

Product: Plantafol 5-15-45

Code: 11516

Print Date: June 24, 2020

SAFETY DATA SHEET Plantafol 5-15-45

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Mixture
Trade name : Plantafol 5-15-45
Product code : 11516

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Relevant identified uses

Use of the substance/mixture : Fertilizer

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Distributed and guaranteed by: Campbells Fertilisers Australasia 18 Raymond Road, Laverton North, Victoria, 3026 Phone: (03) 9931 2211 Fax: (03) 9931 2201 www.campbellsfert.com.au

Competent person responsible for the safety data sheet: regulatory@valagro.com

1.4. Emergency telephone number

Poison Information Centre - Telephone: 131126 (Australia wide - 24HRS)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Not Classified as Dangerous Goods for transport according to the New Zealand Standard NZS 5433:2012 Transport of Dangerous Goods on Land.

Classification according to the Hazardous Substances (Classification) Notice 2017 of the HSNO Act, 1996

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



Product: Plantafol 5-15-45

Code: 11516

Print Date: June 24, 2020

Hazard pictograms (CLP)



Signal word (CLP)

SECTION 3: Composition/information on ingredients

3.1. **Substance**

Not applicable

3.2. **Mixture**

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%

SECTION 4: First aid measures

Description of first aid measures

First-aid measures general

First-aid measures after inhalation

First-aid measures after skin contact

First-aid measures after eye contact

First-aid measures after ingestion

Other information

: Self-protection of the first aider.

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.

Remove contaminated clothing immediately and dispose of safely. Wash skin thoroughly with mild soap and water. If skin irritation occurs: Get medical

advice/attention. : 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. If swallowed, rinse mouth with water (only if the person is conscious). Do not induce vomiting. Immediately call a POISON CENTER or doctor/ physician.

For advice, contact a Poisons Information Centre (e.g. phone Australia 131 126; New Zealand 0800 764 766) or a doctor.

Most important symptoms and 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

Irritating to eyes. symptoms may include stinging, tearing, redness, swelling and

blurred vision.

Symptoms/injuries after ingestion : May cause gastrointestinal irritation, nausea, vomiting and diarrhoea.

Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing media Unsuitable extinguishing media carbon dioxide (CO2), water, dry chemical powder.

combustible materials.



Product: Plantafol 5-15-45

Code: 11516

Print Date: June 24, 2020

Special hazards arising from the substance or mixture

Fire hazard : Do not breathe fumes.

5.3 Advice for firefighters

Precautionary measures fire

Evacuate the personnel away from the fumes.

Firefighting 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.

Protective equipment for firefighters Extra personal protection: complete protective clothing including self-contained breathing apparatus.

Other information Do not allow run-off from fire fighting to enter drains or water courses.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Do not attempt to take action without suitable protective equipment. Wear personal Protective equipment

protection equipment.

: Alert emergency personnel. **Emergency procedures**

6.1.2. 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.

Environmental precautions

Avoid release to the environment.

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, diatomaceous earth, acid- or universal binding agents). Consult the appropriate

authorities about waste disposal.

Other information : Do not allow uncontrolled discharge of product into the environment.

Reference to other sections

For disposal of residues refer to section 13: Disposal considerations. For further information refer to section 8: "Exposure controls/personal protection". See Section 1 for emergency contact information.

SECTION 7: Handling and storage

Precautions for safe handling

: Avoid contact with skin and eyes. Avoid breathing mist or vapor . Keep away from Precautions for safe handling

sources of ignition - No smoking. Keep away from: Metals, dust, organic materials. Minimize generation of dust.

Do not eat, drink or smoke when using this product. Wash hands thoroughly after Hygiene measures

handling.

Conditions for safe storage, including any incompatibilities

: Store tightly closed in a dry, cool and well-ventilated place. Keep out of direct sunlight. Storage conditions

Incompatible products : Oxidising agents, reducing agents, Acids, combustible materials, Powdered metals,

Heat and ignition sources : Keep away from open flames, hot surfaces and sources of ignition.

Prohibitions on mixed storage : Keep away from food, drink and animal feeding stuffs.

Specific end use(s)

No additional information available



Product: Plantafol 5-15-45

Code: 11516

Print Date: June 24, 2020

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/m³
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/m³)	2 mg/m³
Belgium	Short time value (mg/m³)	6 mg/m³
Bulgaria	OEL TWA (mg/m³)	5 mg/m³
Finland	HTP-arvo (8h) (mg/m³)	0,5 mg/m³ Borates (as B)
Germany	TRGS 900 Occupational exposure limit value (mg/m³)	0,5 mg/m³ (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/m³)	2 mg/m³
Latvia	OEL TWA (mg/m³)	10 mg/m³
Lithuania	IPRV (mg/m³)	10 mg/m³
Lithuania	TPRV (mg/m³)	2 mg/m³
Portugal	OEL TWA (mg/m³)	2 mg/m³ (inhalable fraction)
Portugal	OEL STEL (mg/m³)	6 mg/m³ (inhalable fraction)
Slovenia	OEL TWA (mg/m³)	0,5 mg/m³ Boric acid and sodium borate [inhalable fraction]
Slovenia	OEL STEL (mg/m³)	1 mg/m³
Spain	VLA-ED (mg/m³)	2 mg/m³ (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/m³
Switzerland	MAK (mg/m³)	1,8 mg/m³ (inhalable dust)
Switzerland	KZGW (mg/m³)	1,8 mg/m³ (inhalable dust)
USA - ACGIH	ACGIH TWA (mg/m³)	2 mg/m³ (inhalable particulate matter)



Product: Plantafol 5-15-45

Code: 11516

Print Date: June 24, 2020

Boric acid (H3BO3) (10043-35-3)

USA - ACGIH ACGIH STEL (mg/m³) 6 mg/m³ (inhalable particulate matter)

8.2. Exposure controls

Appropriate engineering controls : Provide adequate ventilation.

