

Prepared in accordance with Preparation of Safety Data Sheets for Hazardous Chemicals Code of Practice (Safe Work Australia, February 2016)

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Page: 1/11  
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## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### Product identifier

Trade name: **CANNA AQUA FLORES B**

Synonym(s): -

### Relevant identified uses of the substance or mixture and uses advised against:

Liquid PK fertilizer.

### Product category:

Product Category 12 (PC12 Fertilizers),  
Sector of Use 21 (SU21 Consumer uses).

### Details of the supplier of the safety data sheet

#### Manufacturer/supplier:

#### For Australia:

CANNA Australasia Pty Ltd  
PO Box 1816,  
Subiaco WA 6904 Australia  
Phone: 1800 422 662 / +61 (0)8 9217 4400

#### For New Zealand:

CANNA Australasia Pty Ltd  
PO Box 158,  
Auckland 1140, New Zealand  
Phone: 0800 422 662 / +61 (0)8 9217 4400

#### Further information obtainable from:

Contact person: N. Linton  
Tel.: +31 (0) 162-68 00 12  
Email: msds@canna.com  
Working hours  
(business days): 09:00-17:00.

#### Emergency telephone number:

Australia : Poisons Information Centre 13 11 26  
New Zealand: National Poisons Centre 0800 764 766

## SECTION 2: Hazards identification

### Classification of the substance or mixture

Classification in accordance with GHS, 3<sup>rd</sup> Revised Edition  
Void.

### Label elements and precautionary statement

Hazard pictograms:

-

Signal word: -

Hazard statements:

-

Precautions:

-

Hazard-determining components for

**Trade name:** CANNA AQUA FLORES B

**labelling:** -

### Other hazards

Void.

### Results of PBT and vPvB assessment

**PBT:** No.

**vPvB:** No.

## SECTION 3: Composition/information on ingredients

### Chemical characterization: Mixture.

**Description:** Preparation based on i.a. water, potassium sulphate and nitric acid.

#### Hazardous ingredients

##### Potassium sulphate

CAS#: 7778-80-5

EC#: 231-915-5

Index#: -

REACH reg.#: -

Content (W/W): 1 - 3 %

1272/2008/EC: Eye Dam. 1; H318.

##### Nitric acid 38%

CAS#: 7697-37-2

EC#: 231-714-2

Index#: 007-004-00-1

REACH reg.#: -

Content (W/W): 0.1 - 1 %

Danger:

1272/2008/EC: Ox. Liq. 3; H272 - Skin Corr. 1B; H314.

**Full text of H- phrase(s): see section 16.**

## SECTION 4: First aid measures

### Description of first aid measures

#### General information:

Remove victim from danger zone and place in lying position.

In case of irregular breathing or respiratory arrest provide artificial respiration.

Remove immediately all contaminated clothing.

Substance is harmful to tissue after continuous contact. Rinsing immediately following exposure can limit injury.

#### Inhalation:

Remove to fresh air.

If the victim is not breathing, apply artificial respiration.

#### Skin contact:

Immediately wash with plenty of water and soap.

#### Eye contact:

Remove contact lenses, if present, and immediately rinse eyes while holding eyelids open for a sufficient period of time (at least 15 minutes) with lukewarm water. Help the victim with the rinsing process. Do not use neutralising liquids. Then immediately consult a physician/ophthalmologist.

#### Ingestion:

Rinse mouth immediately with water (if conscious), and then drink plenty of water. Do not induce vomiting (only under the supervision of a physician) and immediately consult a physician or take victim to hospital (show physician packaging, label or SDS). Place unconscious person on the side in the recovery position. Loosen tight clothing such

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as a shirt collar, tie, belt or waistband. Keep at rest.

### Most important symptoms and effects, both acute and delayed

#### Inhalation:

Exposure to vapour concentrations of component dusts higher than the MAC value can be harmful to the health. Potential health effects include: cardiac rhythm irregularities, burning sensation, coughing, difficulty breathing, loss of consciousness. Effects may be delayed. Prolonged inhalation of aerosol and/or mist may cause pneumonia and/or lung oedema, but only after initial corrosive effects on the mucous membranes of the eyes and/or upper airways have become manifest. Contains potassium sulphate which may cause sensitization of susceptible persons.

