1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

1.1 Product identifier

Product name	**GROW KING POTASSIUM**
Synonym(s)	GROW KING POTASSIUM LIQUID FERTILISER

1.2 Uses and uses advised against

Use(s)	LIQUID FERTILISER • LIQUID FERTILIZER

1.3 Details of the supplier of the poduct

Supplier name	**RURAL LIQUID FERTILISERS PTY LTD**
Address	1/61 Dowd Street, Welshpool, WA, 6106, AUSTRALIA
Telephone	(08) 9334 8700; 1800 753 000
Fax	(08) 9334 8711
Email	info@rlf.com.au
Website	http://www.ruralliquidfertilisers.com

1.4 Emergency telephone number(s)

Emergency	Poisons Information Centre: 13 11 26

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

CLASSIFIED AS HAZARDOUS ACCORDING TO AUSTRALIAN WHS REGULATIONS

GHS classification(s)

Serious Eye Damage / Eye Irritation : Category 1

Specific Target Organ Systemic Toxicity (Single Exposure) : Category 3

2.2 Label elements

Signal word **DANGER**

Pictogram(s)

Hazard statement(s)

H318	Causes serious eye damage.
H335	May cause respiratory irritation.

Prevention statement(s)

P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/protective clothing/eye protection/face protection.

Response statement(s)

P304 + P340	IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER or doctor/physician.

Storage statement(s)

P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.

Disposal statement(s)

P501	Dispose of contents/container in accordance with relevant regulations.

2.3 Other Hazards No information provided.

3. COMPOSITION / INFORMATION ON INGREDIENTS

3.1 Substances / Mixtures

Ingredient	CAS Number	EC Number	Content
POTASSIUM CARBONATE	584-08-7	209-529-3	45 to 50%
NON HAZARDOUS INGREDIENTS	Not Available	Not Available	Remainder

4. FIRST AID MEASURES

4.1 Description of first aid measures

Eye If in eyes, hold eyelids apart and flush continuously with running water. Continue flushing until advised to stop by a Poisons Information Centre, a doctor, or for at least 15 minutes.

Inhalation If inhaled, remove from contaminated area. Apply artificial respiration if not breathing.

Skin If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. Continue flushing with water until advised to stop by a Poisons Information Centre or a doctor.

Ingestion For advice, contact a Poison Information Centre on 13 11 26 (Australia Wide) or a doctor (at once).

First aid facilities Eye wash facilities should be available.

4.2 Most important symptoms and effects, both acute and delayed See Section 11 for more detailed information on health effects and symptoms.

4.3 Immediate medical attention and special treatment needed Treat symptomatically.

5. FIRE FIGHTING MEASURES

5.1 Extinguishing media Use an extinguishing agent suitable for the surrounding fire.

5.2 Special hazards arising from the substance or mixture Non flammable. May evolve carbon oxides and potassium oxides when heated to decomposition.

5.3 Advice for firefighters No fire or explosion hazard exists.

5.4 Hazchem code None allocated.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures Wear Personal Protective Equipment (PPE) as detailed in section 8 of the SDS.

6.2 Environmental precautions Prevent product from entering drains and waterways.

6.3 Methods of cleaning up Contain spillage, then cover / absorb spill with non-combustible absorbent material (vermiculite, sand, or similar), collect and place in suitable containers for disposal.

6.4 Reference to other sections See Sections 8 and 13 for exposure controls and disposal.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling — Before use carefully read the product label. Use of safe work practices are recommended to avoid eye or skin contact and inhalation. Observe good personal hygiene, including washing hands before eating. Prohibit eating, drinking and smoking in contaminated areas.

7.2 Conditions for safe storage, including any incompatibilities — Store in a cool, dry, well ventilated area, removed from incompatible substances.

7.3 Specific end use(s) — No information provided.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

Exposure standards — No exposure standards have been entered for this product.

Biological Limits — No biological limit values have been entered for this product.

8.2 Exposure controls

Engineering controls — Avoid inhalation. Use in well ventilated areas.

PPE

Eye / Face — Wear splash-proof goggles.

