













ADJUVANTS	Active Ingredient	Size	Comments
<b>ANTIFOAM "A" Anti-foamer</b> Aqueous emulsion of a polydimethylsiloxane fluid for use as an antifoam agent in agricultural spray systems. 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	5 L	Food grade standard, which is suitable for use in packhouse water dumps, waxing plants, etc.
<b>BUFF-IT</b> A true colour change acidifier specifically formulated for use with systemic chemistry such as Plant Growth Regulators.	Non ionic fatty acid ethoxylates	5, 20 L	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.
<b>GRO-WET Super Spreading Organosilicone Surfactant Blend</b> 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, 20 L	If intended for any purpose other than in combination with Thin-It, consult Grochem prior to application.
<b>SPRAY AID Spreader-activator</b> 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 unfavourable for absorption.	Glycols & glycol ethers 915g/L as a soluble concentrate	5, 20 L	For use with BapSol, NAA, Ethin, Gib-47 and Growth. A product proven to be effective yet able to be used during russet sensitive periods.
<b>UMBRELLA Non-ionic Spreader Sticker Surfactant</b> 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	10 L	Also enhances the effect of Gib-47. Refer to website for info sheet.
BIOLOGICALS	Active Ingredient	Size	Comments
<b>BEE-SCENT Pheromone Attractant for Honey Bees</b> Liquid formulation containing attractants that can direct honey bees to treated blossoms for improved crop pollination.	Pheromones and other natural attractants	9.46 L	Commonly applied to a range of crops including Pip & Stonefruit, Kiwifruit, Melons and Citrus in NZ to enhance Bee activity.
<b>BLOSSOM BLESS Fire Blight Protectant</b> Wettable powder containing Pantoea agglomerans P10c, a beneficial bacteria. 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 <sup>10</sup> CFU/g Pantoea Agglomerans P10c	300g bag	Must be applied before infection occurs. Application should be made as soon as flowers are open. Repeat applications to maintain beneficial populations of Blossom Bless.
<b>CLARITY Biological Fungal Control</b> Biological Fungal Control of Botrytis, Powdery Mildew & Sour rot on grapes, Botrytis on berryfruit, kiwifruit & onions, & various diseases on citrus, lettuce & turf.	 Bacillus subtilis mbi600 5.5x 10 <sup>10</sup> cfu/g	5 x 265g sachet	This is a hard to kill bacterium selected for both copper and sulphur tolerance. Therefore suitable for use in Organically managed vineyards.
FUNGICIDES	Active Ingredient	Size	Comments
<b>GARRISON RAPID Pruning paste</b> Wound dressing to protect against silverleaf in pip and stone fruit. Also protects against European Canker.	2.5g/L cyproconazole & 1.0g/L iodocard in the form of a paint.	2, 10 L	Improved formulation of Garrison featuring rapid drying and improved adhesion.
<b>GROCHEM LIME SULPHUR Fungicide, Acaricide, Insecticide</b> Use as indicated & directed on the label. Blossom thinner to optimise fruit load.	 200g/L Sulphur as Calcium Polysulphides as a soluble concentrate.	20, 200, 1000 L	Registered for use on grapevines for up to 2 weeks after bud break.
<b>MEGASTAR</b> For the control of Blackspot and Powdery Mildew of Pipfruit, brown rot of Stonefruit and Scab of Citrus.	200g/kg flusilazole in the form of a water dispersible granule.	900g (3 x 300g sachet)	One of only 2 DMI compounds recognised still effective in NZ pipfruit orchards for Scab control.
<b>NIMBUS Sulphur</b> For the control of powdery mildew and rust diseases on apples, stonefruit, grapes, tamarillos, peas and other vegetables.	 800 g/kg sulphur in the form of a water dispersible granule	10kg	BioGro certified high quality Sulphur.
<b>NORDOX 75 WG Protective fungicide</b> 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 water dispersible granule.	5, 10 kg	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.
<b>PHOSGARD Systemic fungicide</b> Effective control against Phytophthora and Pythium root rot diseases.	Buffered solution of 400g/L of Phosphorous acid present as the mono & di potassium salts as a Soluble Concentrate	20, 200, 1000 L	Uptake through leaf, bark and functioning root systems.