#### Skin contact:

Slightly irritating to the skin. Signs and symptoms of skin irritation may include redness and a yellow discolouration.

#### Eye contact:

May cause irreversible damage to the eyes. Redness. Pain.

#### Ingestion:

Stomach ache. Irritation of mucous membranes.

### Indication of any immediate medical attention and special treatment needed

Symptomatic treatment and supportive therapy as prescribed.

## SECTION 5: Firefighting measures

### Extinguishing media

#### Suitable extinguishing media:

CO<sub>2</sub>, extinguishing powder or water jet. Fight larger fires with water spray.

Foam.

Sand.

Adapt extinguishing measures to suit the environment.

#### Unsuitable extinguishing media:

Powerful water jet.

### Special hazards arising from the substance or mixture

During heating or in case of fire, poisonous gases may be produced.

May be released in event of fire:

Nitrogen oxides (NO<sub>x</sub>).

Sulphur oxides.

Metal oxides.

### Advice for firefighters

#### Special protective clothing:

Wear self-contained breathing apparatus.

### Other information

No specific requirements.

## SECTION 6: Accidental release measures

### Personal precautions, protective equipment and emergency procedures

Ensure sufficient ventilation.

Wear personal protective equipment.

### Environmental precautions

Do not allow large quantities of product to reach sewage/surface water/groundwater in concentrated form.

Notify competent authorities in case of release of large quantities into the environment.

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### Methods and material for containment and cleaning up

Soak up immediately with absorbent material (sand, dry earth).  
Recycle, if possible.  
Collect in suitable containers for disposal.  
Then flush away residue with plenty of water.

### Reference to other sections

Information regarding safe handling – see section 7.  
Information regarding personal protective equipment – see section 8.  
Information regarding disposal – see section 13.

## SECTION 7: Handling and storage

### Handling

#### Precautions for safe handling:

Provide adequate ventilation/extraction in the workplace.  
Open and handle package with care.  
Avoid formation of aerosols.

#### Information about fire - and explosion protection:

No specific requirements.

### Conditions for safe storage, including any incompatibilities

#### Storage:

Close containers after each use.  
Handle empty containers as if they were full.

#### Requirements to be met by storerooms and receptacles:

Keep only in the original container.  
Keep in a dark place.

Store in a frost-free environment.

Protect against heat and direct sunlight.

Suitable packaging material: Polyethylene.

Suitable material for tanks and pipelines: Stainless steel, PVC.

#### Information about storage in one common storage facility:

Install partitions in the drip tray to prevent acidic and alkaline fertilisers from coming into contact with one another.

#### Further information about storage conditions:

Recommended storage temperature 10 - 30 °C.

### Specific end use(s)

No further relevant information available.

## SECTION 8: Exposure controls/personal protection

### Control parameters

#### Ingredients with limit values that require monitoring at the workplace:

Product information: 7697-37-2	Nitric acid		
TWA 15 min.	mg/m <sup>3</sup> (ppm)	2.6 (1) 2006/15/EC	

#### Hazardous ingredients with DN(M)EL:

Product information: 7778-80-5	Exposure	Value	Unit	Population / Effects
Potassium sulphate				
DN(M)EL	Short-term dermal	-	mg/kg bw/day	Workers Local
DN(M)EL	Short-term	-	mg/m <sup>3</sup>	Workers

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	inhalation			Local
DN(M)EL	Long-term dermal	21.3	mg/kg bw/day	Workers Systemic
DN(M)EL	Long-term inhalation	37.6	mg/m <sup>3</sup>	Workers Systemic
DN(M)EL	Long-term dermal	-	mg/kg bw/day	Workers Local
DN(M)EL	Long-term inhalation	-	mg/m <sup>3</sup>	Workers Local
DN(M)EL	Short-term dermal	-	mg/kg bw/day	General population Local
DN(M)EL	Short-term inhalation	-	mg/m <sup>3</sup>	General population Local
DN(M)EL	Long-term dermal	12.8	mg/kg bw/day	General population Systemic
DN(M)EL	Long-term inhalation	11.1	mg/m <sup>3</sup>	General population Systemic
DN(M)EL	Long-term oral	12.8	mg/kg bw/day	General population Systemic
DN(M)EL	Long-term dermal	-	mg/kg bw/day	General population Local
DN(M)EL	Long-term inhalation	-	mg/m <sup>3</sup>	General population Local

