





Adjuvants

	ACTIVE INGREDIENT	SIZE	COMMENTS
ANTIFOAM "A" A free flowing ready to use liquid that may be added before foaming occurs or after foaming has occurred.	200g/L Polydimethylsiloxane as an emulsion	5L	Food grade standard, which is suitable for use in packhouse water dumps, waxing plants, etc.
GRO-WET Super Spreading Organosilicone Surfactant Blend Designed to enhance spreading and improve the deposition of all types of agro-chemicals without stomatal flooding. Especially suited with Thin-it for primary fruit thinning.	Trisiloxane alkoxyalate	5, 20L	If intended for any purpose other than in combination with Thin-it, consult Grochem prior to application.
LOKIT pH buffering (previously named Buff-IT) Lokit is a true buffering agent and not an acidifier. Application of Lokit to water for use as a spray solution will reduce pH to an acidity more suitable for agrichemicals.	Non ionic fatty acid ethoxylates	5, 20L	Use test strips to determine if use is warranted. Recheck solution pH again to confirm result is in desired range. Will not result in problematic pH reduction.
SPRAY AID Spreader-activator Water-soluble, non-ionic spreader-activator for use in improving the effectiveness of foliar applied plant growth regulators or streptomycin. It enhances uptake under conditions normally unfavorable for absorption.	Glycols & glycol ethers 915g/L as a soluble concentrate	5, 20L	For use with Ambitious, BapSol, NAA, Ethin, Gib-47, Growth and Meteor. A proven and effective product, able to be used during russet sensitive periods.
UMBRELLA Non-ionic Spreader Sticker Surfactant Biodegradable spreader / sticker / rainproof and sunscreen. Designed to extend the life of various fungicides, insecticides and foliar fertilisers.	100% Terpene resins, tall fatty acids & alkyl phenol ethoxylate	10L	Also enhances the effect of Gib-47. Refer to website for info sheet.

Biologicals


	ACTIVE INGREDIENT	SIZE	COMMENTS
 BIO-BIT DF Biological Insecticide Organic insecticide for the control of caterpillars on fruit, vegetable, and ornamental crops	<i>Bacillus thuringiensis</i> subspecies WDG	1kg	BioGro certified insecticide with activity specific to caterpillars.
BEE-SCENT Pheromone Attractant for Honeybees Liquid formulation containing attractants that can direct honeybees to treated blossoms for improved crop pollination.	Pheromones and other natural attractants	9.46L	Commonly applied to a range of crops including pip & stonefruit, kiwifruit, melons and citrus in NZ to enhance bee activity.
 BLOSSOM BLESS Fire Blight Protectant Wettable powder containing Pantoea agglomerans P10c, a beneficial bacterium. Used to reduce the incidence of fire blight on apple and pear blossom. It acts as a protectant, preventing the establishment of fire blight.	Minimum of 3x10 ¹⁰ CFU/g Pantoea Agglomerans P10c	300g	Must be applied 48hrs before infection occurs. Application should be made as soon as flowers are open. Repeat applications to maintain beneficial populations of Blossom Bless.
 CLARITY Biological Fungal Control Biological Fungal Control of Botrytis, Powdery Mildew & Sour Rot on grapes, Botrytis on berry fruit, kiwifruit & onions, & various diseases on citrus, lettuce & turf.	<i>Bacillus subtilis</i> mbi600 5.5x 10 ¹⁰ cfu/g	5 x 265g	This is a hard to kill bacterium selected for both copper and sulphur tolerance. Suitable for use in Organically managed vineyards.
 VIREX Biological insecticide Insecticidal virus for the control of larvae of Codling Moth in pipfruit.	0.7g/L <i>Cydia pomonella</i> granulovirus in the form of a SC	100ml	For use close to harvest.

