



FERTILISERS

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(NOTE:- Analyses expressed in the following fertiliser sections are typical analyses, actual percentages may change slightly, depending on source material.)

AMMONIUM NITRATE PRODUCT LICENCE (SSAN)

As from January 1, 2006, an SSAN licence is required by all stockists, transporters and users of Security Sensitive Ammonium Nitrate (SSAN) products. The regulations will apply for all fertilisers containing more than 45% ammonium nitrate or more than 56% for those containing calcium ammonium nitrate. Licence applications are available by contacting Workcover NSW at www.workcover.nsw.gov.au or phone-131 050.

ANALYTICAL TESTING & INTERPRATATION

We utilise the facilities and services provided by any of four recognised analytical laboratories: Incitec, Phosyn Analytical, Sydney Environmental & Soil Laboratory P/L & Serv-Ag Analytical Services

- **N-CHECK** - Accurate, quick evaluation of available soil nitrogen levels in the root zone. N-check is conducted prior to planting and/or prior to rapid growth stages in the crop. Results are faxed or e-mailed within approx. 36 hours of sample being sent.
- **NU-TEST PLANT SAP**- Quick turnaround test, resulting in an accurate guide for monitoring and managing crop fertility. Standard test is nitrogen (nitrate), phosphorous, potassium, calcium, magnesium, zinc, boron, copper, sulphur (sulphate), manganese, molybdenum, iron & sodium. Sap brix and other elements e.g. chloride are tested upon request.
- **PLANT TISSUE** - Standard analysis includes- nitrate, chloride, boron, calcium, copper, iron, magnesium, manganese, phosphorous, potassium, sodium, sulphur, total N, zinc.
- **TOPSOIL** - For horticulture, pasture & agricultural cropping- includes nitrate, phosphorous, sulphur, exchangeable cations, pH, chloride, EC, organic carbon, colour, texture, boron, DTPA trace elements, ECSE.
- **WATER** - Standard test - includes PH, EC, carbonate, bicarbonate, nitrate, chloride, aluminium, boron, copper, fluoride, iron, magnesium, manganese, phosphorous, potassium, sodium, sulphur, zinc, calcium.

CUSTOM BLENDING

Custom blending is offered to our clients for both solids and liquid fertilisers.

Minimum order

- Granular, 1 tonne
- Liquids 1,000L
- Soluble Solids, 250kg



PATON FERTILIZERS & ACE OHLSSON

- ✓ Supplying quality fertilisers at great value for money
- ✓ Custom blends available for greater than 1 tonne
- ✓ Providing exceptional service for over 100 years

CUSTOM BLENDS

Can be created to suit your specific fertiliser requirements

Paton Fertilizers has the unique ability to add the latest new technologies to your fertiliser blend:

- Pedocare[®] – Increased Water Efficiency
- Entec[®] – Slow Release Nitrogen
- NutriSmart[®] – Active Eco Fertiliser
- Mother Earth[®] – Organic Granulated Fertiliser
- Full range of major, secondary and trace elements
N, P, K, Ca, S, Mg, Fe, Zn, Mn, Cu, Mo, B, Cl

**Call Ace on (02) 9746 6640
to create a custom blend to suit your needs**

Paton Fertilizers also supplies a complete range of bagged fertilisers including:



Specialty Horticulture Blends
Organic Fertiliser Blends
Soluble Nutrafeed[®] range
Controlled release Multicote[®]
Home Garden Fertilisers
Granular Soil Conditioners

**For more information on the Paton Fertilizers range please visit
www.paton.com.au**

CONSUMER PACKS

Product	Nutritional Analysis (%)													Pack	
	N	P	K	S	Ca	Mg	Zn	Fe	Cu	B	Mn	Mo	+TE	Sizes	
AGRICULTURAL LIME					39.0	0.1								25 kg	
AGRIGRANULES (Dyn. Lift.)	3.0	2.4	1.5	1.0	7.7									35 kg	
AGRIPELLETS (Dyn. Lift.)	3.0	2.4	1.5	1.0	7.7									35 kg	
AQUASOL	23.0	4.0	18.0										√	25 kg	
AZALEA & CAMELLIA (+ water saving grans.)	7.6	3.4	10.7	16.0	7.3								√	25 kg	
BANANA SPECIAL (+ water saving grans.)	7.1	5.6	5.4	12	9.4	0.5		0.1						25, 50 kg	
BLOOD & BONE (premium)	5.4	5.5	0.2	0.1	11.5	0.1		0.2						25, 50 kg	
CITRUS XXX GOLD (+ water saving grans)	9.3	4.7	8.0	10.0	7.2	1.6								25 kg	
DOLOMITE					22.5	11.4								25 kg	
DYNAMIC LIFTER LONG LIFE	5.0		3.0	5.0	2.0	5.5							√	35 kg	
GYPSUM (natural)				15.5	20.1	0.2		0.1						25, 50 kg	
MULTIPURPOSE No. 20 (+ water saver grans.)	10.4	3.5	5.5	16.5	7.4									25 kg	
NATIVE PLANT FOOD (+ water saving grans.)	9.2	2.3	5.7	12.9	8.0	1.6							√	25 kg	
NO. 17 LAWN FOOD (+ water saving grans.)	9.1	3.9	4.9	17.5	8.5									25, 50 kg	
ORCHID FERT A	11.8	13.2	16.6										√	3 kg	
ORCHID FERT B	30.0	4.4	8.3										√	3 kg	
ROSE FOOD (+ water saving grans.)	8.7	2.9	8.6	14.0	5.5	0.9								20 kg	
SEASOL SEAWEED CONCENTRATE 100%														1, 5 L	
SULPHATE OF AMMONIA (fine)	20.5			24										25, 50 kg	
WEEDER-FEEDER	4.9			8.5				4.5						25 kg	