**Hazardous ingredients with DN(M)EL:**

Product information: 7697-37-2	Exposure	Value	Unit	Population / Effects
Nitric acid				
DN(M)EL	Short-term dermal	-	mg/kg bw/day	Workers Local
DN(M)EL	Short-term inhalation	2.6	mg/m <sup>3</sup>	Workers Local
DN(M)EL	Long-term dermal	-	mg/kg bw/day	Workers Systemic
DN(M)EL	Long-term inhalation	1.3	mg/m <sup>3</sup>	Workers Systemic
DN(M)EL	Long-term dermal	-	mg/kg bw/day	Workers Local
DN(M)EL	Long-term inhalation	-	mg/m <sup>3</sup>	Workers Local
DN(M)EL	Short-term dermal	-	mg/kg bw/day	General population Local
DN(M)EL	Short-term inhalation	1.3	mg/m <sup>3</sup>	General population Local
DN(M)EL	Long-term dermal	-	mg/kg bw/day	General population Systemic
DN(M)EL	Long-term inhalation	-	mg/m <sup>3</sup>	General population Systemic
DN(M)EL	Long-term oral	-	mg/kg bw/day	General population Systemic
DN(M)EL	Long-term	-	mg/kg bw/day	General

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	dermal			population Local
DN(M)EL	Long-term inhalation	0.65	mg/m <sup>3</sup>	General population Local

### Hazardous ingredients with PNEC:

Product information: 7778-80-5 Potassium sulphate	Value	Unit	Compartment
PNEC	0.68	mg/l	Fresh water
PNEC	0.068	mg/l	Marine water
PNEC	6.8	mg/l	Intermittent releases
PNEC	10	mg/l	STP (sewage treatment plant)
PNEC	-	mg/kg dwt	Sediment fresh water
PNEC	-	mg/kg dwt	Sediment marine water
PNEC	-	mg/kg wwt	Soil
PNEC	No bio- accumulation potential	mg/l	Oral

## Exposure controls

### Personal protective equipment:

Remove immediately all contaminated clothing.

Store protective clothing separately.

Avoid contact with the eyes and skin.

### General protective and hygienic measures:

Keep away from foodstuffs and beverages.

Do not eat, drink or smoke when using this product.

The usual precautionary measures are to be adhered to when handling chemicals.

### Respiratory protection:

No specific requirements, normal room ventilation will suffice.

### Hand protection:



Safety gloves.

The glove material (EN374) has to be impermeable and resistant to the product/ the substance/ the preparation. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

### Glove material

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

### Penetration time of glove material

The exact break through time can be obtained from the manufacturer of the protective gloves and has to be observed.

### Eye protection:

Tight fitting safety goggles. Eye shower. Full facemask with splash/spatter risk.



### Body protection:

Wear suitable protective work clothing (in case of splash risk).

### Measuring procedures:

In order to establish compliance with an exposure limit and to establish that exposure is properly controlled, it may be necessary to determine the concentration of the substances in the inhalation zone or in the general workspace.

### Environmental exposure controls:

Leakage of the material and concentrated solution must be stopped.

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## SECTION 9: Physical and chemical properties

### Information on basic physical and chemical properties

#### General information

#### Appearance

Form:	Liquid.
Colour:	Colourless.
Odour:	Odourless.
Odour threshold:	Not determined.

pH-value	2.8-3.1
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#### Change in condition

Melting point/melting range:	Not determined.
Boiling point/boiling range:	Not determined.

Flash Point:	> 93 °C.
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Flammability (solid, gas):	Not applicable.
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Auto-ignition temperature:	Not determined.
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Explosion hazard:	Not determined.
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#### Explosive limits

Lower:	Not determined.
Upper:	Not determined.

