanthum	С	С
Nightshade, hairy	Solanum sarrachoides	С	С
Pansy	Viola tricolor	С	-
Pigweed, redroot	Amaranthus retroflexus	С	С
Pigweed, smooth	Amaranthus hybridus	С	С
Pigweed, tumble	Amaranthus albus	С	С
Pineappleweed	Matricaria matricariodes	С	-
Puncturevine, common	Tribulus terrestris	С	-
Purslane, common	Portulaca oleracea	С	-
Pusley, common	Richardia scabra	PC	-
Ragweed, common	Ambrosia artemisiifolia	С	С
Ragweed, giant	Ambrosia trifida	PC	С
Redmaids	Calandria caulescens	С	-
Rocket, London	Sisymbrium irio	С	-
Shepherd's-purse	Capsella bursa-pastoris	С	-
Smartweed, ladysthumb	Polygonum persicaria	С	С
Smartweed, pale	Polygonum lapathifolium	С	С
Smartweed, Pennsylvania	Polygonum pensylvanicum	С	С
Sowthistle, annual	Sonchus oleraceus	С	-
Spanishneedles	Bidens bipinnata	С	-
Sunflower, common	Helianthus annuus	PC	С
Swinecress	Coronopus didymus	С	-
Tasselflower, red	Emilia sonchifolia	С	-
Velvetleaf	Abutilon theophrasti	С	С
Waterhemp, common	Amaranthus rudis	С	С
Vetch, common	Vicia sativa	С	-
Vetch, purple	Vicia benghalensis	PC	-
Waterhemp, tall	Amaranthus tuberculatus	С	С
Willowherb, panicle	Epilobium brachycarpum	С	-

<sup>&</sup>lt;sup>1</sup>MESOTRIONE 4SC tank mixture with atrazine is approved only for use on corn grain sorghum and sugarcane. Refer to the crop sections on this label for specific use directions.

C = Control PC = Partial Control

#### **Use Directions**

Apply as a directed or shielded spray. Avoid contact with trunk surfaces, fruit or crop foliage. Do not apply when nuts or fruits are on the ground at harvest. Ensure that the soil is settled, firm and relatively free of debris at time of application. Also ensure that the soil is free of depressions around trees where rain or irrigation water can concentrate. Apply the first application of MESOTRIONE 4SC in late fall/early winter or spring and subsequent applications utilizing one of the programs noted in the Table 3.

Table 3. MESOTRIONE 4SC Application Programs, Rates and Intervals

_	Application Rate (fl oz/A)			Application Interval
Program	1 <sup>st</sup> Application	2 <sup>nd</sup> Application	3 <sup>rd</sup> Application	(wk)
1	6	6	-	20
2	6	3	-	6
3	6	3	3	6
4	3	3	3	6



For optimum postemergence weed control, apply MESOTRIONE 4SC to actively growing weeds in tank mixture with burndown herbicides.

For effective residual weed control, MESOTRIONE 4SC must be moved into the weed seed germination zone.

Subsequent application(s) of MESOTRIONE 4SC can be made alone or in tank mixture, with the herbicides noted above, if weed emergence occurs.

Refer to individual product labels for precautionary statements, restrictions, rates, approved uses and a list of weeds controlled.

Apply MESOTRIONE 4SC in a spray volume of 10-40 gal/A.

AD011118

Manufactured for: Albaugh, LLC 1525 NE 36<sup>th</sup> Street Ankeny, IA 50021