

POISON
KEEP OUT OF REACH OF CHILDREN
READ SAFETY DIRECTIONS BEFORE OPENING OR USING

 **Sabakem**

Hexythiazox 100EC[®]

Miticide

ACTIVE CONSTITUENT: 100 g/L HEXYTHIAZOX
SOLVENT: 753 g/L XYLENE

GROUP **10A** INSECTICIDE

For the control of Two-Spotted Mite (*Tetranychus urticae*)
and European Red Mite (*Panonychus ulmi*) on apples,
pears, stone fruit and ornamentals and for control of
Two-Spotted Mite on strawberries.

IMPORTANT: READ THIS LEAFLET BEFORE OPENING OR USING THIS PRODUCT

Sabakem Pty Ltd ABN 34 151 682 138
Suite 809, Level 8, 2 Queen Street, Melbourne VIC 3000
Tel: 03 9629 3979 • Fax: 1300 242 436 • www.sabakem.com

DIRECTIONS FOR USE

RESTRAINTS:

DO NOT apply by AIRCRAFT.

DO NOT apply to ANY CROP more than once per season.

DO NOT apply to ANY CROP treated earlier in the same season with CLOFENTEZINE.

DO NOT apply to DECIDUOUS FRUIT before October 20 or after January in any season.

DO NOT use in ORCHARDS where products likely to cause MITE FLARING have been used or are planned to be used.

CROP	PEST	WHP
<p>In the following table, all rates are given for dilute spraying. For concentrate spraying, refer to the Mixing/ Application section. For details of RECOMMENDED ADULTICIDES and RESISTANCE WARNING AND MANAGEMENT refer to General Instructions.</p>		
PROGRAMME #1		
Pears	Two-Spotted Mite only	3 days
Apples and stone fruit		
PROGRAMME #2		
Apples and stone fruit	Two-Spotted Mite only	

RATE per 100 L	CRITICAL COMMENTS
	For all uses in this table: Apply by dilute or concentrate spraying equipment. Apply the same total amount of product to the target crop, whether applying this product by dilute or concentrate spraying methods.
IRRESPECTIVE OF WHETHER BIOLOGICAL CONTROL IS BEING PRACTICED.	
25 ml plus a recommended Adulticide	Apply when mites are evident but WELL BEFORE the infestation reaches a level where ECONOMIC DAMAGE IS IMMINENT.
WHERE BIOLOGICAL CONTROL IS NOT BEING PRACTICED	
Use PROGRAMME #1	
WHERE BIOLOGICAL CONTROL OF twospotted mite IS BEING PRACTICED.	
25 mL plus a non-ionic surfactant at the label rate.	Apply when mites are evident but WELL BEFORE the infestation reaches a level where ECONOMIC DAMAGE IS IMMINENT, taking into account the effectiveness of the biological control agent determined from frequent field checks, conducted by appropriately trained personnel.

CROP	PEST	WHP
PROGRAMME #3		3 days
Apples, pears and stone fruit	European Red Mite only	
Pears	Two-Spotted Mite AND / OR European Red Mite	
Apples and stone fruit	Two-Spotted Mite AND / OR European Red Mite	

RATE per 100 L	CRITICAL COMMENTS
25 mL plus a non-ionic surfactant at the label rate.	<p>IRRESPECTIVE OF WHETHER BIOLOGICAL CONTROL IS BEING PRACTICED.</p> <p>FOLLOWING treatment with OIL at recommended rates PRIOR to BUDBURST, apply to infestations of predominately EGGS and IMMATURE MOTILES in NOVEMBER.</p>
	<p>IRRESPECTIVE OF WHETHER BIOLOGICAL CONTROL IS BEING PRACTICED.</p> <p>Where European red mite is dominant use PROGRAMME #3. Where Two-Spotted Mite is dominant us PROGRAMME #1.</p>
	<p>WHERE BIOLOGICAL CONTROL IS NOT BEING PRACTICED</p> <p>Where twospotted mite is dominant use PROGRAMME #1. Where European Red Mite is dominant use PROGRAMME #3.</p>
	<p>WHERE BIOLOGICAL CONTROL OF Two-Spotted Mite IS BEING PRACTICED.</p> <p>Use PROGRAMME #3.</p>
	<p>WHERE BIOLOGICAL CONTROL OF European Red Mite IS BEING PRACTICED.</p> <p>Use PROGRAMME #1.</p>
	<p>WHERE BIOLOGICAL CONTROL OF Two-Spotted Mite AND European red mite IS BEING PRACTICED.</p> <p>Where Two-Spotted Mite is dominant use PROGRAMME #2. Where European Red Mite is dominant use PROGRAMME #3.</p>

