

**HARMFUL**  
**KEEP OUT OF REACH OF CHILDREN**

**Mortar**<sup>®</sup>  
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170712

## **INSECTICIDE**

Contains: 440g/litre buprofezin in the form of a suspension concentrate

**To control mealybugs, scales, froggatt's apple  
leafhopper and whitefly on a wide range of crops**

**PLEASE READ ENTIRE LABEL BEFORE MIXING OR APPLYING. SHAKE OR STIR WELL BEFORE USE.****HAZARD CLASSIFICATIONS:** 6.1E, 6.3B, 6.9B, 9.1D**WARNING:** May be harmful if swallowed, inhaled or absorbed through the skin. May cause skin irritation. May cause organ damage from repeated oral exposure at high doses.**FIRST AID:** If swallowed DO NOT induce vomiting. For advice contact the National Poisons Centre 0800 POISON (0800 764 766) or a doctor immediately. If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. DO NOT scrub the skin. If splashed in eyes, wash out immediately with water for at least 15 minutes. If inhaled move the victim to fresh air immediately. Begin artificial respiration if breathing has stopped.**PERSONAL PROTECTION:** Avoid contact with skin or inhalation of spray mist. Gloves should be worn at all times. Wear eye protection when handling the concentrate. Ensure adequate ventilation when handling the concentrate. Remove protective clothing and wash hands and face thoroughly before meals and after work. Wash protective clothing daily after work. Do not eat, drink or smoke while using this product.**ECOTOXIC:** Harmful to aquatic organisms. Avoid contamination of any water supply with chemical or empty container.**STORAGE:** Store in original container, tightly closed, away from foodstuffs. Keep out of reach of children.**DISPOSAL:** Triple rinse empty container placing rinse water in the spray tank. If recycling, discard cap and deliver clean container to an Agrecovery depot or crush and bury in an approved landfill. Dispose of product only by using according to this label, or at an approved disposal facility.**SAFETY DATA SHEET:** Additional information is listed in the SDS available from Lonza NZ Limited or www.lonza.co.nz

Approved pursuant to the HSN Act 1996, No: HSR002487. See www.epa.govt.nz for approval conditions.

Registered pursuant to the ACVM Act 1997, No. P007544 See www.foodsafety.govt.nz for registration conditions.

**DIRECTIONS FOR USE:** All recommended rates are for high volume spraying to run off. For maximum effect, complete coverage and wetting of all surfaces inhabited by pest insects is required. For concentrate spraying, adjust dilution rates to apply the same quantity of Mortar per hectare as would have been applied through high volume spraying.**It is an offence to use this product on animals.**

CROP	INSECTS	USE RATE AND SCHEDULE
Pipfruit	Mealybugs, scales & froggatt's apple leafhopper	Mix 30 ml per 100 litres of water. Apply twice, 10 - 14 days apart, between greentip and start of pink. A third application should be applied between the middle and end of November. Do not apply after the end of November. On mature apples apply 3000 litres spray mix per hectare. On mature pears apply 5000 litres spray mix per hectare.
Grapes	Mealybugs	Mix 30 ml per 100 litres of water. Apply twice, 14 - 21 days apart, between bud movement and start of flowering. Bud movement applications should be mixed with 1% spraying oil. Apply not less than 1000 litres spray mix per hectare.
Golden queen peaches	Mealybugs	Mix 30 ml per 100 litres of water. Apply twice, 10 - 14 days apart, between bud movement and start of pink. On mature peaches apply 3000 litres spray mix per hectare.
Citrus	Scales	Mix 30 ml per 100 litres of water. Apply twice, 10 - 14 days apart, when scale is first apparent. Where populations persist, re-apply at intervals of not less than one month. Where season long spray programmes are needed, alternate Mortar with other approved insecticides to prevent possible development of resistant scale. Do not apply more than 4 applications of Mortar per season. Apply not less than 2500-3000 litres spray mix per hectare.
Kiwifruit	Armoured scales	Mix 30 ml per 100 litres of water. Apply between greentip and opening of the first female flowers. Where two applications of an insecticide are required over this period, use Mortar for only one application. Apply 2000 litres spray mix per ha.
Tamarillo	Whitefly	Mix 30 ml per 100 litres of water. Apply between pruning and before fruit set. Later applications, no closer than 28 days apart, should be made when whitefly populations exceed 20 adults per leaf. Other insecticides may be tank mixed or alternated with Mortar to control adult whitefly. Apply not less than 1000 litres spray mix per hectare.
Persimmon	Mealybugs	Mix 30 ml per 100 litres of water. Apply twice, 10 - 14 days apart between greentip and blossom. Apply not less than 2500 litres spray mix per hectare.
Glasshouse Crops: Cucumbers, eggplant, melons, peppers, pepino, tomatoes, zucchini. Ornamentals including bouvardia, gerbera, pointsettia, roses.	Whitefly	Mix 30 ml per 100 litres of water. Apply at first appearance of whitefly. If necessary repeat at an application interval of not less than three weeks. Apply no more than two applications of Mortar per crop or season.

**MODE OF ACTION:** Mortar is an Insect Growth Regulator that primarily interferes with the moulting of immature stages of mealy bug, scales and whitefly. It does not control adults. Pest populations therefore decrease with the passage of generations and results are seldom quickly visible.**SELECTIVITY:** Mortar is effective against a few sucking insects only. It is safe to predator mites, bees and most parasites or predators of target pest insects such as Encarsia wasp parasite of whitefly. Mortar is compatible with Integrated Pest Management (IPM) and Integrated Fruit Production (IFP) programmes.**APPLICATION:** Mortar can be used through conventional and concentrate spraying equipment.**MIXING:** Pour the correct volume of Mortar into the partly filled spray tank with agitator running. Complete filling and maintain agitation while spraying and during any stoppages. Use all mixed product the same day.**COMPATIBILITY:** May be tank mixed with most commonly used crop protection products except strongly alkaline materials such as Bordeaux mixture or lime sulphur.**It is an offence for users of this product to cause residues exceeding the relevant MRL in the Food Notice: Maximum Residue Levels for Agricultural Compounds.****WITHHOLDING PERIODS:** Pipfruit - 56 days; Grapes - Do not apply after the start of flowering; Golden queen peaches - Do not apply after the 1st flower buds have opened; Citrus - 14 days; Kiwifruit - Do not apply after the first female flower buds have opened; Tamarillo - 7 days; Persimmon - Do not apply after the first flower buds have opened; Tomatoes, cucurbits, peppers, eggplants - 3 days.**RESISTANCE MANAGEMENT:** **GROUP 16 INSECTICIDE**

Mortar contains a homopteran growth regulator insecticide with the inhibition of chitin biosynthesis, type 1 mode of action. Resistance to this and other group 16 insecticides could develop from excessive use. To minimise this risk use strictly in accordance with the label instructions. Avoid using group 16 insecticides exclusively and follow resistance management strategies that exist for particular pests listed as controlled on this label. Avoid unnecessary spraying and maintain good cultural control practices. See www.resistance.nzpps.org for further information.

**NOTICE TO BUYER:** The manufacturer and vendors of Mortar warrant the formulation to contain the specified active ingredient within accepted tolerance but make no warranty of any kind on the uses of material and accept no responsibility, whether the material is used in accordance with the label directions or not.