

# SAFETY DATA SHEET

# Plantafol 0-25-50

1.1. Product identifier		
Product form	: Mixture	
Trade name	: Plantafol 0-25-50	
Product code	: 11527	
1.2. Relevant identified us	ses of the substance or mixture and uses advis	ed against
1.2.1. Relevant identified us	Ses	
Use of the substance/mixture	: Fertilizer	
I.2.2. Uses advised agains		
No additional information availab	le	
I.3. Details of the supplie	r of the safety data sheet	
Distributed and guaranteed by: Campbells Fertilisers Australasia 18 Raymond Road, Laverton No Phone: (03) 9931 2211 Fax: (03) 9931 2201 www.campbellsfert.com.au		
Competent person responsible for regulatory@valagro.com	or the safety data sheet:	
1.4. Emergency telephon	e number	
Poison Information Centre - Tele	ephone: 131126 (Australia wide – 24HRS)	
SECTION 2: Hazards ide	ntification	
	substance or mixture	

Classified as Hazardous according to the Hazardous Substances (Minimum Degrees of Hazard) Regulations 2001, New Zealand. Not Classified as Dangerous Goods for transport according to the New Zealand Standard NZS 5433:2012 Transport of Dangerous Goods on Land.

#### **HSNO Classification:**

6.4A - Substances that are irritating to the eye

#### Hazard statement codes:

H319 - Causes serious eye irritation

#### Precautionary statement codes – Prevention:

P103 - Read label before use P264 - Wash exposed areas thoroughly after handling P280 - Wear protective eye/face protection

#### Precautionary statement codes - Response:

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P337 + P313 If eye irritation persists: Get medical advice/attention.

#### Precautionary statement codes - Disposal:

P501 - Dispose of contents/container to comply with applicable local, national and international regulation





Name	Product identifier (Cas No)	%	Approval Status (NZIoC)
Tetrapotassium pyrophosphate	7320-34-5	10 - 12.5	Approved for use as a component in a product covered by the group standard disclosed in section 15.
Boric acid	CAS:10043-35-3	>= 0.1% - < 0.25%	HSNO Approval Code HSR002995 Specific concentration limit >= 5.5%

<b>SECTION 4: First aid measures</b>	
4.1. Description of first aid measu	ires
First-aid measures general First-aid measures after inhalation	<ul> <li>Self-protection of the first aider.</li> <li>Remove victim to fresh air and keep at rest in a position comfortable for breathing. In case of breathing difficulties administer oxygen. In case of irregular breathing or respiratory arrest provide artificial respiration. Seek medical advice.</li> </ul>
First-aid measures after skin contact	: Remove contaminated clothing immediately and dispose of safely. Wash skin thoroughly with mild soap and water. If skin irritation occurs: Get medical advice/attention.
First-aid measures after eye contact	<ul> <li>In case of contact with eyes, rinse immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Subsequently consult an ophthalmologist. Remove contact lenses, if present and easy to do. Continue rinsing. Protect uninjured eye.</li> </ul>
First-aid measures after ingestion	: If swallowed, rinse mouth with water (only if the person is conscious). Do not induce vomiting. Immediately call a POISON CENTER or doctor/ physician.
Other information	: For advice, contact a Poisons Information Centre (e.g. phone Australia 131 126; New Zealand 0800 764 766) or a doctor.
4.2. Most important symptoms an	d effects, both acute and delayed
Symptoms/injuries after inhalation	: Inhalation may cause irritation, cough, shortness of breath.
Symptoms/injuries after skin contact	: Repeated or prolonged skin contact may cause irritation. irritation (itching, redness, blistering).
Symptoms/injuries after eye contact	<ul> <li>Irritating to eyes. symptoms may include stinging, tearing, redness, swelling and blurred vision.</li> </ul>
Symptoms/injuries after ingestion	: May cause gastrointestinal irritation, nausea, vomiting and diarrhoea.
4.3. Indication of any immediate n	nedical attention and special treatment needed