CONTROLLED RELEASE

Product	Nutritional Analysis (%)													Pack	
	N	P	K	S	Ca	Mg	Zn	Fe	Cu	B	Mn	Mo	+TE	Sizes	
AGROBLEN NS STD (3-4 month)	15	3.4	13			2.4								25 kg	
AGROBLEN NS STD (5-6 month)	15	3.5	13.3			3								25 kg	
AGROBLEN NS STD (8-9 month)	22	3	9			1.2								25 kg	
AGROBLEN (12-14 month)	15	3.9	7.5			1.8								25 kg	
AGROBLEN NS FRUIT (8-9 month)	19	4	8			2.4								25 kg	
AGROBLEN S'BERRY SUMMER (12-14 mnth)	19	2.1	8.3			1.8								25 kg	
AGROBLEN S'BERRY WINTER (8-9 month)	19	3	9			1.8								25 kg	
AGROBLEN FORESTCOTE (12-14 month)	19	2.1	8.3			1.8								25 kg	
MULTICOTE BLUE (4 month release)	19.8	6.0	14.2											20 kg	
MULTICOTE GREEN (4 month release)	25.8	2.0	14.2											20 kg	
MULTICOTE NK (4 month release)	12.0		35.6											25 kg	
MULTICOTE 4 + (4 month release)	16.0	4.0	10.0	3.0									√	25 kg	
MULTICOTE 4 MINI + (4 month release)	19.0	3.0	9.0	6.4									√	25 kg	
MULTICOTE 6 + (6 month release)	18.0	3.0	10.0	3.4									√	25 kg	
MULTICOTE 8 + (8 month release)	18.0	3.0	10.0	3.4									√	25 kg	
MULTICOTE 8 LOW P + (8 month release)	18.0	1.3	15.0	1.9									√	25 kg	
MULTICOTE 12 + (12 month release)	15.0	3.0	12.0	1.8									√	25 kg	
NUTRICOTE GREY 90 day @ 20°C	16.0	4.4	8.3											25 kg	
NUTRICOTE PURPLE 130 day @ 20°C	20.0		10.8											25 kg	
NUTRICOTE BLUE 180 day @ 20°C	16.0	4.4	8.3											25 kg	
NUTRICOTE BLACK 400 day @ 20°C	16.0	4.4	8.3											25 kg	
OSMOCOTE (3-4 month)	14.0	6.1	11.6											25 kg	
OSMOCOTE (5-6 month)	17.0	4.4	10.0											25 kg	
OSMOCOTE (8-9 month)	18.0	2.6	10.0											25 kg	
OSMOCOTE EXACT STANDARD (5-6 mnth)	15.0	4.0	7.5										√	25 kg	
OSMOCOTE EXACT STANDARD (8-9 mnth)	15.0	4.0	7.5										√	25 kg	
OSMOCOTE EXACT MINI (3.4 month)	16.0	3.5	9.1										√	10, 25 kg	
OSMOCOTE PLUS LO P (8-9 month)	17.0	1.6	8.7										√	25 kg	
OSMOCOTE PLUS LO P (12-14 month)	17.0	1.5	8.5										√	25 kg	
TRIABON 3M	16.0	3.0	10.0										√	25 kg	
SAFE N	35.6													20 L	
SIERRABLEN FLORA (8-9 mnth)-landscapes	21.0	1.8	9.0											20 kg	
SPORTSTURF + IRON	27.0	1.0	3.0	9.0				2.0						20 kg	

HORTICULTURAL CROP BLENDS

Product	Nutritional Analysis (%)													Pack Sizes		
	N	P	K	S	Ca	Mg	Zn	Fe	Cu	B	Mn	Mo	+TE			
CAL-GRAN 50/50 (S)	16.9		14.4	8.7	4.4										40, 1T	kg
CALTRAM Mg	19.7			12.4	3.6	2.9									25, 1K	kg
CAL-LETTUCE	10.1	7.2	8.9	7.2	1.2										25, 1K	kg
CAL-TRAM K	16.5		11.8	11.2	3.6	0.5									25, 1K	kg
COUNTRY BLUE NPK FERT	12.3	3	5	8.1		1.8		0.4		0.15					25, 1.2k	kg
DYNAMIC LIFTER CROP & VINE LIFT.	10	6	3	7	3										35, 1K	kg
DYNAMIC LIFTER ORCHARD LIFTER	8	3	8	6	4										35, 1K	kg
No. 19 + Mg	13.7	5.8	5.9	5.9	0.9	1.0									25	kg
G5 FERTILISER	5.0	6.0	4.5	13.3	13.2										40, 1K	kg
GREEN BANANA	8.1	4.9	9.0	4.0	10.1										25, 1K	kg
GROWER 12	10.7	7.9	14.5	8.9											40, 1K	kg
GROWER 16 + Mg	14.4	6.4	5	14.1	2.2										40, 1K	kg
KTRAM + Mg	20.1		14.0	10.8		0.8									25, 1K	kg
MULTIGRO	10.1	3.5	5.5	16.3	7.8										40, 1K	kg
PATONS CORN SPECIAL	12.4	2.2	15.8	9.9	0.1	4.3								√	50, 1K	kg
PATONS N & K	18.4		14.5	0.7		0.9									25, 1K	kg
PROPABUNCH	13.6	2.3	17.5	2.8	5										40, 1K	kg
MOTHER EARTH FRUIT	13.7	1.9	14.8	7.4	0.8	0.5	0.03	0.06	0.03	0.01	0.03	0			25, 1K	kg
NITROPHOSKA BLUE SPECIAL	12	5.2	14.1	6	4.3	1.2	0.01	0.05		0.02					40, 1K	kg
NITROPHOSKA PERFEKT	15.0	2.2	16.6	8.0	3.0	1.2	0.01	0.10		0.02					25	kg
NO. 27 (RED)	11.3	5.9	16.0	10.2											25, 1K	kg
RUSTICA PLUS	12.0	5.0	14.0	5.0	4.5	1.2	0.10			0.02					40, 1K	kg
SHIRLEYS BANANA SPECIAL	6.7	4.3	5.3	12.0	9.4										40, 1K	kg