<b>TREE DOC 400SL</b> <i>Systemic fungicide</i> 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, present as the mono and di potassium salts, in the form of a soluble concentrate.	5, 20 L	Inject Avocado trees before spring and autumn flush.
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INSECTICIDES			
	Active Ingredient	Size	Comments
<b>BIO-BIT DF</b> <i>Biological Insecticide</i> Organic insecticide for the control of caterpillars on fruit, vegetable and ornamental crops. Active Ingredient: 32000 International Units Bacillus thuringiensis subspecies kurstaki (H-3a, 3b HD1) /mg in the form of a water dispersible granule.	 32000 International Units Bacillus thuringiensis subspecies kurstaki (H-3a, 3b HD1) /mg in the form of a water dispersible granule	1 kg	BioGro certified insecticide with activity specific to caterpillars.
<b>COMIC</b> <i>Insect Growth Regulator</i> 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 wetttable powder.	10 x 86g WSB	MPI recommend 2 month interval between grazing Comic treated crops and stock slaughter.
<b>EXCEL OIL</b> A safe effective mineral oil for in-season use for insect control on citrus, kiwifruit, avocados pip and stone fruit and powdery mildew on grapes.	Narrow range paraffinic mineral oil	5, 20, 200, 1000 L	
<b>EXCEL ORGANIC OIL</b> Season long organic mineral oil for use in insect control in avocados, citrus, kiwifruit, pip and stone fruit and for powdery mildew on grapes.	 Organic narrow range paraffinic mineral oil	5, 20, 200, 1000 L	
<b>EXCEL PLUS</b> <i>Surfactant</i> Enhanced mineral oil with spreader for insect control.	832g/L mineral oil in the form of an emulsifiable concentrate plus organo-modified siloxane spreader.	20, 200, 1000 L	For use in combination with insecticides such as Exault.
<b>HUNTER</b> <i>Insect Growth Regulator</i> A target specific insecticide for the control of codling moth on pipfruit, leafrollers on avocados, grapes, kiwifruit and pipfruit.	240g/L Methoxyfenozide in the form of a suspension concentrate.	1, 5 L	
<b>PARAMITE</b> Selective miticide for the control of 6 spotted mites in avocados.	110g/L Etoxazole in the form of a soluble concentrate	5 L	Effective against all life stages.
<b>VIREX</b> <i>Biological insecticide</i> Insecticidal virus for the control of larvae of codling moth in Pipfruit.	 0.7g/L Cydia pomonella granulovirus in the form of a suspension concentrate	100 ml bottle	For use close to harvest.

MATING DISRUPTION			
	Active Ingredient	Size	Comments
<b>NOMATE™ CM</b> <i>Codling Moth Pheromone</i> An advanced solid matrix pheromone spiral for use as a communication disruptant for control of the Codling Moth (Cydia pomonella) "	 (E,E)-8,10-Dodecadien-1-OL	400 piece bag	Faster application time - saving labour costs.
<b>NOMATE™ QUATTRO</b> <i>Three New Zealand Leafroller + Codling Moth Pheromone</i> An advanced solid matrix pheromone spiral for use as a communication disruptant for control of the Codling Moth (Cydia pomonella), Three NZ Leaf roller (Epiphyas postvittana) (Planotortrix octo) (Ctenopsuestis obliquana)."	 280mg active ingredient per dispenser + a mixture of acetates & alcohols	200 piece bag	Faster application time - saving labour costs.
<b>NOMATE™ 3 Species</b> <i>Three New Zealand Leafroller Pheromone</i> An advanced solid matrix pheromone spiral for use as a communication disruptant for control of the LBAM, green and brown headed leafrollers "	 280mg active ingredient per dispenser + a mixture of acetates & alcohols	400 piece bag	faster application time - saving labour costs.
<b>SCENTRY</b> <i>Monitoring Equipment</i> Caps & traps.			

THINNING CHEMISTRY			
	Active Ingredient	Size	Comments
<b>BAPSOL</b> <i>Plant Growth Regulator</i> Plant growth regulator for use as a secondary fruitlet thinner of apples and pears.	20g/L 6-Benzyladenine as a soluble concentrate	5, 20 L	Also for use as a fruit size enhancer when added to certain cover sprays. When used for thinning always combine with Spray Aid.

<b>BAPSOL 100 Plant Growth Regulator</b> High strength plant growth regulator for use as a secondary fruitlet thinner of apples and pears. <b>This product is 5 x concentrate of other Benzyladenine formulations.</b>	100g/L 6-Benzyladenine as a soluble concentrate	1, 5 L	Also for use as a fruit size enhancer when added to certain cover sprays. When used for thinning always combine with Spray Aid.
<b>ETHIN Plant Growth Regulator</b> Plant growth regulator for bloom thinning & return bloom enhancement in apples & ripening of tomatoes, apples, kiwifruit. Also for the suppression of annual poa seedhead in turf.	480g/L chlorethephon in the form of a soluble concentrate	1, 5, 20 L	Always combine with Spray Aid except when mixed with cover sprays. Do not mix with acidifiers such as Buff-it.
<b>NAA 100 Plant Growth Regulator</b> Primary thinner for pipfruit.	100g/L 1-naphthylacetic acid as the sodium salt in the form of a soluble concentrate	1, 5 L	Always combine with Spray Aid.
<b>METEOR Plant Growth Regulator</b> A photosynthesis inhibitor which when applied to apple fruitlets will result in a reduction in fruit set.	700g/kg metatritron in the form of a water dispersible granule.	4 x 250g 24 x 250g	
<b>THIN-IT Primary Blossom Thinner</b> Blossom thinner to optimise crop loads in pipfruit and stonefruit crops.	782g/L Ammonium thiosulphate as a soluble concentrate	20, 200, 1000 L	Use with Gro-Wet to reduce water rates and leaf burn.