No additional information available		B//////
<b>SECTION 5: Firefighting measures</b>		
5.1. Extinguishing media		
Suitable extinguishing media Unsuitable extinguishing media	<ul> <li>carbon dioxide (CO2), water, dry chemical powder.</li> <li>combustible materials.</li> </ul>	
	2/10	



recautionary measures for refighting instructions : Evacuate the personnel away from the furnes. : Cool down the containers exposed to heat with a water spray. Move undamaged containers from immediate hazard area if it can be done safely. : Extra personal protection: complete protective clothing including self-contained breathing apparatus. ther information : Do not allow run-off from fire fighting to enter drains or water courses. <b>ECTION 6: Accidental release measures</b> <b>1. Personal protective equipment and emergency procedures</b> <b>1.1. For non-emergency personnel</b> rotective equipment : Do not attempt to take action without suitable protective equipment. Wear personal protection equipment. : Do not attempt to take action without suitable protective equipment. Wear personal protective equipment : Wear suitable protective clothing, gloves and eye/face protection. Avoid breathing dust/fume/gas/mist/apours/spray. mergency procedures : Evacuate unnecessary personnel. <b>2. Environmental proceutions</b> void release to the environment. <b>3. Methods and material for containment and cleaning up</b> or containment : Stop leak if safe to do so. : Evacuate unnecessary personal vacer. Absorb with liquid-binding material (e.g. : Stop leak if safe to do so. : Stop leak if safe to do so. : Evacuate unconscience of product into the environment. <b>4. Reference to other sections</b> or disposal of residues refer to section 13 : Disposal considerations. For further information refer to section 8: "Exposure introls/personal protection". See Section 10 remergency contact information. <b>ECTION 7: Handling and storage</b> <b>1. Precautions for safe handling</b> : Avoid contact with skin and eyes. Avoid breathing mist or vapor . Keep away from : Stop leak if safe to do so. : Conditions for safe handling : Avoid contact with skin and eyes. Avoid breathing mist or vapor . Keep away from : Marking and storage <b>1. Precautions for safe handling</b> : Avoid contact with skin and eyes. Avoid breathing mist or vapor . Keep away from	ire hazard	: Do not breathe fumes.
iriefighting instructions       : Cool down the containers exposed to heat with a water spray. Move undamaged containers from immediate hazard area if it can be done safely.         rotective equipment for firefighters       : Extra personal protection: complete protective clothing including self-contained breathing apparatus.         ther information       : Do not allow run-off from fire fighting to enter drains or water courses.         ECTION 6: Accidental release measures       .         1.1       For non-emergency personnel         rotective equipment       : Do not allow run-off from fire fighting to enter drains or water courses.         1.1.2. For non-emergency personnel       : Do not altempt to take action without suitable protective equipment. Wear personal protection equipment.         mergency procedures       : Alert emergency personnel.         1.1.2. For emergency responders       : Evacuate unnecessary personnel.         rotective equipment       : Wear suitable protective clothing, gloves and eye/face protection. Avoid breathing dust/fume/gas/mist/vapours/spray.         void release to the environment.       : Stop leak if safe to do so.         2.2       Environment       : Stop leak if safe to do so.         lethods for cleaning up       : Ventilate affected area. Wear personal protection equipment. Minimize generation of dust. Wash with plenty of soap and water. Absorb with liquity of soap and water. Absorb with li	.3. Advice for firefighters	
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SECTION 6: Accidental release measures         S1.1       Personal precautions, protective equipment and emergency procedures         S1.1.1       For non-emergency personnel         Protective equipment       :       Do not attempt to take action without suitable protective equipment. Wear personal protection equipment.         Emergency procedures       :       Alert emergency personnel.         S1.2.       For emergency responders         Protective equipment       :       Wear suitable protective clothing, gloves and eye/face protection. Avoid breathing dust/fume/gas/mist/vapours/spray.         Emergency procedures       :       Evacuate unnecessary personnel.         S2.       Environmental precautions         Wood release to the environment.       :         S3.       Methods and material for containment and cleaning up         For containment       :       Stop leak if safe to do so.         Methods for cleaning up       :       Ventilate affected area. Wear personal protection equipment. Minimize generation of dust. Wash with plenty of soap and water. Absorb with liquid-binding material (e.g. sand, diatomaccous earth, acid- or universal binding agents). Consult the appropriate authorities about wast disposal.         Duter information       :       :       Do not allow uncontrolled discharge of product into the environment.         64.       Reference to other sections       :       Exposure on funition.	Protective equipment for firefighters	: Extra personal protection: complete protective clothing including self-contained
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Emergency procedures       : Alert emergency personnel.         S.1.2. For emergency responders       Protective equipment         Protective equipment       : Wear suitable protective clothing, gloves and eye/face protection. Avoid breathing dust/fume/gas/mist/vapours/spray.         Emergency procedures       : Evacuate unnecessary personnel.         S.2. Environmental precautions       Wear suitable protective clothing, gloves and eye/face protection. Avoid breathing dust/fume/gas/mist/vapours/spray.         For containment       : Evacuate unnecessary personal.         S.3. Methods and material for containment and cleaning up         For containment       : Stop leak if safe to do so.         Ventilate affected area. Wear personal protection equipment. Minimize generation of dust. Wash with plenty of scap and water. Absorb with liquid-binding material (e.g., sand, diatomaceous earth, acid- or universal binding agents). Consult the appropriate authorities about waste disposal.         Dther information       : Do not allow uncontrolled discharge of product into the environment.         S.4. Reference to other section 5       : Do not allow uncontrolled discharge of product into the environment.         S.4. Precautions for safe handling       : Avoid contact with skin and eyes. Avoid breathing mist or vapor . Keep away from sources of ignition - No smoking. Keep away from: Metals, dust, organic materials. Minimize generation of dust.         Hygiene measures       : Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. <t< td=""><td>5.1.1. For non-emergency personn</td><td>el</td></t<>	5.1.1. For non-emergency personn	el
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controls/personal protection". See Section 1 for emergency contact information.         SECTION 7: Handling and storage         7.1. Precautions for safe handling         Precautions for safe storage, including any incompatibilities         Proconditions         Precautions         Storage conditions         Procompatible products         Precaution sources         Precautions for safe storage         Precautions for safe storage, including any incompatibilities         Precautions         Precautions <td>6.4. Reference to other sections</td> <td></td>	6.4. Reference to other sections	
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	ncompatible products	: Oxidising agents. reducing agents. Acids. combustible materials. Powdered metals.
Prohibitions on mixed storage : Keep away from food, drink and animal feeding stuffs.	_	: Keep away from open flames, hot surfaces and sources of ignition.
	Prohibitions on mixed storage	: Keep away from food, drink and animal feeding stuffs.
	7.3. Specific end use(s)	