Personal protective equipment : Safety glasses. Gloves. Protective clothing.

Hand protection : Chemical resistant gloves (according to European standard EN 374 or equivalent).

Protective gloves made of rubber or PVC

Eye protection : Wear eye glasses with side protection according to EN 166 or equivalent.

Skin and body protection : Chemical resistant protective apron/clothing (tested to EN 14605 or equivalent)

: Where excessive dust may result, wear approved mask. Dust production: dust mask

with filter type P2

: No data available



Melting point

Respiratory protection





SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Solid

Appearance : Crystalline solid.

Colour : whit

Odour : characteristic.

Odour threshold : No data available

pH : No data available

pH solution : $6.3 \, 1\% \, (t = 20^{\circ}C)$

Relative evaporation rate (butyl acetate=1) : not applicable, solid

Freezing point : No data available

Boiling point : not applicable, solid

zomily point in the application, come

Flash point : not applicable, solid

Auto-ignition temperature : No data available

Decomposition temperature : No data available

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 : 1.3 kg/l

Solubility : Water: 100 g/l @ 25°C



Product: Plantafol 5-15-45

Code: 11516

Print Date: June 24, 2020

Log Pow : No data available

Viscosity, kinematic : not applicable, solid
Viscosity, dynamic : not applicable, solid

Explosive properties : Not explosive as none of the components is 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 : $125300 \mu S/m (1 g/L - 18 °C)$

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No polymerization. Reacts violently with. oxidizing agents. Strong acids.

10.4. Conditions to avoid

heat/sparks/open flames/hot surfaces. Humidity.

10.5. Incompatible materials

Oxidising agents. reducing agents. Acids. combustible materials. Powdered metals.

10.6. Hazardous decomposition products

Nitrogen oxides. Potassium oxides. Carbon oxides (CO, CO2). Phosphorus oxides.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

Tetrapotassium pyrophosphate (7320-34-5)		
LD50 oral rat	> 2000 mg/kg	- /////////////////////////////////////
LD50 dermal rabbit	> 2000 mg/kg OECD 402	WALLEL (1)
LC50 inhalation rat (mg/l)	> 1.1 mg/l OECD 403, EU method B.2	WWW.1111177

Boric acid (H3BO3) (10043-35-3)	
LD50 oral rat	> 2600 mg/kg OECD 401
LD50 dermal rabbit	> 2000 mg/kg FIFRA (40CFR 163)
LC50 inhalation rat (mg/l)	> 2,03 mg/l OECD 403

Skin corrosion/irritation : Not classified

Serious eye damage/irritation : Causes serious eye irritation.

Respiratory or skin sensitisation : Not classified Germ cell mutagenicity : Not classified Carcinogenicity : Not classified : Not classified



Product: Plantafol 5-15-45

Code: 11516

Print Date: June 24, 2020

Reproductive toxicity : Not classified Specific target organ toxicity (single exposure) : Not classified exposure) : Not classified : Not classified

exposure)

Aspiration hazard : 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	

SECTION 12: Ecological information

12.1. Toxicity

Tetrapotassium pyrophosphate (7320-34-5)	
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

Plantafol 5-15-45	
Persistence and degradability	The methods for determining the biological degradability are not applicable to inorganic substances.

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

Plantafol 5-15-45		
Ecology - soil	Expected to be highly mobile in soil.	

12.5. Other adverse effects

No additional information available



Product: Plantafol 5-15-45

Code: 11516

Print Date: June 24, 2020

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods

Reuse or recycle following decontamination. External recovery and recycling of waste should comply with applicable local and/or national regulations.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / AND / NZS5433

14.1. UN number

Not regulated for transport

14.2. 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

14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR) : Not applicable

IMDG

Transport hazard class(es) (IMDG) : Not applicable

IATA

Transport hazard class(es) (IATA) : Not applicable

ADN

Transport hazard class(es) (ADN) : Not applicable

RID

Transport hazard class(es) (RID) : Not applicable

New Zealand (NZS 5433:2012)

Transport of Dangerous Goods on Land : Not applicable

14.4. Packing group

Packing group (ADR) : Not applicable
Packing group (IMDG) : Not applicable
Packing group (IATA) : Not applicable
Packing group (ADN) : Not applicable
Packing group (RID) : Not applicable

14.5. Environmental hazards

Dangerous for the environment : No Marine pollutant : No

Other information : No supplementary information available



Product: Plantafol 5-15-45

Code: 11516

Print Date: June 24, 2020

14.6. Special precautions for user

- 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 according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions

15.1.2. National regulations

New Zealand

Classification:

Classified as hazardous according to HSNO Act 1996; Hazardous Substances (Classification) Notice 2017.

National Chemical Inventories (NZIoC) HSNO Approval Number (Group Standard)

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Abbreviations and acronyms:

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
IATA	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



Product: Plantafol 5-15-45

Code: 11516

Print Date: June 24, 2020

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

: 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.

Full text of H- and EUH-statements:

Eye Irrit. 2	Serious eye damage/eye irritation, Category 2	
H319	Causes serious eye irritation	
11111111		

Eye Irrit. 2	H319	Calculation method