KEEP OUT OF REACH OF CHILDREN READ LABEL AND SAFETY DATA SHEET BEFORE OPENING OR USING



PHEROMONE DISRUPTANT

NOMATE® QUATTRO SPIRAL IS A PHEROMONE COMMUNICATION DISRUPTANT FOR CONTROL OF THE CODLING MOTH (Cydia pomonella) AND THREE NZ LEAFROLLER (Epiphyas postivittana, Planotortrix octo, AND Ctenopsuestis obliquana).

ACTIVE INGREDIENT: A mixture of acetates and alcohols. 280.0 mg active ingredient per dispenser.

DANGER: May cause allergy or asthma symptoms or breathing difficulties if contents of spiral are inhaled. Causes serious eve irritation.

May cause long lasting harmful effects to aquatic life. NoMate® QUATTRO Spirals are NOT to be applied onto or into water. Do not contaminate streams, rivers, or water wavs with used product or packaging.

Wear protective gloves, safety glasses and cotton overalls when applying. In case of inadequate ventilation wear respiratory protection.

Read label before use.

Avoid breathing vapours.

Wash hands, face and all exposed skin after handling. Avoid release to the environment.

FIRST AID

IF SWALLOWED: Do NOT induce vomiting. Give a glass of water to drink. If vomiting occurs, give further water. For advice, contact the National Poison Centre 0800 POISON (0800 764766) or a doctor immediately.

IF ON SKIN: Remove contaminated clothing and flush skin and hair with running water. If swelling, redness, blistering or irritation occurs, seek medical advice. IF

IN EYES: Wash out immediately with water. In all cases of eye contamination, it is a sensible precaution to seek medical advice.

IF INHALED: If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTRE or doctor/physician.

In transport emergency dial 111. Police or Fire Brigade.
For specialist advice in an emergency only, call 0800
CHEMCALL (0800 243 6225), 24 Hrs. If medical advice is needed: Have product container or label at hand.

STORAGE: Keep out of reach of children. Store in unopened original foil envelopes. If NoMate® QUATTRO is to be stored for longer than 3 months, it should be held under refrigeration at or below 5°C. Reseal any unused spirals in pouches immediately after use and store under refrigeration at or below 5°C.

SAFETY DATA SHEET: A safety data sheet is available from Grochem or www.grochem.com.

DISPOSAL: Dispose of product by using as directed on this label or at an approved landfill. Dispose of packaging by burning if permitted, otherwise bury at an approved landfill.

CONDITIONS OF SALE: As no control can be exercised over the manner in which or the conditions under which this product is used, all conditions and warranties expressed or implied, other than those required by statute are excluded. No responsibility will be accepted for any damage or injury whatsoever arising from the storage, handling, application or use of this product.

Approved Pursuant to the HSNO Act 1996, No. HSR100628 (Straight Chained Lepidopteran Sex Pheromone Group Standard). See www.epa.govt.nz for approval conditions.

NoMate® QUATTRO is a registered trademark of Scentry Biologicals, Inc., Billings, MT 59102, USA.

DIRECTIONS FOR USE:

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

NoMate® QUATTRO will not directly control any pest other than the insects listed on the label.

NoMate® QUATTRO should not be used as the sole treatment against high populations of codling moth and New Zealand leafroller species.

TIMING OF APPLICATION: Apply NoMate® QUATTRO spirals before first moth emergence in spring in your region. Prediction degree day models and industry export protocols can provide assistance in application timing.

METHOD OF APPLICATION: NoMate® QUATTRO is applied by hand by wrapping the spirals around the tree stems or branches. Open the bag just prior to application. Spirals should be applied at a rate of 800 per hectare. Place spirals within 1m of the tops of trees and 0.5 to 1m within the radius of the tree canopy. Apply the NoMate® QUATTRO spirals evenly throughout the treatment block.

MONITORING: Monitor the orchard for all three Leafroller species and codling moth regularly using pheromone traps. If moth populations exceed the recommended threshold as determined by previous seasons' trapping records and consulting your local horticultural advisor, apply an insecticide registered for that purpose

OTHER IMPORTANT INFORMATION: Treat entire orchard blocks (3 hectare minimum) with NoMate® QUATTRO and not just sections within large conventionally treated orchards. Conventionally treated orchards frequently serve as sources of mated females.

If a major source of mated female codling moths are present adjacent to the field, migration of these moths may significantly reduce the level of control achieved. Sources are likely to be un-sprayed or badly controlled apple, pear, Nashi, quince, walnut or crab apples within 200 metres. Stone fruit can support low numbers of codling moth and could be a minor source of mated females when planted next to NoMate® QUATTRO treated apple or pear.

While adjacent conventionally sprayed crops are likely to be sources of mated female moths, it is important to take measures to prevent invasion of the NoMate® QUATTRO treated crop.

Either: Over treat orchard blocks which might serve as infestation sources within 200 metres with NoMate® QUATTRO (i.e. treat a strip about 50 metres wide nearest the NoMate® QUATTRO and the conventional insecticide programme).

Or: Over treat borders of NoMate® QUATTRO treated orchards adjacent to potential infestation sources with an insecticide registered for control of codling moth to a depth of about 50 metres.

Where adjacent sources of mated females are unsprayed or badly controlled, both measures will be required.

Remove or disinfest fruit bins which might be a source of moths before codling moth emergence in spring.

Fruit trees which were bulldozed in the previous season and which were hosts to codling moth can also be sources of infestation. Bum bulldozed trees which might harbour codling moth before the following spring.

Control achieved using NoMate® QUATTRO may be reduced in orchards situated on windy hill tops, on the high spots in highly undulating terrain and steeply sloping country in orchards where the codling moth populations are moderate to high. Wind can reduce the air concentration of pheromone leading to reduced control where the codling moth populations are moderate to high. Wind breaks and hail netting assist in maintaining high levels of pheromone in the air.

WITHHOLDING PERIOD: Not required when used as directed.



CROP	INSECT	RATE
Apples and pears	Codling moth (Cydia pomonella)	800 spirals/ha
Pipfruit orchards	Light Brown Apple Moth (Epiphyas postivittana), Green Headed Leafroller (Planotortorix octo), and Brown Headed Leafroller (Ctenopsuestis obliquana).	