No additional information available



# SECTION 8: Exposure controls/personal protection

# 8.1. Control parameters

### New Zealand Workplace Exposure Standard:

No value assigned for this specific material by the New Zealand Department of Labour (Health & Safety).

Tetrapotassium pyrophosphate (7320-3	4-5) (EU parameters)
DNEL/DMEL (Workers)	
Long-term - systemic effects, inhalation	2.79 mg/m <sup>3</sup>
DNEL/DMEL (General population)	
Long-term - systemic effects,oral	> 70 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	680 mg/m³
PNEC (Water)	
PNEC aqua (freshwater)	0.05 mg/l
PNEC aqua (marine water)	0.005 mg/l
PNEC aqua (intermittent, freshwater)	0.5 mg/l
PNEC (STP)	
PNEC sewage treatment plant	50 mg/l

Boric acid (H3BO3) (10043-35-3)		
Belgium	Limit value (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup>
Belgium	Short time value (mg/m <sup>3</sup> )	6 mg/m <sup>3</sup>
Bulgaria	OEL TWA (mg/m³)	5 mg/m <sup>3</sup>
Finland	HTP-arvo (8h) (mg/m <sup>3</sup> )	0,5 mg/m <sup>3</sup> Borates (as B)
Germany	TRGS 900 Occupational exposure limit value (mg/m <sup>3</sup> )	0,5 mg/m <sup>3</sup> (The risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed-inhalable fraction)
Ireland	OEL (8 hours ref) (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup>
Latvia	OEL TWA (mg/m³)	10 mg/m <sup>3</sup>
Lithuania	IPRV (mg/m³)	10 mg/m <sup>3</sup>
Lithuania	TPRV (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup>
Portugal	OEL TWA (mg/m³)	2 mg/m <sup>3</sup> (inhalable fraction)
Portugal	OEL STEL (mg/m³)	6 mg/m <sup>3</sup> (inhalable fraction)
Slovenia	OEL TWA (mg/m³)	0,5 mg/m <sup>3</sup> Boric acid and sodium borate [inhalable fraction]
Slovenia	OEL STEL (mg/m <sup>3</sup> )	1 mg/m <sup>3</sup>
Spain	VLA-ED (mg/m³)	2 mg/m <sup>3</sup> (the partial or complete commercialization or use of this substance as a phytosanitary or biocide compound is prohibited)
Spain	VLA-EC (mg/m³)	6 mg/m <sup>3</sup>
Switzerland	MAK (mg/m³)	1,8 mg/m <sup>3</sup> (inhalable dust)
Switzerland	KZGW (mg/m³)	1,8 mg/m <sup>3</sup> (inhalable dust)
USA - ACGIH	ACGIH TWA (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup> (inhalable particulate matter)