Setting the standard in high quality liquid fertilisers

LIQUID / FLOWABLES

APPLICATION KEY:- F = Foliar, I = Irrigation (Fertigation), D = Dip, SD = Soil Drench (guides only)

Product	Key	Nutritional Analysis (%)													Pack Sizes		
		N	P	K	S	Ca	Mg	Zn	Fe	Cu	B	Mn	Mo	+TE			
AGRIPOTASH	F, I			41.5												10, 210	L
AGRODEX BORON (Organic Acids)	F, I										10					5, 20, 200, 1000	L
AGRODEX CaB (Organic Acids)	F, I	5				10					0.8					20, 200, 1000	L
AGRODEX K35 (+ organic & amino acids)	F, I			35.0												20, 200, 1000	L L
AGRODEX MOLY	F, I		10.0										24.0			5, 20	L
AGRODEX P & K (Organic Acids)	F, I		19	21							10					20, 200, 1000	L
AGRODEX SKO (20% Silica)	F, I			13												20, 200, 1000	
AGRO N32 + HUMIC (3% Humic Acid)	F, I	32														20, 200, 1000	L
BALANCE NITRATE	F, I	12.2				18.3										20, 200	L
BORTRAC	F	6.0									15.0					10, 210	L
CALTRAC 400	F	6.9				40.0										10, 210	L
CARBO CAL (+ Organic & amino acids)	F, I					10.0										20, 200	L
COPTREL 500	F									50.0						10	L
EASY CAL	F, I	12.6				18.1										200, 1K	L
EASY N	F, I	42.5														200, 1K	L
FOLIAR NITROPHOSKA	F	12.0	2.1	7.0	1.0		0.1							√	5, 20, 200	L L	
GOEMAR BM86 (Seaweed cream - GA14)	F, I										1.6		0.0			10	L
GROCAL MGB	F	10.0				17.0	4.0				0.1					5, 20, 200,	L L

LIQUID / FLOWABLES

APPLICATION KEY:- F = Foliar, I = Irrigation (Fertigation), D = Dip, SD = Soil Drench (guides only)

Product	Key	Nutritional Analysis (%)													Pack Sizes	
		N	P	K	S	Ca	Mg	Zn	Fe	Cu	B	Mn	Mo	+TE		
GROMATE (Humic/carboxylis/amino acid)	F, I														20, 200	L
GROWFLOW 40H (+ Humic acid)	I	30.0	10.0												20, 200	L
GROWFLOW 42H (+ Humic acid)	I	5.5	10.0	27.0											20, 200	L
GROWFLOW 44H (+ Humic acid)	I	15.0	7.0	13.0											20, 200	L
GROWFLOW 45H (+ Humic acid)	I	14.0	15.0	11.0											20, 200	L
GROWFLOW 47H (+ Humic acid)	I	15.0	4.0	23.0											20, 200	L
HIGH NK	F, I	18.0	6.0	13.5											20, 200	L
HIGH PK ULTRA	F, I		18.0	37.0											20, 200	L
HYDROMAG LIQUID	F	6.9					30.0								10, 210	L
HYDROPHOS	F		19.2	6.1			6.0								10, 210	L
K-FORTE (+ humic acid)	F		5.0	20.0											18.92	L
KELPAK 100 (100% Seaweed)	F, I, D														5, 20, 200	L
KICKSTART BIO 25 (25% Humic Acid)	I	7.5	5	2	5.86		1.27	3.25	0.19	0.2	0.46	0.87	0.03		20, 200, 1000	L
LIQUID CALCIUM	F, I	13.3				18.3									20, 200	L
LIQUID SILICA (12% Silica)	F, I	5.0		9.9											20, 200	L
MAG-FLO	F, I						30.0								20, 200	L
MANTRAC 500	F	6.9										50.0			10	L
MOLYTRAC LIQUID	F, I		11.0										25.0		1, 5, 10	L
NATRAKELP SEAWEED	F, I														25, 200	L
NITRO HUMUS 323 (+3% Humic acid)	F, I	32.0													20, 200, 1000	L L
NITRO IRON 27	F, I	14.0			6.5				13.0						20, 200	L
PENTAFLO	F, I	4.3	15.0			12.5	3.8	2.5			1.3				10	L
PITSTOP	F, I, D					17.0									20, 200	L
PITSTOP PLUS	F, I, D					16.0					0.2				20, 200	L
PREMIUM	F, I		15.1			4.04									20, 200	L
QUICKSTART HIGH TRACE	F	9	6	2.5	6		3.2	4.6	0.22	0.25	0.58	1.1	0.03		20, 200, 1000	L
REACTION	F, I	12.0	6.0	8.0										√	20, 200	L
REVITALIZE (micrbial soil activator)	F, I													√	5, 20	L
SAFE N	F, I	35.6													20, 200	L
SENIPHOS	F		13.5			4.0									10, 210	L
STOPIT	F, D					16.0									10, 210	L
SUPA BOR	F, I	4.1									10.0				5, 20, 200	L L
SUPA BOR PLUS	F, I	6.00									15.00				10	L
SUPA COPPER (Cu as EDTA chelate)	F, I									5.00					20, 200	L
SUPA HUMUS (12% Humic acid)	F, I														20, 200	L
SUPA IRON (Fe as EDTA chelate)	F, I								9.00						5, 20	L
SUPA K 30 (K in citric form)	F, I			30.00											20, 200	L
SUPA MAG (Mg as EDTA chelate)	F, I						6.00								20, 200	L
SUPA MANG (Mn as EDTA chelate)	F, I											6.00			20, 200	L
SUPA MOLY	F, I		11.00										25.00		1, 5, 20	L
SUPA STAND PHOS (+ Kelpak)	F, I, D	6.00	10.00	3.00											20, 200	L
SUPA ZM 60	F, I							35.00				25.00			10, 200	L
SUPA ZINC (Zn as EDTA chelate)	F, I							7.50							20, 200	L
SYNERGIZER (+ humic & fulvic acids)	F	11.00	19.50	4.60											18.92	L
TRAPEAZE (6% Seaweed Base)	F, I	2.95			2.65			2.5		0.5	1.95	2.25	0.23	co-balt	20, 200, 1000	L
WUXAL AMINOCAL (+ Amino acid)	F					15.00		0.50							20	L
WUXAL CALCIUM	F	16.00				17.20	1.80				0.08			√	10	L
WUXAL LIQUID	F, SD	9.90	4.30	6.20										√	20, 200	L
VINE - GRO PLUS	I	16.00	6.00	18.00										√	200	L
ZINC 100	F, I							100.00							10, 200	L
ZINTRAC 700	F	1.80						70.00							10	L