CROP	PEST	WHP
Strawberries	Two-Spotted Mite	1 day
Ornamentals	Two-Spotted Mite AND / OR European Red Mite	–

NOT TO BE USED FOR ANY PURPOSE, OR IN ANY MANNER, CONTRARY TO THIS LABEL UNLESS AUTHORISED UNDER APPROPRIATE LEGISLATION.

RATE per 100 L	CRITICAL COMMENTS
WHERE BIOLOGICAL CONTROL IS NOT BEING PRACTICED.	
25 mL plus 40 mL TORQUE® Miticide.	Apply when mites are evident but WELL BEFORE the infestation reaches a level where ECONOMIC DAMAGE IS IMMINENT. DO NOT apply as a concentrate spray.
WHERE BIOLOGICAL CONTROL OF Two-Spotted MIS BEING PRACTICED.	
25 mL plus a non-ionic surfactant at the label rate	Apply when mites are evident but WELL BEFORE the infestation reaches a level where ECONOMIC DAMAGE IS IMMINENT. DO NOT apply as a concentrate spray.
Due to the diversity of ornamentals and growing conditions, plant reactions to Sabakem Hexthiazox 100EC® Insecticide must be checked before large scale applications are made. Sabakem Pty Ltd will not be held responsible for any adverse plant reactions caused by Sabakem Hexthiazox 100EC® Insecticide.	
WHERE BIOLOGICAL CONTROL IS NOT BEING PRACTICED.	
25 mL plus a recommended Adulticide	Apply when mites are evident but WELL BEFORE the infestation reaches a level where ECONOMIC DAMAGE IS IMMINENT. DO NOT apply as a concentrate spray.
WHERE BIOLOGICAL CONTROL OF Either or Both Pests IS BEING PRACTICED.	
25 mL plus a non-ionic surfactant at the label rate.	Apply when mites are evident but WELL BEFORE the infestation reaches a level where ECONOMIC DAMAGE IS IMMINENT. DO NOT apply as a concentrate spray.

WITHHOLDING PERIODS:

APPLES, PEARS AND STONE FRUIT: DO NOT HARVEST FOR 3 DAYS AFTER APPLICATION.

STRAWBERRIES: DO NOT HARVEST FOR 1 DAY AFTER APPLICATION.

WARNING:

Export fruit: This product should not be applied to fruit destined for export to countries where no tolerance has been established for hexythiazox in imports of the particular fruit.

GENERAL INSTRUCTIONS

Recommended Adulcicides: Adulcicides recommended for mixing with Sabakem Hexthiazox 100EC[®] Insecticide are listed below.

Recommended Adulcicide	Instructions for Application with Sabakem Hexthiazox 100EC[®] Insecticide
TORQUE [®] Miticide, propargite wettable powder	Refer to Adulcicide Label. Apply at the highest rate recommended for the particular pest, crop and State.
Dicofol emulsifiable concentrate	This mixture should only be applied under the supervision of Sabakem Pty Ltd or its authorised agents. Apply at the highest rate recommended for the particular pest, crop and State.
Summer Spraying Oils conforming to SAA Specifications for C21 NR and C23 NR grades.	Apply at 500mL / 100mL. Apply only as a dilute spray. Apply only to pears and peaches that are destined for canning. DO NOT apply more than once in any season.

MIXTURES WITH ADULTICIDES

When Sabakem Hexthiazox 100EC[®] Insecticide is applied with an adulcicide, the method of application should comply with the recommendations for both materials.