USA - ACGIH A	CGIH STEL (mg/m³)	6 mg/m <sup>3</sup> (inhalable particulate matter)
.2. Exposure controls		
Appropriate engineering controls	: Provide adequate vent	ilation.
Personal protective equipment	: Safety glasses. Gloves	0
land protection	Protective gloves made	
Eye protection		side protection according to EN 166 or equivalent.
Skin and body protection		tective apron/clothing (tested to EN 14605 or equivalent)
Respiratory protection	: Where excessive dust with filter type P2	may result, wear approved mask. Dust production: dust mask
Physical state	hysical and chemical properties : Solid	
Appearance Colour	: Crystalline solid. : white.	
Ddour	: characteristic.	
Ddour threshold	: No data available	
bH	: No data available	
oH solution Relative evaporation rate (butyl ac	: 6.3 1% (t = 20°C) etate=1) : not applicable, solid	
Melting point	: No data available	
Freezing point	: No data available	
Boiling point	: not applicable, solid	
Flash point	: not applicable, solid	
Auto-ignition temperature	: No data available	
Decomposition temperature	: No data available	

Decomposition temperature	
Flammability (solid, gas)	: No data available
Vapour pressure	: not applicable, solid
Relative vapour density at 20 °C	: not applicable, solid
Relative density	: No data available

Density

Solubility

: 1.3 kg/l : Water: 100 g/l @ 25°C

5/10



∟og Pow	: No data available	
√iscosity, kinematic	: not applicable, solid	
/iscosity, dynamic	: not applicable, solid	
Explosive properties	: Not explosive as none of the components is	s classified as explosive.
Oxidising properties	: Not oxidising, according to UN test O.1 for	oxidising solids on analogue mixture.
Explosive limits	: No data available	
9.2. Other information		
Specific conductivity	: 125300 µS/m (1 g/L - 18 °C)	×.
SECTION 10: Stability and re	eactivity	
10.1. Reactivity		
No additional information available		
10.2. Chemical stability		111111111111
Stable under normal conditions.		11111111111
10.3. Possibility of hazardous re	eactions	A2111111111
No polymerization. Reacts violently wi		
10.4. Conditions to avoid		
heat/sparks/open flames/hot surfaces	. Humidity.	
10.5. Incompatible materials		
· · · · · · · · · · · · · · · · · · ·	ids. combustible materials. Powdered metals.	
10.6. Hazardous decomposition	products	
	arbon oxides (CO, CO2). Phosphorus oxides.	
SECTION 11: Toxicological i	nformation	23000011111111
11.1. Information on toxicologic		
Acute toxicity	: Not classified	
Tetrapotassium pyrophosphate (7	320-34-5)	
LD50 oral rat	> 2000 mg/kg	
LD50 dermal rabbit	> 2000 mg/kg OECD 402	
LC50 inhalation rat (mg/l)	> 1.1 mg/l OECD 403, EU method B.2	
Boric acid (H3BO3) (10043-35-3)		
LD50 oral rat	> 2600 mg/kg OECD 401	X0007777//
LD50 dermal rabbit	> 2000 mg/kg FIFRA (40CFR 163)	
LC50 inhalation rat (mg/l)	> 2.03 mg/l OECD 403	

Skin corrosion/irritation Serious eye damage/irritation : Not classified

6/10

: Causes serious eye irritation.



: Not classified
: Not classified
: Not classified
: Not classified
: Not classified
: Not classified
: Not classified

Other information:

Boric acid (H3BO3) (10043-35-3)		
Reproductive toxicity		
LOAEL (animal/male, F0/P)	58.5 mg/kg	
NOAEL (animal/male, F0/P)	17.5 mg/kg	

ECTION 12: Ecological info	rmation
2.1. Toxicity	
Tetrapotassium pyrophosphate (73	320-34-5)
LC50 fish 1	> 100 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss)
EC50 Daphnia 1	> 100 mg/l (Exposure time: 48 h - Species: water flea)
EC50 72h algae (1)	> 100 mg/l OECD 201
ErC50 (other aquatic plants)	> 1000 mg/l 3h - OECD 209