ORGANIC & ORGANIC BASED

Product	N	P	K	S	Ca	Mg	Zn	Fe	Cu	B	Mn	Mo	+TE	Sizes
AGRIGRANULES (Dynamic Liftre)	3.00	2.40	1.50	1.00	7.70									35, 1K kg
AGRIPELLETS (Dynamic Lifter)	3.00	2.40	1.50	1.00	7.70									35, 1K bulk kg
AGROLIG (75% humic acid, 6.6% org. conc.)														22.7 kg
AMINOGRO (marine protein biostimulant)														10, 20 L 200 L
ACADIAN SSE (100% seaweed extract)	1.10	0.65	13.00											2.5, 5 kg 20 kg
BIOVERM COARSE (worm casts BFA ✓)	1.00	2.40			6.20	0.90	0.10	1.70	0.70	0.01	0.10			20, 1K kg
BIOVERM FINE (worm castings BFA ✓)	1.00	2.40			6.20	0.90	0.10	1.70	0.70	0.01	0.10			25 kg
BLOOD & BONE (premium BFA approval A1216)	5.40	5.80	0.20	0.10	11.50	0.10		0.20						25, 50 kg 1K kg
BLOOD & BONE PLUS K	4.90	4.80	4.90	3.60	11.70			0.25						25 kg
CHARLIE CARP (NASAA cert.)	3.00	0.70	0.10	1.00									✓	5, 20 L
DYNAMIC LIFTER LONG LIFE	5.00	3.00	5.00	2.00	5.50									35, 1K kg
DYNAMIC LIFTER TURF LIFTER	9.90	4.00	6.00	5.00	3.70									35, 1K kg
DYNAMIC LIFTER VINE LIFTER	10.00	6.00	3.00	7.00	3.00									40 kg bulk, 1 T
GUANO (BFA 309MI)		11.60			29.00									40, 1K kg
FISH EMULSION (Agrobrest BFA ✓)	4.06	0.72	0.78	0.45									✓	5, 20 L
KELPAK 100 (seaweed extract)														5, 20 L 200, L
MOTHER EARTH (BFA ✓, recycled-organic)	5.00	2.00	0.50		3.60	0.30		0.90						20, 35 kg 0.5, 1 T
MOTHER EARTH FRUIT	13.70	1.90	14.80	7.40	0.80	0.50	0.03	0.06	0.03	0.01	0.03			25, 1K kg
NATRAKELP LIQUID SEAWEED	0.75												✓	25, 200 L
NUTRISMART (BFA ✓ SGN 350)	1.00	2.40			6.20	0.90	0.10	1.70	0.70	0.01	0.10			25, 1K kg
NUTRISMART (BFA ✓ SGN 150)-MINI	1.00	2.40			6.20	0.90	0.10	1.70	0.70	0.01	0.10			25 kg
OM-3	5.00		1.00											20, 200 L
ORGANIC STONEFRUIT BLEND	10.00	4.10	14.00	7.80	2.60	0.90							✓	25, 1K kg
SEASOL (100% seaweed extract)														5, 20 L
SULPHATE OF POTASH-G (BFA A1216)			41.00	17.40										25 kg
SUPA HUMUS (12% humic acid)														20, 200 L

PASTURES

REFER ALSO TO STRAIGHTS & SOIL CONDITIONERS

(Note- All products listed in this section are also available as true bulk.)

Product	N	P	K	S	Ca	Mg	Zn	Fe	Cu	B	Mn	Mo	+TE	Sizes
CAL-GRAN 50/50 (S)	16.90		14.40	8.70	4.40									40, 1T kg
CAL-GRAN AFTERGRAZE	20.60	3.00	7.50	3.80	4.40									40, IT kg
DAIRY PRO	25.90	3.90	15.90	0.30										40,1T kg
GRANULOCK 15	14.30	12.00		10.50										40, 1T kg
GRANULOCK 15 Mo 05	14.00	12.00		10.05								0.05		40, 1K kg
GRASSBOOSTA	29.90			15.00										40, 1K kg
PASTURE 16		5.90	16.50	7.40	13.40									40, 1K kg
PASTURE 25		4.40	25.00	5.50	10.00									40, 1K kg
PASTURE STARTER	6.70	13.90		8.60	10.10									40, 1K kg
QUICK N	27.00			13.20										50, 1K kg