Vapour pressure:	Not determined.
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Relative density:	1.113 (water = 1).
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Vapour density:	Not determined.
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Evaporation rate:	Not determined.
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Solubility in/miscibility with water:	Fully.
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Partition coefficient n-octanol/water:	Not determined.
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#### Viscosity

Dynamic:	Not determined.
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Kinematic:	Not determined.
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Other information	No further relevant information available.
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## SECTION 10: Stability and reactivity

### Reactivity

#### Chemical stability:

The product is stable if stored and handled as prescribed.

#### Thermal decomposition/Conditions to be avoided:

No decomposition if used as prescribed. Avoid storing at high temperatures (> 30 °C) to prevent degradation of the material or pressure build-up. Avoid low temperatures (< 10 °C) to prevent crystallization from occurring.

Material is susceptible to frost.

#### Possibility of hazardous reactions

Contact with strong reducing agents (and bases).

#### Conditions to avoid

Avoid heat, sparks, open flames, and other sources of ignition. Prevent evaporation in a non-ventilated environment. Protect against heat and direct sunlight. Protect against frost.

#### Incompatible materials

Mildly corrosive for metals.

#### Hazardous decomposition products

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No hazardous decomposition products are formed if stored under normal conditions. In case of heating or combustion, irritating or poisonous vapours may be released such as nitrogen oxides, sulphur oxides and metal oxides.

## SECTION 11: Toxicological information

### Toxicology information

#### Acute toxicity from the components:

LD/LC50 values relevant for classification:		
Product information: 7778-80-5	Potassium sulphate	
Oral	LD50	> 2000 mg/kg (rat) (OECD 425)
	LDL0	570 mg/kg (human)
Inhalation	LC50 (4 h)	- (OECD 433)
Dermal	LD50	> 2000 mg/kg (rat) (OECD 402)
Product information: 7697-37-2	Nitric acid	
Oral	LD50	430 mg/kg (human)
Inhalation	LC50 (4h)	> 80 mg/l (rat) (OECD 403)
Dermal	LD50	-

The following health risk assessment is based on an assessment of the various ingredients in the product.

#### Primary irritant effect:

##### on the skin:

Irritates the skin and the mucous membranes.

##### to the eye:

Irritant / corrosive effect.

#### Germ cell mutagenicity:

Not classified.

#### Reproductive and developmental toxicity:

Not classified.

#### Sensitisation:

No sensitising effects known.

#### CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction):

Not classified.

#### Other information:

No further relevant information available.

## SECTION 12: Ecological information

### Toxicology information

#### Ecotoxicity from the components:

Aquatic toxicity:		
Product information: 7778-80-5	Potassium sulphate	
Fish	LC50 (96 h)	680 mg/l (fathead minnow)
	LC50 (96 h)	3550 mg/l (bluegill)
Water flea	EC50 (48 h)	720 mg/l (daphnia magna, EPA/600/4-90/027)
	EC50 (48 h)	890 mg/l (daphnia magna, DIN 38412 Part II)
Algae	EC50	-
Bacteria	EC50	-
Product information: 7697-37-2	Nitric acid	



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Fish	LC100 (96 h) LC50 (96 h)	3 – 3.5 mg/l (bluegill sunfish) > 100 mg/l
Water flea	EC50 (96 h) EC50 (48 h)	490 mg/l (daphnia magna, EPA/600/4-90/027) 180 mg/l (daphnia magna)
Algae	EC50	-
Bacteria	EC50	-

**The following ecological risk assessment is based on an assessment of the various ingredients in the product.**

### Persistence and degradability

Partially inorganic and presumed to be partially biodegradable over the long-term.

### Behaviour in environmental compartments

#### Bioaccumulative potential:

Bioaccumulation in organisms is not expected.

#### Mobility in soil:

No further relevant information available.

### Further ecological information

#### General information:

Water hazard class 1 (German regulation) (Self-assessment): slightly hazardous to water. Do not discharge undiluted product into groundwater, surface water or sewage system.