Fungicides

	ACTIVE INGREDIENT	SIZE	COMMENTS
EUROZEB Protectant Mancozeb fungicide for a range of crops. High quality European produced product.	Mancozeb (750g/kg) WDG	10kg	High quality European product. Fully tested against impurities for NZ conditions.
GROCHEM DODINE For the control of Black Spot in apples and pears. Also Leaf Curl in peaches and nectarines.	400g/L Dodine	TBC	Contact Grochem for more information.
GARRISON RAPID Pruning Paste Wound dressing to protect against Silverleaf on Pip and Stonefruit, European Canker Pipfruit, Trunk disease Grapes.	2.5g/L cyproconazole & 1.0g/L iodocarb the paint form	2, 10L	Improved formulation of Garrison featuring rapid drying and improved adhesion.
GROCHEM LIME SULPHUR Fungicide, Acaricide, Insecticide Use as indicated & directed on the label. Blossom thinner to optimise fruit load.	 200g/L Sulphur as Calcium Polysulphides as a SC	20, 200, 1000L	Registered for use on grapevines for up to 2 weeks after bud break.
MEGASTAR For the control of Blackspot and Powdery Mildew of Pipfruit, brown rot of Stonefruit, Scab of Citrus and trunk disease Grapes	200g/kg flusilazole in the form of a WDG	3 x 300g	A popular choice in DMI, for curative control of blackspot in pipfruit and in grapes for preventative control of Dieback. Always follow the label.
NORDOX 75 WG Protective fungicide Registered for use in a wide range of horticulture and arable crops. Full Psa label claim for kiwifruit all season.	 750g/kg copper as Cuprous Oxide as a WDG	5, 10kg	The gold standard of coppers for control of Bacterial diseases such as Psa in kiwifruit and fungal diseases requiring maximum rain fastness e.g. European Canker.
NORSHIELD Protectant copper fungicide the control of Downy and Powdery Mildew, Blackspot, Botrytis and Sour Rot in grapes, and European Canker in apples.	450g/kg copper as cuprous oxide in the form of a water dispersible granule.	10L	Superior formulation with reduced particle size, increasing availability and activity.
PHOSGARD Systemic fungicide Effective control against Phytophthora and Pythium root rot diseases.	Buffered solution of 400g/L of Phosphorous acid. SC	20, 200, 1000L	Uptake through leaf, bark and functioning root systems.
TREE DOC 400SL Systemic fungicide pH neutral liquid phosphorous acid fungicide for control of Phytophthora and Pythium root rots. Both preventative and curative action if sufficient root systems when treated.	400g/L phosphorous acid.	5, 20L	Inject avocado trees before spring and autumn flush.
SAVVY For the control of Botrytis in grapes, bulb onions and Botrytis anthracnose and Rhizopus in strawberries.	300g/L Cyprodinil and 200g/L Fludioxonil in the form of SC	10L	A liquid solution for botrytis control in grapes.

Insecticides





	ACTIVE INGREDIENT	SIZE	COMMENTS
COMIC Insect Growth Regulator For the control of Codling Moth on apples and pears and Leafroller on apples, pears, kiwifruit, grapes and stonefruit (not cherries) and avocados.	700g/kg tebufenozide in the form of a WP	10 x 86g	MPI recommend 2 month interval between grazing Comic treated crops and stock slaughter.
EXAULT An insect growth regulator that interferes with the moulting process in the young development stages of mealy bug, scale and whitefly. Exault has no effect on adults. The action of exault is gradual, causing a decline in the population as each generation is affected. Exault is suitable for IPM programmes as it is safe to most predators and parasites. It is also safe to bees.	440g/litre buprofezin in the form of a suspension concentrate	5L	Exault is suitable for IPM programs as it is safe to most predators and parasites. It is also safe to bees.