MIXING

With the agitation system operating, add the required amount of Sabakem Hexthiazox® 100EC Insecticide to the nearly filled spray vat. Add a non-ionic surfactant if required. Mix thoroughly. Add other spray material last. Top up the spray vat. The agitation system should be operated continuously until all the spray is applied. Sprays containing Sabakem Hexthiazox® 100EC Insecticides should be used within 3 hours of preparation.

APPLICATION

Dilute Spraying: Use a sprayer designed to apply high volumes of water up to the point of run-off and matched to the crop being sprayed. Set up and operate the sprayer to achieve even coverage throughout the crop canopy. Apply sufficient water to cover the crop to the point of run-off. Avoid excessive run-off. The required water volume may be determined by applying different test volumes, using different settings on the sprayer, from industry guidelines or expert advice. Add the amount of product specified in the Directions for Use table for each 100L of water. Spray to the point of run-off. The required dilute spray volume will change and the sprayer set up and operation may also need to be changed as the crop grows.

Concentrate Spraying: Use a sprayer designed and set up for concentrate spraying (that is a sprayer which applies water volumes less than those required to reach the point of run-off) and matched to the crop being sprayed. Set up and operate the sprayer to achieve even coverage throughout the crop canopy using your chosen water volume. Determine an appropriate dilute spray volume (See Dilute Spraying above) for the crop canopy. This is needed to calculate the concentrate mixing rate. The mixing rate for concentrate spraying can then be calculated in the following way:

EXAMPLE ONLY

1. Dilute spray volume as determined above: For example: 1500 L/ha
 2. Your chosen concentrate spray volume: For example 500 L/ha
 3. The concentration factor in this example is: $3 \times$ (ie. $1500 \text{ L} \div 500 \text{ L} = 3$)
 4. If the dilute label rate is 10mL/ 100L, then the concentrate rate becomes 3×10 , that is, 30 mL / 100L of concentrate spray.
- The chosen spray volume, amount of product per 100L of water and the sprayer set up and operation may need to be changed as the crop grows.
 - For further information on concentrate spraying, users are advised to consult relevant industry guidelines, undertake appropriate competency training and follow industry Best Practices.

Strawberries: Apply as a dilute spray. Increase the volume from around 1000L per sprayed hectare on small pre-flowering plants to around 2500L per sprayed hectare on large, fully developed, fruiting plants. The spray should be directed to ensure the undersides of the leaves are thoroughly covered.

Ornamentals: Apply as a dilute spray. Use sufficient volume and direct the spray to ensure that the undersides of the leaves are thoroughly covered.

BIOLOGICAL CONTROL

Recommendations for where biological control is being practiced should only be followed if one or more of the following are established in the particular orchard: *Typhlodromus occidentalis*, *Typhlodromus pyri*, *Phytoseiulus persimillis*, *Amblyseius womersleyi*. If none of these predators is established, follow the recommendations for where biological control is not being practiced.

INSECTICIDE RESISTANCE WARNING

For insecticide resistance management Sabakem Hexthiazox 100EC[®] Insecticide is

GROUP	10A	INSECTICIDE
-------	------------	-------------

a Group 10A Insecticide. Some naturally occurring mite biotypes resistant to Sabakem Hexthiazox 100EC[®] Insecticide and other Group 10A insecticides may exist through normal genetic variability in any mite population. The resistant individuals can eventually dominate the mite population if Sabakem Hexthiazox 100EC[®] Insecticide or other Group 10A Insecticides are used repeatedly. The effectiveness of Sabakem Hexthiazox 100EC[®] Insecticide on resistant individuals could be significantly reduced. Since occurrence of resistant individuals is difficult to detect prior to use, Sabakem Pty Ltd accepts no liability for any losses that may result from the failure of Sabakem Hexthiazox 100EC[®] Insecticide to control resistant mites.

It has been confirmed by sampling and bio-assay that strains of twospotted mite and European red mite resistant to hexythiazox, the active constituent of Sabakem Hexthiazox 100EC[®] Insecticide, and clofentezine have developed and are established in certain deciduous fruit and rose plantations in Australia. It is thus probable that strains of twospotted mite and European Red Mite resistant to hexythiazox and clofentezine have developed and are established in other deciduous fruit orchards, rose and other ornamental plantations and strawberry plantings in Australia.