SLOW RELEASE

Product	N	P	K	S	Ca	Mg	Zn	Fe	Cu	B	Mn	Mo	+TE	Sizes
AGRIFORM TREE TABLETS 10g	20.0	4.3	4.1										✓	10 kg
AGRIFORM TREE TABLETS 21g	20.0	4.3	4.1										✓	10 kg
IBDU (Coarse or Fine): 3-4 M Release	31.0													25 kg
NITROPHOSKA PERFEKT	15.0	2.0	17.0										✓	25 kg
SIRFLOR (Ureaformaldehyde)	38.0													20 kg
SPORTSMaster HI K	15.0		20.0			2.4								25 kg
SPORTSMaster HI N	22.0	2.2	8.3											25 kg
SULPHUR COATED UREA (Std): 3-4M	39.0			12.0										22.7 kg
SULPHUR COATED UREA (Mini): 3-4M	30.0			25.0										25 kg
UREAFORM UF38	38.0													22.7 kg

SOIL CONDITIONERS

Product	N	P	K	S	Ca	Mg	Zn	Fe	Cu	B	Mn	Mo	+TE	Sizes	
AGRICULTURAL LIME					39.0	0.2								25, 1K bulk	kg
DOLOMITE					22.5	11.4								25, 1K bulk	kg
GRANULAR DOLOMITE (coarse & greens gde)					22.5	11.4								25, 1K	kg
GRANULAR LIME (coarse & greens grades)					39.0	0.1								25, 1K	kg
GYP-FLO (liquid Gypsum)				25.0	35.0									20, 800	L
GYP-SUM (natural)				16.9	20.9	0.2								25, 50 T, bulk	kg
HOT LIME (Quick Lime)					85.0									1	T
HYDRATED LIME					82.0									20	kg
MOBILIZER (3% fulvic acid + amino acids)														18.92	L
N-CAL (amending sodium soils)	2.0				12.0									200	L
pH PLUS TECH GRADE (Liquid Lime)					35.0									20, 800	L
pH PLUS + 12% Mag. (Liquid Dolomite)				12.0	30.0									20, 800	L
PROMESIUM (Magnesite)					2.2	21.7		2.00						25	kg
Q.A. LIME (microfine)					38.4	0.4								25	kg
SUPERZYME (beneficial bacteria)														500 1, 10	g kg
ZEOLITE (Hydrous Aluminosilicates)														20, 25	kg

SOIL pH (feature)

What is soil pH?

Soil pH is a measure of the acidity or alkalinity of the soil. This is measured on a logarithmic scale that runs for 0 (most acid) to 14 (most alkaline), with 7 as neutral.

As the pH scale is logarithmic, descending down the scale from pH 7 (neutral), each number is 10 times more acid than the one before it. A soil with a pH of 6 is 10 times more acid than neutral (pH 7); as soil with a pH of 5 is 100 times more acid than neutral (pH 7). The pH value actually represents the concentration of hydrogen ions in the soil - the more hydrogen ions, the more acid the soil. Farmers tend to refer to alkaline soils as "sweet" and acid soils as "sour".

Origins

Natural soil pH depends on the type of rock from which it was formed and the processes that acted on it. These processes are climate, vegetation, topography and time. Weathering processes tend to cause lowering of pH (increased acidity) over time. Some agricultural practices will accelerate the acidification process.

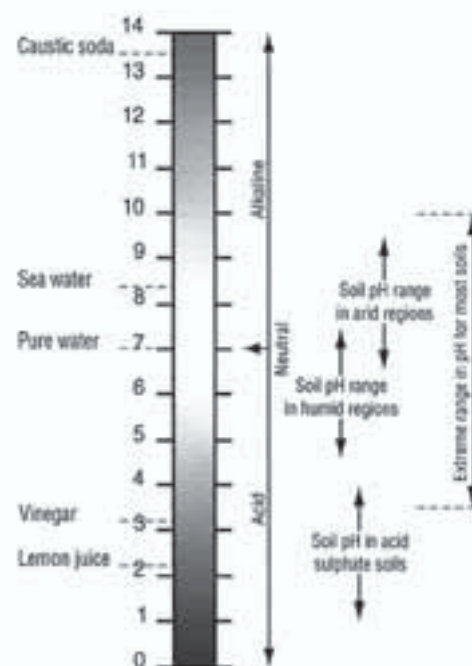
Effects

Soil pH directly effects the availability of nutrients to the plant.

- * Below pH 5, slow microbial activity means only small amounts of nitrogen and sulphur are present in mineral form for plants to use.
- * Below pH 5, phosphorous combines chemically with aluminium and becomes unavailable to plants.
- * Below pH 5, less Calcium, Magnesium and Potassium are present in the soil.
- * Above pH 7, Manganese, Iron, Zinc, Copper & Boron are less soluble in the soil and not available to plants.
- * Below pH 4.5 Manganese becomes too soluble and can be toxic to plants.
- * Below pH 4.5 Molybdenum is less available to plants.
- * Below pH 5, Aluminium becomes too soluble and ties up phosphorous.
- * Below pH 5, soil fungi can thrive.
- * Below pH 5, beneficial bacteria are adversely effected.

Changing Soil pH

Crushed sulphur and some ammonium - based nitrogen fertilisers lower pH. Lime or dolomite will raise pH.