<p>EXCEL ORGANIC OIL Season long organic mineral oil for use in insect control in avocados, citrus, kiwifruit, pip and stone fruit and for powdery mildew on grapes.</p>		<p>Organic narrow range paraffinic mineral oil</p>	<p>5, 20, 200, 1000L</p>	<p>For use in combination with an insecticide, to control insect pests such as Scale, Mealybug, Thrips and Mites.</p>
<p>EXCEL PLUS SPRAYING OIL Enhanced mineral oil with spreader for scale insect control.</p>		<p>832g/L mineral oil in the form a EC plus organo- modified siloxane spreader.</p>	<p>20, 200, 1000L</p>	<p>For use in combination with an insecticide, to control insect pests such as Scale, Mealybug, Thrips and Mites.</p>
<p>PARAMITE Selective miticide for the control of 6 spotted mites in avocados.</p>		<p>110g/L Etoxazole in the form of a SC</p>	<p>5L</p>	<p>Apply at the first sign of mite crawlers.</p>
<p>VELOCITY For the control of Leafroller on pipfruit, kiwifruit, avocado and grapes</p>		<p>50g/litre emamectin benzoate in the form of a SC</p>	<p>240ml, 1L</p>	<p>Velocity 50SC is rapidly absorbed into the leaf via translaminar activity.</p>

Herbicides

	ACTIVE INGREDIENT	SIZE	COMMENTS
<p>SOLETO Pre-emergence herbicide for the control of annual broad-leaved weeds in potatoes.</p>	<p>500g/L Metobromuron</p>	<p>1, 5, 10L</p>	<p>Assessed for efficacy and crop safety in multiple trials in Canterbury and Pukekohe over three years prior to registration</p>

Mating Disruption

	ACTIVE INGREDIENT	SIZE	COMMENTS
<p>NOMATE™ CM Codling Moth Pheromone An advanced solid matrix pheromone spiral for use as a communication disrupter for control of the Codling Moth.</p>	 <p>(E,E)-8,10-Dodecadien-1-OL</p>	<p>400 piece bag</p>	<p>Faster application time - saving labour costs.</p>
<p>NOMATE™ QUATTRO Three New Zealand Leafroller + Codling Moth Pheromone An advanced solid matrix pheromone spiral for use as a communication disrupter. For control of the Codling Moth, Three NZ Leafroller species.</p>	 <p>280mg active ingredient per dispenser + a mixture of acetates & alcohols</p>	<p>200 piece bag</p>	<p>Faster application time - saving labour costs.</p>
<p>NOMATE™ 3 SPECIES Three New Zealand Leafroller Pheromone An advanced solid matrix pheromone spiral for use as a communication disrupter for control of the LBAM, Green and Brownheaded Leafrollers.</p>		<p>400 piece bag</p>	<p>Faster application time - saving labour costs.</p>
<p>SCENTRY Monitoring Equipment Pheromone caps attracting male moths Codling Moth and Leafroller species.</p>	 <p>Caps & traps.</p>		<p>Proven and effective in all NZ situations</p>

Thinning Chemistry

	ACTIVE INGREDIENT	SIZE	COMMENTS
<p>BAPSOL 100 Plant Growth Regulator High strength plant growth regulator for use as a secondary fruitlet thinner of apples and pears.</p>	<p>100g/L 6-Benzyladenine as a SC</p>	<p>1, 5L</p>	<p>Used as a fruit size enhancer when added to certain cover sprays. Also used for thinning always combine with Spray Aid or Lokit for pH buffering.</p>
<p>ETHIN Plant Growth Regulator Plant growth regulator for bloom thinning & return bloom enhancement in apples & ripening of tomatoes, apples, kiwifruit. Also, for the suppression of annual poa seed head in turf.</p>	<p>480g/L chlorethephon in the form of a SC</p>	<p>1,5, 20L</p>	<p>Always combine with Spray Aid except when mixed with cover sprays. Do not mix with pH acidifiers such as Lokit.</p>

NAA 100 Plant Growth Regulator Primary thinner for pipfruit.	100g/L 1-naphthylacetic acid as the sodium salt in the form of a SC	1, 5L	Always combine with Spray Aid and if required pH buffering agent Lokit.
METEOR Plant Growth Regulator A photosynthesis inhibitor which when applied to apple fruitlets will result in a reduction in fruit set.	700g/kg metamitron in the form of a WDG	4 x 250g 24 x 250g	Always combine Spray aid and follow the label. Seek professional advice on product use prior to application.
THIN-IT Primary Blossom Thinner Blossom thinner to optimise crop loads in pipfruit and stone fruit crops.	782g/L Ammonium Thiosulphate as a SC	20, 200, 1000L	Use with Gro-Wet to reduce water rates and leaf burn.