SINCE STRAINS OF MITE RESISTANT TO HEXYTHIAZOX AND CLOFENTEZINE CANNOT BE ADEQUATELY CONTROLLED WITH SABAKEM HEXTHIAZOX 100EC[®] INSECTICIDE, the buyer of this product or agents or advisers of the buyer should not use or direct that this

product be used for the control of mites known or suspected to be resistant to either hexythiazox or clofentezine. In the event that Sabakem Hexthiazox 100EC® Insecticide or mixtures containing Sabakem Hexthiazox 100EC® Insecticide are found by the buyer or agents or advisors of the buyer to be ineffective in controlling mites, the buyer or agents or advisors of the buyer should immediately advise Sabakem Pty Ltd and should seek advice concerning effective miticides.

RESISTANCE MANAGEMENT

To delay the development of mites resistant to hexythiazox or clofentezine users of this product are requested to:

1. Endeavour to establish biological control of mites using predatory mites.
2. Limit the total number of applications of these miticides to ONE per season.
3. When using mixtures, ALTERNATE the types of adulticide used where possible.
4. Regularly inspect, maintain and calibrate application equipment to ensure it is operating efficiently. Thorough spray coverage will minimise the number of treatments needed to control mites.

COMPATIBILITY

Sabakem Hexthiazox 100EC® Insecticide plus a non-ionic surfactant and Sabakem Hexthiazox 100EC® Insecticide plus any one of the recommended adulticides are compatible with a range of commonly used pesticides. Refer to Sabakem personnel for details.

PROTECTION OF WILDLIFE, FISH, CUSTACEANS AND ENVIRONMENT

DO NOT contaminate streams, rivers or waterways with the chemical or used containers.

STORAGE AND DISPOSAL

Store in the closed, original container in a dry, cool, well-ventilated area out of direct sunlight. Triple or preferably pressure rinse containers before disposal. Add rinsings to spray tank. DO NOT dispose of undiluted chemicals on site. If recycling, replace cap and return clean containers to recycler or designated collection point. If not recycling, break, crush, or puncture and bury empty containers in a local authority landfill. If no landfill is available, bury the containers below 500mm in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots. Empty containers and product should not be burnt.

SAFETY DIRECTIONS

Will damage eyes. Will irritate the skin. Avoid contact with eyes and skin if product on skin, immediately wash area with soap and water. If product in eyes, wash it out immediately with water. When opening the container and preparing spray wear cotton overalls buttoned to the neck and wrist, washable hat, elbow-length PVC gloves and goggles. Wash hands after use. After each day's use, wash gloves, goggles and contaminated clothing.

FIRST AID

If poisoning occurs, contact a doctor or Poisons Information Centre. Phone Australia 131 126. If swallowed, do NOT induce vomiting. Give a glass of water. If skin contact occurs, remove contaminated clothing and wash skin thoroughly. Remove from contaminated area. Apply artificial respiration if not breathing. If in eyes, hold eyes open, flood with water for at least 15 minutes and see a doctor.

SAFETY DATA SHEET

Additional Information is listed in the Safety Data Sheet.

CONDITIONS OF SALE: The use of this product is beyond the control of Sabakem Pty Ltd. No warranty is expressed or implied regarding the suitability or efficiency for any purpose for which it is used by the buyer. Sabakem Pty Ltd accepts no responsibility for any consequences resulting from the use of this product. Sabakem Pty Ltd will not be held liable for any loss, injury or damage arising from the sale, supply or use of this product, whether through negligence or otherwise. No responsibility will be accepted for any consequences whatsoever resulting from the use of this product.

Additional statements required by Globally Harmonised System of Classification and Labelling of Chemicals (GHS) and Safe Work Australia: Flammable liquid and vapour. Harmful if inhaled. May cause respiratory irritation. Toxic to aquatic life.

© Registered trademarks of Sabakem Pty Ltd

APVMA Approval No: 69165/60112