### Results of PBT and vPvB assessment

The mixture does not meet all of the assessment criteria for persistence, bioaccumulation and toxicity and hence is not considered to be PBT or vPvB.

### Other adverse effects

Contains substances that contribute to eutrophication: Nitrates.

## SECTION 13: Disposal considerations

### Waste treatment methods

#### Recommendation:

May be brought to a supervised incineration plant in compliance with local regulations.

#### EC Regulation for Disposal of Waste (EWC):

06 10 02\* WASTES FROM INORGANIC CHEMICAL PROCESSES, wastes from the MFSU of nitrogen chemicals, nitrogen chemical processes and fertiliser manufacture; waste containing dangerous substances.

### Uncleaned packaging

#### Recommendation:

Disposal must be made according to official regulations. Empty the packaging with care. Do not contaminate soil, water or environment with the waste container. Comply with local regulations with regard to the recovery or disposal of waste.

## SECTION 14: Transport information

### Land transport ADR/RID (cross-border)

**ADR/GGVSEB class:** Not a dangerous good according to the transport regulations.

**Hazard identification number:** -

**UN number:** -

Trade name: **CANNA AQUA FLORES B**

Packing group: -  
Label: -  
Special marking: -  
UN proper shipping name: -  
Tunnel restriction code: -

### Inland shipping ADN/ADR

ADN/R-class: -  
UN number: -  
Subsidiary risk: -  
Environmental hazards: -  
CMR properties: -  
Buoyancy: -

### Maritime transport IMDG

IMDG-class: -  
UN number: -  
Label: -  
Packing group: -  
EMS number: -  
Marine pollutant: -  
Proper shipping name: -

### Air transport ICAO-TI and IATA-DGR

ICAO/IATA-class: -  
UN number: -  
Label: -  
Packing group: -  
Proper shipping name: -

### Environmental hazards

No.

### Special precautions for user

None.

### Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

No further relevant information available.

## SECTION 15: Regulatory information

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

#### National regulations:

*Agricultural and Veterinary Chemicals Act 1988* (Commonwealth)- Australia  
New Zealand Inventory of Chemicals (NZIoC)

#### EU regulations and directives which affect this mixture (not yet directly or indirectly mentioned):

Directive 89/686/EEC Personal protective equipment.  
Directive 98/24/EC Risks related to chemical agents at work.  
Regulation 2003/2003/EC Concerning fertilisers.

### Chemical safety assessment

A chemical safety assessment has not been carried out.

Trade name: **CANNA AQUA FLORES B**

## SECTION 16: Other information

This information is based on the current state of our knowledge. It should not be construed as any guarantee of product characteristics, nor does it establish a legally valid contractual relationship.

### List of relevant H- phrases from sections 2 and 3

H272 May intensify fire; oxidiser.  
H314 Causes severe skin burns and eye damage.  
H318 Causes serious eye damage.

### Document history

Printed on: 23 March 2021.  
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### Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route  
(European Agreement concerning the International Carriage of Dangerous Goods by Road)  
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)  
IMDG: International Maritime Code for Dangerous Goods  
IATA: International Air Transport Association  
IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)  
ICAO: International Civil Aviation Organization  
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)  
P: Marine pollutant  
GHS: Globally Harmonized System of Classification and Labelling of Chemicals  
CAS: Chemical Abstracts Service (division of the American Chemical Society)  
EC50: Half maximal effective concentration  
HSNO: Hazardous Substances and New Organisms Act 1996  
LC50: Lethal concentration, 50 percent  
LD50: Lethal dose, 50 percent  
OEL: Occupational Exposure Limit  
NOEC: No Observed Effect Concentration  
NZIoC: New Zealand Inventory of Chemicals  
vPvB: Very Persistent and Very Bioaccumulative  
PBT: Persistent, Bioaccumulative and Toxic substance  
EWC: European Waste Catalogue  
TWA: Time-Weighted Average  
DNEL: Derived No-Effect Level  
DMEL: Derived Minimal Effect Level  
PNEC: Predicted No-Effect Concentration