Plant Growth Regulators

	ACTIVE INGREDIENT	SIZE	COMMENTS
AMBITIOUS 10SL For the suppression of Psa symptoms in kiwifruit and fruit sizing in apples	10g/L forchlorfenuron in the form of a SC	1, 5L	Can be applied to kiwifruit in combination with Nordox. See your Grochem representative for more information.
BAGA Plant growth regulator, to improve the shape of apples, increase feathering in cherries and improve flowering in calla lilies.	Gibberellic Acid 4+7 and 6 Benzyladenine	1L	The alternative to Promalin™.
BUDCYT Bud Promotion For the promotion of bud growth on blind apple wood of non-bearing trees.	1g/L Thidiazuron	1L	Use prior to bud break to site new shoot growth.
CYAN / HC50 Dormancy Breaker Proven reliable technology for dormancy breaking, flowering and harvest compression, simplifying crop management.	530g/L hydrogen cyanamide in the form of a SC	20, 200L	For use on kiwifruit and pipfruit.
ESCAPE Enhance the uptake of Calcium nitrate fertilisers applied during dormancy to assist with nitrogen driven bud development in the spring.	270g/L Decanol Alkoxyate 40g/L Calcium 190g/L Nitrogen	20, 200L	Deciduous fruit crops once winter chilling requirements have been obtained will benefit from enhanced uptake of nitrogen applied to buds during dormancy.
GROWTH For a wide range of uses in a range of crops – please refer to the label or contact Grochem.	Contains 40g/L GA3 in the form of a SC	1, 5, 20L	Typically used to develop shoots in young pipfruit blocks. Also, a convenient formulation for use in cherries for firmness and quality.
GIB-47 Russet Reducer Natural plant growth regulator that improves fruit quality by reducing the incidence of russet & improving skin finish.	10g/L Gibberellin A4 and A7 as a Soluble Concentrate	1, 5 L	Check pH of spray solution, ideally this should be 5.0-6.0. Consider in combination with Umbrella for improved results.
SUNNY Plant growth regulating material for use on avocados to increase fruit size and reduce vegetative growth.	50g/L Uniconazole-P	5 L	Sunny improves size and shape of avocados.

Fertigation – Horticulture

	ACTIVE INGREDIENT	SIZE	COMMENTS
AVO K Fully soluble chloride free fertiliser powder for early to mid-season use as part of or a full season fertigation programme.	10-5-14-1.4	25kg	A fully soluble NPK complex for use on avocados.
FERTIGATE O Fully soluble high K chloride free fertiliser powder.	6-5-30	25kg	Late season fertigation to match requirement for potassium. Chloride free

FERTIGATE W Fully soluble chloride free fertiliser powder for late season use.	15-2-25	25kg	For use on crops that are chloride sensitive.
FERTIGATE Y Formulated as a balanced chloride free feed for use in establishing young plants.	13-17-11	25kg	Early season fertigation to provide phosphate for root growth.