PLANT GROWTH REGULATORS	Active Ingredient	Size	Comments
<b>AMBITIOUS 10SL Plant Growth Regulator</b> For fruit sizing of kiwifruit and apples. A limited label claim in kiwifruit for Psa.	10g/L forchlorfenuron in the form of a soluble concentrate	1,5 L	Can be applied to kiwifruit in combination with Nordox.
<b>BAGA</b> Plant growth regulator, to improve the shape of apples, increase feathering in cherries and improve flowering in Calla lillies.	Gibberellic Acid 4+7 and 6 Benzyladenine	1 L	The alternative to Promalin™.
<b>BUDCYT Bud Promotion</b> For the promotion of bud growth on blind apple wood of non-bearing trees."	1g/L Thidiazuron	1 L	Use prior to bud break to site new shoot growth.
<b>CYAN / HC50 Dormancy Breaker</b> Proven reliable technology for dormancy breaking, flowering and harvest compression, simplifying crop management.	530g/L hydrogen cyanamide in the form of a soluble concentrate	20, 200 L	For use on Kiwifruit and pipfruit.
<b>GROWTH Plant Growth Regulator</b> 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 soluble concentrate.	1, 5, 20 L	Typically used to develop shoots in young pipfruit blocks. Also a convenient formulation for use in Cherries,
<b>GIB-47 Russet Reducer</b> 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.
<b>SUNNY</b> Plant growth regulating material for use on avocados to increase fruit size and reduce vegetative growth.	50g/l Uniconazole-P	5 L	Sunny means Money through increased size potential.

FERTIGATION - Horticulture	Active Ingredient	Size	Comments
<b>FERTIGATE O</b> Fully soluble high K fertiliser powder.	7-6-29	25kg	Later season fertigation to match requirement for potassium.
<b>FERTIGATE W</b> Fully soluble chloride free fertiliser powder for late season use.	15-2-25	25kg	For use in crops that are chloride sensitive.
<b>FERTIGATE Y</b> 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
<b>BOOST-IT Foliar</b> Foliar feed for foliar applications to horticulture crops for early and mid season use. Contains growth stimulants Tricontonol & Gibberellins.	23-6-10+5	10kg	Can be used in a tank mix with most other sprays to give tree crops a vegetative boost when under stress.
<b>BOOST-IT PLUS Foliar</b> Similar to Boost-it but chloride free & with added sulphur and magnesium.	20-5-8+4S +1.2Mg	10kg 25kg	Additional Mg for situations of high soil pH, otherwise similar to Boost it.



<b>BUD-WISER</b> 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.	45gB, 26gZn, 60gMg + trace elements	10kg	Post Harvest on pipfruit but a good option pre-flowering on Grapes.
<b>CITRIMIN</b> 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	
<b>FINISH-IT Foliar</b> 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.
<b>FINISH-IT PLUS Foliar</b> 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 + 17S	25kg	Similar to Finish It but with additional Sulphur.
<b>GRO-MAG SUPER</b> Highly soluble, chloride free, magnesium powder with boron & manganese for use in orchard crops with alkaline soils.	9 Mg, 0.3B, 0.75 Mn + 13S	20kg	Applies a high dose of immediately plant available Magnesium.
<b>KIWICOMBO</b> Complex of nutrient specifically designed for Kiwifruit with extra magnesium and chelated Iron for maximum results.	5.7 - 1.3 - 3.9 - 7.8Mg, 1.5Fe, 1.7Zn, 0.05B, 0.04Mn, 12.7S	10kg	All in one trace element package for Kiwifruit apply pre-flowering.
<b>ORGANIC MAG SUPER</b> Highly soluble, free flowing non-chloride magnesium powder with boron & manganese for use in orchard crops with alkaline soils.	9 Mg, 0.3B, 0.75 Mn + 13S	20kg	Similar to Gro-Mag Super but Organically certified.



FOLIAR FERTILISERS – Liquid	Active Ingredient	Size	Comments
<b>CALCIUM-175</b> 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 chloride	20, 200 1000 L	Effective Calcium supply to assist with fruit storage. AA & QAC free.
<b>CALPHOS</b> Buffered Calcium Phosphate solution used to increase storage of horticulture crops. Contains 135g/L Phosphate & 40g/L Calcium.	135gP, 40gCa	20, 200, 1000 L	Promotes cell division in addition to providing Calcium
<b>ENCAL 160gCa</b> 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, 1000 L	Liquid calcium nitrate.
<b>PHOS-POT 2-11-19 Foliar fertiliser</b> Liquid P and K foliar fertiliser with enhanced N for use on fruit trees field and vegetable crops.	400g/L Phosphorous Acid with urea	5, 20, 200, 1000 L	An effective phosphate foliar fertiliser to promote plant health.