Boric acid (H3BO3) (10043-35-3)	
LC50 fish	79,7 mg/l
EC50 Daphnia	133 (115 - 153) mg/l (Exposure time: 48 h - Species: Daphnia magna)
EC50 other aquatic organisms	175 mg/l
ErC50 (algae)	40 mg/l Pseudokirchneriella subcapitata
LOEC (chronic)	23 mg/l Fathead minnow, 32d
NOEC chronic fish	11,2 mg/l Fathead minnow, 32d
NOEC chronic crustacea	25,9 mg/l Hyalella azteca, 42d
NOEC chronic algae	>= 100 mg/l Agmenellum quadruplicatum, 10d

12.2.	Persistence and degradability	
11527		
Persis	tence and degradability	The methods for determining the biological degradability are not applicable to inorganic substances.

12.3. Bioaccumulative potential

No additional information available



11527		
Ecology - soil	Expected to be highly mobile	in soil.
2.5. Other adverse effects		
lo additional information available		
SECTION 13: Disposal conside	rations	
3.1. Waste treatment methods		
Vaste treatment methods	: Reuse or recycle following decont should comply with applicable loc	tamination. External recovery and recycling of waste al and/or national regulations.
<b>SECTION 14: Transport informa</b>	ation	
n accordance with ADR / RID / IMDG / IA	TA / AND / NZS5433	
4.1. UN number		
lot regulated for transport		111111111
		ATTITITI H
4.2. UN proper shipping name Proper Shipping Name (ADR)	: Not applicable	
Proper Shipping Name (IMDG)	: Not applicable	
Proper Shipping Name (IATA)	: Not applicable	
Proper Shipping Name (ADN)	: Not applicable	
Proper Shipping Name (RID)	: Not applicable	
4.3. Transport hazard class(es)		
JDR		
ransport hazard class(es) (ADR)	: Not applicable	
MDG		
ransport hazard class(es) (IMDG)	: Not applicable	
ΑΤΑ		
ransport hazard class(es) (IATA)	: Not applicable	
NDN		
ransport hazard class(es) (ADN)	: Not applicable	
RID		
ransport hazard class(es) (RID)	: Not applicable	
lew Zealand (NZS 5433:2012)		
ransport of Dangerous Goods on Land	: Not applicable	
4.4. Packing group		
Packing group (ADR)	Not applicable	
Packing group (IMDG) Packing group (IATA)	: Not applicable : Not applicable	
Packing group (ADN)	: Not applicable	
Packing group (RID)	: Not applicable	
4.5. Environmental hazards		
Dangerous for the environment	: No	
farine pollutant	: No	
Other information	: No supplementary information ava	allable



- Overland transport	
No data available	
- Transport by sea	
No data available	
- Air transport	
No data available	
- Inland waterway transport	
No data available	
- Rail transport	
No data available	
14.7. Transport in bulk accor	ding to Annex II of MARPOL 73/78 and the IBC Code
Not applicable	
SECTION 15: Regulatory in	nformation
	onmental regulations/legislation specific for the substance or mixture
15.1.1. EU-Regulations	
Contains no REACH substances wi	th Annex XVII restrictions
Contains no substance on the REA	CH candidate list
Contains no REACH Annex XIV sul	hstances
15.1.2. National regulations	
New Zealand	
Classification:	: Classified as hazardous according to criteria in the HS (Minimum Degrees of Hazard) Regulations 2001.
National Chemical Inventories (NZI	0

#### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

# **SECTION 16: Other information**

SDS	Safety Data Sheet
CAS	Chemical Abstracts Service
PBT	Persistent, Bioaccumulative and Toxic substance
vPvB	Very Persistent and Very Bioaccumulative
BCF	Bioconcentration factor
CLP	Classification, Labelling and Packaging
GHS	Globally Harmonised System
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
CSR	Chemical Safety Report
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
DNEL	Derived-No Effect Level
EC50	Median effective concentration
ΙΑΤΑ	International Air Transport Association



IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
RID	Regulations concerning the International Carriage of Dangerous Goods by Rai
PVC	Polyvinyl chloride
PNEC	Predicted No-Effect Concentration

Other information

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: This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product. It is the user's responsibility to take the mentioned precautionary measures and to ensure that this information is complete and sufficient for the use of this product.

Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
H319	Causes serious eye irritation
100	
Eve Irrit. 2	H319 Calculation method