Foliar Fertilisers – Dry Powder

	ACTIVE INGREDIENT	SIZE	COMMENTS
BOOST-IT PLUS Similar to Boost-it but chloride free & with added sulphur and magnesium.	20-5-8+4 S + 1.2 Mg	10kg 25kg	Additional Mg for situations of high soil pH, otherwise similar to Boost-it.
BUD-WISER 3 essential trace elements of Magnesium, Boron and Zinc into one easy to use chloride free powdered product. A foliar trace element booster for particular use post- harvest.	45g B, 26g Zn, 60g Mg + trace elements	10kg	Post harvest on pipfruit but a good option pre-flowering on grapes.
CITRIMIN Specifically formulated wettable powder for the needs of citrus.	2.4% N, 5.3% P, 8.7% Mg, 4.4% Mn, 2.6% Zn, 1.6% Fe, 0.7% B, 15% S	10kg	
FINISH-IT PLUS A specially formulated chloride free foliar spray to supply high levels of plant available nutrients for supplementary feeding to ensure top yields & plant performance.	6-6-26 + 11S	25kg	Similar to Kiwi Finish but with additional Sulphur.
GRO-MAG SUPER Highly soluble, chloride free, magnesium powder with Boron & Manganese for use in orchard crops with alkaline soils.	9 Mg, 0.3 B, 0.75 Mn + 13 S	20kg	Applies a high dose of immediately plant available Magnesium.
KIWI COMBO Complex of nutrient specifically designed for kiwifruit with extra magnesium and chelated Iron for maximum results.	5.7 - 1.3 - 3.9 - 7.8 Mg, 1.5 Fe, 1.7Z N, 0.05 B, 0.04 Mn, 12.7 S	10kg	All in one trace element package for kiwifruit apply pre-flowering.
KIWI FINISH Specially formulated foliar spray to supply high levels of plant available nutrients for supplementary feeding to ensure top yields & plant performance.	6-6-30+3	10kg	Used in situations of high crop loads to provide ongoing potassium supply to leaf area thus enabling sugar accumulation.




Foliar Fertilisers – Liquid


	ACTIVE INGREDIENT	SIZE	COMMENTS
CALCIUM-175 Uniquely buffered liquid calcium used for boosting Calcium levels in apples and the correction of Calcium deficiencies in most crops, fruit and vines.	175g Calcium in the form of Calcium chloride	20, 200 1000L	Effective Calcium supply to assist with fruit storage. AA & QAC free.
CALPHOS Buffered Calcium Phosphate solution used to increase storage of horticulture crops. Contains 135g/L Phosphate & 40g/L Calcium.	135g P, 40g Ca	20, 200, 1000L	Promotes cell division in addition to providing Calcium
ENCAL 160g Ca Also contains a penetrating non-ionic surfactant for improving uptake. A liquid Calcium Nitrate solution, used for boosting Calcium levels in apples and the correction of Calcium deficiencies in most crops, fruit and vines.	16% Ca, 15% N, 2% Mg, 0.07% B, 0.06% Zn, 0.12% Fe, 0.06% Mn, 0.06% Cu	20, 200, 1000L	Liquid Calcium Nitrate.