SOLUBLES (STRAIGHTS)

(SEE ALSO TRACE ELEMENTS)

Product	Nutritional Analysis (%)													Pack Sizes		
	N	P	K	S	Ca	Mg	Zn	Fe	Cu	B	Mn	Mo	+TE			
CALCIUM NITRATE (Greenhouse grade)	15.5				19.0										25	kg
DAP TECHNICAL	21.2	22.5													25	kg
ENTEC SOLUBLE	21.0			23.0											25	kg
LIQUIFERT K SPRAY (SOP)			42.0	18.0											25	kg
LIQUIFERT MAG (magnesium sulphate)		12.4	9.6												25	kg
LIQUIFERT N	46.0														25	kg
LIQUIFERT P/MAP TECH.	12.0	26.6													25	kg
MAGNESIUM NITRATE	10.8					9.6									25	kg
MKP TECHNICAL		22.5	28.0												25	kg
POTASSIUM NITRATE (fine)	13.5		38.3												25	kg
POTASSIUM NITRATE + Mg	12.0		36.0			1.2									25	kg
SOLUBOR										20.5					1, 25	kg
SOLUPOTASSE (SOP)			41.5	18.4											25	kg
SULPHATE OF AMMONIA TECHNICAL	21.0			24.0											50	kg
UREA 0.5% LO BI	46.0														20, 25	kg
WSM /LIQUIFERT K (MOP)			50.0												25	kg

TERMINOLOGIES:

Epsom Salts = Liquifert Mag = Magnesium Sulphate
 Mono Potassium Phosphate = MKP
 Muriate of Potash = WSM = Liquifert K
 Sulphate of Potash = Solupotasse = Liquifert K Spray

SOLUBLES (MULTI - BLENDS)

Product	Nutritional Analysis (%)													Pack Sizes	
	N	P	K	S	Ca	Mg	Zn	Fe	Cu	B	Mn	Mo	+TE		
AQUASOL	23.0	4.0	18.0										√	25	kg
BIOMIN BOOSTER V (as amino acids)	6.7					4.1	4.1	2.6	1.5	1.5	2.6	0.5		2, 10	kg
BUDBUILDER		3.0				24.0	10.0			3.0				10, 20	kg
LIQUIFERT BALANCE	20.6	8.5	16.0											25	kg
NUTRAFEED 19	22.2	8.0	15.2				0.01	0.03	0.00	0.01	0.02			25	kg
NUTRAFEED 20	24.1		23.6				0.01	0.17	0.02	0.01	0.02			25	kg
NUTRAFEED 23	23.9	4.0	17.9				0.01	0.32	0.02	0.01	0.02			25	kg
NUTRAFEED KESTRAL	14.1	4.9	22.9	4.9			0.04	0.03	0.01	0.04	0.04	0.004		25	kg
NUTRAFEED HYDROPONIC	10.7	5.2	25.2	8.4			0.0	0.1						25	kg
ORCHID FERTILISER A	11.8	13.2	16.6										√	10	kg
ORCHID FERTILISER B	30.0	4.4	8.3										√	10	kg
PETERS BLOSSOM BOOSTER	10.0	13.1	16.6											15	kg
PETERS EXCEL HI K CAL MAG	13.0	2.2	16.6		5.0									15	kg
PETERS EXCEL HI N CAL MAG	20.0	2.2	7.5		5.0									15	kg
PETERS FOLIAR FEED	27.0	6.5	10.0											15	kg
PETERS GENERAL PURPOSE	20.0	8.7	16.6											15	kg
PETERS ROSE SPECIAL	20.0	13.1	8.3											15	kg
PETERS STEM (Trace Element Mix)													√	11.34	kg
THRIVE GENERAL PURPOSE	25.0	4.0	17.0										√	15	kg
THRIVE HIGH POTASSIUM	15.2	2.0	27.2										√	15	kg
TRACEL - K	5.0	4.4	29.0	4.0		1.2							√	10, 20	kg
TRACEL SP	20.0	3.5	11.6	5.7		1.2							√	10, 20	kg

STRAIGHT FERTILIZERS

(Pack Size Notes: -1K = 1000kg i.e 1T bags, 1T = 1 Tonne bags, bulk = bulk truck loads)

Product	Nutritional Analysis (%)													Pack Sizes		
	N	P	K	S	Ca	Mg	Zn	Fe	Cu	B	Mn	Mo	+TE			
CAL-GRAN	23.9			10.8	4.4										40 1T, bulk	kg
DAP (Di Ammonium Phosphate)	18.0	20.0		1.6											25, 40 1T, bulk	kg
ENTEC GRANULAR	26.0			13.0											50 0.5, 1	kg T
GRAN-AM (granulated Sulph, of Ammonia)	20.2			24.0											40 1T, bulk	kg
GRANULOCK 15	14.3	12.0	10.5												40 1T, bulk	kg
MAP (Mon Ammonium Phosphate)	10.0	21.9		1.5											25, 40 1T, bulk	kg
MURIATE OF POTASH (granulated)			50.1												25, 40 1T, bulk	kg
POTASSIUM NITRATE PRILLED	13.0		38.3												25, 40	kg
SULPHATE OF AMMONIA (fine)	20.2			24.0											25, 50 1T, bulk	kg
SULPHATE OF POTASH (granulated)			41.0	17.4											25, 40 1T, bulk	kg
SUPERPHOSPHATE		9.0		11.6	19.1										25, 50 1T, bulk	kg
SUPERPHOSPHATE FINE		8.8		11.0	18.0										25	kg
SUPER Mo 0.025		8.8		11.0	20.0							√			40 1T, bulk	kg
SUPER Mo 0.05		8.8										√			40 1T, bulk	kg
TRIPLE SUPER		20.7		1.0	15.0										50	kg
UREA GRANULAR	46.0														20, 40 1T, bulk	kg

SUNDRY FERTILISERS

Product	Nutritional Analysis (%)													Pack Sizes		
	N	P	K	S	Ca	Mg	Zn	Fe	Cu	B	Mn	Mo	+TE			
AGRICULTURAL SULPHUR				90.0											25	kg
ALUM.SULPHATE (17.3% AIO ³)															25	kg
BIO-SIZE (biostimulent-amino acids + betaines)															3.78	L
CALCIUM CHORIDE (flaked)					36.0										25	kg
NITRIC ACID- 70%															5, 20 200	L L
PHOSPHORIC ACID- 85%															5, 25	L