TRACE ELEMENTS	Active Ingredient	Size	Comments
<b>MOBSTAR</b> High concentration solution of Molybdenum and chelated Boron for the rapid correction of both trace elements.	100g B, 25g Mo	20, 200 L	For use especially on Red Wine grapes to assist fruit set.
<b>SUPER BORON</b> Boron foliar feed with added Molybdenum	15% (150g/kg) Elemental B, 0.4% (4g/kg) Elemental Mo, 12% (120g/kg) Elemental N	10, 18 kg	AA & QAC free Boron product for use on export Apples, Pears and Kiwifruit.
<b>TRACE-IT BORON</b> Liquid Boron complex for the correction of Boron deficiencies.	150g Boron	5,20,200 L	Liquid Boron for use on a range of crops excluding Apples and Kiwifruit.
<b>TRACE-IT COPPER</b> A liquid copper chelate for the correction of copper deficiencies	75gCu	5, 20, 200. 1000 L	Has also demonstrated ability to remove leaves post harvest in industry trials on Apples for European Canker management.
<b>TRACE-IT MAGNESIUM</b> Liquid Magnesium for the correction of Magnesium deficiencies with the benefits of nitrogen.	80gMg, 90gN	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.
<b>TRACE-IT MANGANESE</b> Liquid Manganese for the correction of Manganese deficiencies.	190gMn, 110gS	20, 200 L	Typically required in high soil pH areas. Based on Mn Sulphate.

<b>TRACE-IT MANGANESE N</b> A liquid Manganese Nitrate for the correction of Manganese deficiencies.	200g as Manganese Nitrate	20, 200 L	Typically required in high soil pH areas. Based on Mn Nitrate.
<b>TRACE-IT MOLYBDENUM</b> Liquid Molybdenum for the rapid correction of Molybdenum deficiencies.	250gMo	1, 5 L	More usually required in field crops.
<b>TRACE-IT POTASSIUM</b> Liquid Potassium for the correction of Potassium deficiencies	300gK, 250gS	20, 200, 1000 L	An alternative to Finish It where Potassium is required.
<b>TRACE-IT SULPHUR</b> Liquid, soluble Sulphur fertiliser for the correction of Sulphur deficiencies.	300gS, 130gN	20, 200 L	Avoid application in heat of the day.
<b>TRACE-IT TOTAL</b> Complete micronutrient fine powder formulation for the prevention & correction of trace element deficiencies in a range of crops. Application by foliar or fertigation.	63g/kgN, 15g/kgB, 4.9g/kgCu, 12g/kgMn, 50g/kgFe, 12g/kgMg, 0.5g/kgMo, 40g/kgZn, 141g/kgS	4, 10 kg	Ideal product to use when in doubt about which trace element may be deficient.
<b>TRACE-IT ZINC CHELATE</b> Liquid "chelated" Zinc solution for foliar application of elemental Zinc for the correction of Zinc deficiencies.	75g Zn	5, 20, 200 L	Plant safe Zinc suitable for application during the growing season.
<b>TRACE-IT ZINC SULPHATE</b> Concentrated Zinc Sulphate solution for foliar application of elemental Zinc for the correction of Zinc deficiencies.	150g Zn	5, 20, 200, 1000 L	Usually applied in the absence of green tissue and fruit.

ORGANIC NUTRIENTS		Active Ingredient	Size	Comments
<b>GRO-B</b> BioGro certified Boron complex for the correction of Boron deficiencies.		170g B	4 kg	Use warm water to dissolve.
<b>GRO-MN</b> BioGro certified liquid Manganese for the correction of Manganese deficiencies.		100gMn, 110gS	20 L	Usually required in high soil pH areas.

KIWIFRUIT SPECIALITIES		Active Ingredient	Size	Comments
<b>CP CLEANER</b> <i>Water stain remover</i> Technically advanced formulation of Calcium Phosphate for use pre-harvest to remove water stains on kiwifruit.		200g/L Phosphoric acid	20, 200, 1000 L	Apply 24 hours prior to harvest, used also to clean spray equipment down.
<b>JEWEL CLEAN</b> <i>Water stain remover</i> Lactic acid based Kiwifruit water stain remover. Unique low foam formulation.		Low foam lactic acid	20, 200, 1000 L	Apply 2 to 3 days prior to harvest.

Please refer to the web site [www.grochem.com](http://www.grochem.com) for more product specific information.  
Grochem representative or horticultural supplier. Telephone: 04 237 0905.