Trace Elements

	ACTIVE INGREDIENT	SIZE	COMMENTS
SUPER BORON Boron foliar feed with added Molybdenum 15% (150g/kg) Elemental B, 0.4% (4g/kg) Elemental Mo, 12% (120g/kg) Elemental	Boron, Molybdenum	10kg	AA & QAC free Boron product for use on export apples, pears and kiwifruit.
TRACE-IT BORON Liquid Boron complex for the correction of Boron deficiencies.	150g B	5, 20, 200L	Liquid Boron for use on a range of crops excluding apples and kiwifruit.
TRACE-IT COPPER A liquid copper chelate for the correction of Copper deficiencies	75g Cu	5, 20, 200, 1000L	Has also demonstrated ability to remove leaves post harvest in industry trials on apples for European Canker management.
TRACE-IT MAGNESIUM Liquid Magnesium for the correction of Magnesium deficiencies with the benefits of Nitrogen.	80g Mg, 90g N	5, 20, 200, 1000 L	Liquid Magnesium easy to mix and compatible with most products. Being in nitrate form is more plant available than other formulations.
TRACE-IT MANGANESE Liquid Manganese for the correction of Manganese deficiencies.	190g Mn, 110g S	20, 200L	Typically required in high soil pH areas. Based on Mn Sulphate.
TRACE-IT MANGANESE N A liquid Manganese Nitrate for the correction of Manganese deficiencies.	200g as Manganese Nitrate	20, 200L	Typically required in high soil pH areas. Based on Mn Nitrate.
TRACE-IT MOLYBDENUM Liquid Molybdenum for the rapid correction of Molybdenum deficiencies.	250g Mo	1, 5L	More usually required in field crops.
TRACE-IT SULPHUR Liquid, soluble Sulphur fertiliser for the correction of Sulphur deficiencies.	300g S, 130g N	20, 200L	Avoid application in heat of the day.
TRACE-IT TOTAL Complete micronutrient fine powder formulation for the prevention & correction of trace element deficiencies in a range of crops. Application by foliar or fertigation.	63g/kg N, 15g/kg B, 4.9g/kg Cu, 12g/kg Mn, 50g/kg Fe, 12g/kg Mg, 0.5g/kg Mo, 40g/kg Zn, 141g/kg S	4, 10kg	Ideal product to use when in doubt about which trace element may be deficient.
TRACE-IT ZINC CHELATE Liquid "chelated" Zinc solution for foliar application of elemental Zinc for the correction of Zinc deficiencies.	75g Zn	5, 20, 200L	Plant safe Zinc suitable for application during the growing season.
TRACE-IT ZINC SULPHATE Concentrated Zinc Sulphate solution for foliar application of elemental Zinc for the correction of Zinc deficiencies.	150g Zn	5, 20, 200, 1000L	Usually applied in the absence of green tissue and fruit.

Organic Nutrients

	ACTIVE INGREDIENT	SIZE	COMMENTS
GRO-B BioGro certified Boron complex for the correction of Boron deficiencies.	 170g B	4 kg	Usually required in high soil pH areas.
GRO-MN BioGro certified liquid Manganese for the correction of Manganese deficiencies.	 100g Mn, 110g S	20 L	Usually required in high soil pH areas.
ORGANIC MAG SUPER Highly soluble, free flowing non-chloride magnesium powder with boron & manganese for use in orchard crops with alkaline soils.	 9 Mg, 0.3 B, 0.75 Mn + 13S	20kg	Similar to Gro-Mag Super but Organically certified.

<p>ORGANIBOR Organic Boron</p> <p>OrganiBor is a slow release boron fertiliser for use in many commonly grown crops and perennial fruit trees.</p>		<p>100g/kg boron in the form of magnesium and calcium borate compounds</p>	<p>20, 1000kg</p> <p>To assist with the control of brown heart disease in forage crops such as turnip and fodder beet.</p>
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Kiwifruit Specialities

	ACTIVE INGREDIENT	SIZE	COMMENTS
<p>CP CLEANER Water stain remover</p> <p>Technically advanced formulation of Calcium Phosphate for use pre-harvest to remove water stains on kiwifruit.</p>	<p>200g/L Phosphoric Acid</p>	<p>20, 200, 1000L</p>	<p>Apply 24 hours prior to harvest, used also to clean spray equipment down.</p>
<p>GRAZER GUARD</p> <p>A bird deterrent used to prevent crop damage during sensitive periods on kiwifruit, grapes, berry fruit, grain and seed crops and seedling emergence. The product coats the surface and is distasteful to birds. Birds have to attack the fruit (and therefore inflict damage) don't like it and move on.</p>	<p>10% Calcium as Calcium Chloride</p>	<p>5, 10L</p>	<p>The product coats the surface and is distasteful to birds.</p>
<p>JEWEL CLEAN Water stain remover</p> <p>Lactic acid based kiwifruit water stain remover. Unique low foam formulation.</p>	<p>Low foam Lactic Acid</p>	<p>20, 200, 1000L</p>	<p>Apply 2 to 3 days prior to harvest.</p>

Please refer to the web site www.grochem.com for more product specific information.
Grochem representative or horticultural supplier. Telephone **04 237 0905**.