TRACE ELEMENTS

SEE ALSO LIQUID & SOLUBLES

Product	Nutritional Analysis (%)													Pack Sizes	
	N	P	K	S	Ca	Mg	Zn	Fe	Cu	B	Mn	Mo	+TE		
BIOMIN BOOSTER V (as amino acids)	6.7					4.1	4.1	2.6	1.5	1.5	2.6	0.5		2, 10	kg
BIOMIN CALCIUM (Ca as amino acid ch.)	3.6				15.0									2, 25	kg
BIOMIN MAGNESIUM (as amino acids)	5.5					12.0								2, 10	kg
BORAX										11.0				25	kg
BORIC ACID										15.0				1	kg
BORON GRANULAR			0.6	3.0	9.0	0.7				10.0				25	kg
BORON SOLUBLE (Foliarel Brand)										20.5				1, 25	kg
COMPLETE TRACE ELEMENTS							5.0	10.0	5.0	2.0	5.0	0.05		22.7	kg
COPPER SULPHATE (Bluestone)				12.7					25.0					1, 25	kg
GRANOMAG (Mg oxide)					1.1	57.5								25	kg
IRON SULPHATE HEPTAHYDRATE				16.9				20.5						25	kg
IRON CHELATE - EDTA								13.2						25	kg
LIBREL BMX							0.6	3.4	1.7	0.875	1.7	0.023		25	kg
LIBREL Ca					9.5									1, 25	kg
LIBREL Cu									14.0					1, 25	kg
LIBREL Fe								13.2						1, 25	kg
LIBREL Mg						5.5								1, 25	kg
LIBREL Mn											13.0			1	kg
LIBFER SP								6.0						1	kg
LIBREL Zn							14.0							1, 25	kg
MAGNESIUM SULPHATE (Epsom Salts)				13.0		10.0								25	kg
MANGANESE SULPHATE (fine)				19.0							31.0			25	kg
SODIUM MOLYBDATE												39.0		1, 25	kg
SOLUBOR														1, 25	kg
SULPHUR POWDER				99.5										25	kg
ZINC SULPHATE HEPTAHYDRATE				11.0			20.0							25	kg
ZINC SULPHATE MONOHYDRATE				17.2			35.0							25	kg

TURF & LANDSCAPE

Product	Nutritional Analysis (%)													Pack Sizes	
	N	P	K	S	Ca	Mg	Zn	Fe	Cu	B	Mn	Mo	+TE		
CAL-GRAN 50/50 (S)	16.90		14.40	8.70	4.40									40, 1T	kg
CAL-GRAN AFTERGRAZE	20.60	3.00	7.50	3.80	4.40									40, 1T	kg
DYNAMIC LIFTER TURF LIFTER	9.90	4.00	6.00	5.00	3.70									35, 1K	kg
LANDSCAPE BLEND (79% of N as C.R.)	25.00	3.00	12.00	1.50		0.50		1.00						25	kg
NO. 17 HUNTER SPECIAL	8.50	3.60	7.40	17.70	8.00									40, 1K	kg
NO. 17 LAWN FOOD (SHIRLEYS)	9.10	3.90	4.90	17.70	8.60									50, 1K	kg
NUTRAFEED 23	23.90	4.00	17.90				0.01	0.32	0.02	0.01	0.02			25	kg
QUICK CUT	20.50	2.90	7.60											25, 1K	kg
QUICK N (amm. nitrate based)	27.00			13.20										25, 1K	kg
QUICKGRASS	13.20	2.20	28.00	0.20										40, 1K	kg
SAFE N	36.00													20, 200	L
SIERRABLEN FLORA (8-9 month)	21.00	1.80	9.00											20	kg
SULPHATE OF AMMONIA (fine)	20.50			24.00										25	kg
SUPERTURF C	16.70	3.60	6.50	17.30										25	kg
SUPERTURF G	26.90		7.60	12.00										25	kg
TURF BLEND	15.00	5.00	25.00	0.40										40, 1K	kg
UREA GRANULATED	46.00													40, 1K	kg

Seasol[®]

Proven by science...Proven in the paddock!
100% AUSTRALIAN OWNED AND MANUFACTURED



- Stimulates root development and vigorous plant growth.
- Enhances flowering, improves fruit set and size.
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Would a heavy, safe Spray Oil take a weight off your mind?

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Happily, this is never a problem with D-C-Tron[®] Plus. That's because D-C-Tron[®] Plus is heavier than normal summer oils and has unique patented UV absorbers built-in. These UV absorbers offer



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Plants are also protected by a unique plant safe emulsion system developed by Caltex. Not only can this emulsion system be used in all types of water, its formulation ensures that each and every tree receives a fair and even oil coverage.

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Weigh up the advantages, and you'll see it's the one heavy spray oil you can trust.

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For more information see your reputable Caltex Australian Agricultural Reseller or call 1300 364 169.
Note: Caltex accepts no responsibility arising from the use of the oil other than in accordance with label recommendations.
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CALTEX

GROWING MEDIA PRODUCTS

(REFER ALSO - WATER MANAGEMENT PRODUCTS)

Product	Comments	Pack	
AUSPERL P400	extracted perlite - fine grade	5	kg
AUSPERL P500	extracted perlite - horticultural grade	5	kg
COCOPEAT CP400	coir fibre pith- multi purpose premium medium- bale	290	L
DEBCO PLUGGER- STARTER PLUS	ready to use growing medium for direct seeding of vegetables and flowers. Contains wetters & fert.	30	L
ORCHID POTTING MIX	contains composted graded bark, free draining mix	30	L
PEAT MOSS- KLASMANN	Lithuanian fine sphagnum peat moss- bale	250	L
PEAT MOSS- NZ	New Zealand sphagnum peat moss- bale	105	L
SUGAR CANE MULCH	virgin mulch - bale covers 4m2 @ depth 75-100mm	10	kg
VERMICULITE #2	fine grade normally used as a top dress after sowing	5	kg
VERMICULITE #3	medium horticultural grade	5	kg
WATERWISE PREMIUM POTTING MIX	contains water crystals, wetting agent, coir fibre and fertiliser	30	L



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on earth for
the greatest
grapes**



Australia's most popular organic fertiliser.

Dynamic Lifter the 100% natural fertiliser that gives your grapes a boost.

It's produced from composted chicken manure which is concentrated and heat-treated to kill the weed seeds found in raw manure products and reduce the moisture content.

A slow-release fertiliser activated by microbial activity, Dynamic Lifter provides plant-essential nutrients including trace elements for sustained growth, without burning your vines.

Dynamic Lifter also improves soil organic matter content resulting in increased nutrient retention and water-holding capacity, improves soil structure, encourages microbial activity and is pH neutral.

Plus, Dynamic Lifter is certified by the Biological Farmers Association of Australia (BFA). It's the natural way to give your grapes, and business a boost.



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**If you thought Dynamic Lifter* was only
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Dynamic Lifter* is available in loose bulk or 1 tonne bulk bags.

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Kocide® Blue Xtra™ with BioActive™ copper is an easier mixing, better handling, non foaming, less dusty, better spreading, lower copper loading, more bioavailable, readily compatible, more effective copper fungicide.

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MARKETS

FLOWER PRODUCTION

- Fumigants
- Granular herbicides- Casoron G, Ronstar
- Preservatives
- Seed
- Slow & controlled release fertilisers
- Soft chemistry



FORESTRY & REVEGETATION

- Planting & landcare products
- Power equipment
- Pruning & Lopping
- Selective Herbicides
- Tableted fertilisers
- Tree Guards



HOUSE & GARDEN

- Consumer pack garden products
- Fertilisers- Banana Special, Dynamic Lifter
- General pest control- Ficam W, Permex
- Rodenticides- Storm Secure, Talon
- Seaweed & fish based fertilisers
- Tools & pruning equipment



HYDROPONICS

- Growing media
- Propagation equipment
- Pythium control fungicides
- Seed
- Soluble fertilisers
- Trace elements



LANDSCAPING

- Fertiliser/seed spreaders
- Power equipment- chainsaws, trimmers
- Slow release & tableted fertiliser
- Spray equipment & spares
- Tools
- Water savers- Zeba All Natural



NURSERY

- Fertilisers- CR, solubles, trace elements
- Growing media & propagation products
- Knitted & mesh products
- Plant growth regulators
- Potent snail bait- Metarex
- Safety equipment & clothing



POTATOES

- Fertiliser- horticultural blends
- Irrigation
- Pre-plant products- Maxim 100FS
- Sap tests- quick turn around
- Fungicides- Amistar SC, Bravo, Score, Walabi
- Seed treatment



TURF

- Adjuvants & soil wetters
- Analysis- soil & leaf
- Colourants
- Fertiliser- blends & straights
- Herbicides & pesticides
- Seed



FRUIT CROPS

- Foliar fertilisers- Wuxal Calcium
- Foliar fungicides- Chorus
- Picking Aids
- Pruning equipment- Electrocoup secateurs
- Post- harvest products- cleaners & waxes
- Weather forecasting- Agricast



GREENHOUSE CROPPING

- Crop chemicals
- High grade soluble fertilisers
- Irrigation- T tape
- IPM advice, pest & disease identification
- Polythene film
- Seed



INDUSTRIAL / GOVERNMENT FACILITIES

- Drum transfer & handling systems
- Extensive seed range- flower, reclamation, turf
- Non-selective herbicides
- Public health products
- Water quality- Greenex Aqua
- Water retention products- Zeba All Natural



INTENSIVE HORTICULTURE

- Analytical- plant, soil & water
- Crop covers
- Crop protection- Alsystin, Octave
- Foliar Fertilisers- Wuxal Calcium, Wuxal Liquid
- Sanitisers
- Pruning Equipment



PASTURE & CROPPING

- Animal health products
- Crop protection chemicals
- Fencing
- Fertilisers
- Grass herbicides- Fusilade Forte
- Seed & seed dressings



PEST CONTROL

- Drum pump systems
- Insecticides- Actellic 900 SF, bifenthrin based products
- Rodenticides- Storm Secure
- Safety clothing & equipment
- Smoke Generators- Imperators
- Spray equipment & spares



VEGETABLES

- Base & supplementary fertilisers
- Environmental friendly pesticides- Gemstar
- Irrigation
- New age insecticides- Avatar, Proclaim & Success 2
- Pre-emergent herbicides- Baron
- Seed
- Super adjuvants- Duwett & Designer



VINEYARDS

- Bulk container options- 100L & 110L drums
- Cover crops
- Fencing
- Modern fungicide technology- Cabrio
- Petiole & Soil Testing + Interpretation
- Pruning Equipment
- Selective herbicides- Basta, Illico & Sprayseed 250



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Dithane[®]
Rainshield
Neo Tec Fungicide



Active Constituent: 750 g/kg MANCOZEB

GROUP **Y** FUNGICIDE

For the control of certain fungal diseases of fruit, field crops, tobacco, turf, vegetables and ornamentals as per Directions For Use.

Contents: 20 kg

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Dithane* Rainshield* Neo Tec* combines proven Rainshield technology with the latest advances in granular formulation. The result is a user-friendly product that's easy to mix and handle, has less dust and provides your vineyard with the super protection you've come to expect from the 'Incredible Green Bag'. For more information, call Dow AgroSciences on 1800 700 096 or see your local reseller.



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