Hands — Wear PVC or rubber gloves.

Body — When using large quantities or where heavy contamination is likely, wear coveralls.

Respiratory — Not required under normal conditions of use.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	CLEAR, COLOURLESS LIQUID
Odour	ODOURLESS
Flammability	NON FLAMMABLE
Flash point	NOT RELEVANT
Boiling point	NOT AVAILABLE
Melting point	NOT AVAILABLE
Evaporation rate	NOT AVAILABLE
pH	11.0 to 11.4 (1 % solution)
Vapour density	NOT AVAILABLE
Specific gravity	1.500 to 1.520
Solubility (water)	SOLUBLE
Vapour Pressure	NOT AVAILABLE
Upper explosion limit	NOT RELEVANT
Lower explosion limit	NOT RELEVANT
Partition coefficient	NOT AVAILABLE
Autoignition temperature	NOT AVAILABLE
Decomposition temperature	NOT AVAILABLE

Viscosity	NOT AVAILABLE
Explosive Properties	NOT AVAILABLE
Oxidising Properties	NOT AVAILABLE
Odour Threshold	NOT AVAILABLE

10. STABILITY AND REACTIVITY

10.1 Reactivity Carefully review all information provided in sections 10.2 to 10.6.

10.2 Chemical stability Stable under recommended conditions of storage.

10.3 Possibility of hazardous reactions Polymerization is not expected to occur.

10.4 Conditions to avoid Avoid heat, sparks, open flames and other ignition sources.

10.5 Incompatible materials Incompatible with combustible materials, and reducing agents (e.g. sulphites)

10.6 Hazardous decomposition products May evolve carbon oxides and potassium oxides when heated to decomposition.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity

Information available for the product:

Based on available data, the classification criteria are not met. Ingestion of large quantities may result in nausea, vomiting, abdominal pain and diarrhoea.

Information available for the ingredient(s):

Ingredient	Oral Toxicity (LD50)	Dermal Toxicity (LD50)	Inhalation Toxicity (LC50)
POTASSIUM CARBONATE	> 2000 mg/kg (rat)	--	--

Skin	Contact may result in irritation, redness, rash and dermatitis.
Eye	Causes serious eye damage. Contact may result in irritation, lacrimation, pain and redness.
Sensitisation	Not classified as causing skin or respiratory sensitisation.
Mutagenicity	Not classified as a mutagen.
Carcinogenicity	Not classified as a carcinogen.
Reproductive	Not classified as a reproductive toxin.
STOT – single exposure	May cause respiratory irritation. Over exposure may result in irritation of the nose and throat, with coughing.
STOT – repeated exposure	Not classified as causing organ damage from repeated exposure.
Aspiration	Not classified as causing aspiration.

12. ECOLOGICAL INFORMATION

12.1 Toxicity — No information provided.

12.2 Persistence and degradability — No information provided.

12.3 Bioaccumulative potential — No information provided.

12.4 Mobility in soil — No information provided.

12.5 Other adverse effects — Plant nutrients may be beneficial to plants at low levels, however high levels may cause reduced growth or burns in sensitive species. Excess may be washed through soil to waterways. Nutrients released to waterways may cause algal blooms, with potential for toxic effects on aquatic organisms.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Waste disposal — Dispose of to an approved landfill or waste processing site. Contact the manufacturer/supplier for additional information (if required).

Legislation — Dispose of in accordance with relevant local legislation.

14. TRANSPORT INFORMATION

NOT CLASSIFIED AS A DANGEROUS GOOD BY THE CRITERIA OF THE ADG CODE, IMDG OR IATA

	LAND TRANSPORT (ADG)	SEA TRANSPORT (IMDG / IMO)	AIR TRANSPORT (IATA / ICAO)
14.1 UN Number	None Allocated	None Allocated	None Allocated
14. 2 Proper Shipping Name	None Allocated	None Allocated	None Allocated
14.3 Transport hazard class	None Allocated	None Allocated	None Allocated
14.4 Packing Group	None Allocated	None Allocated	None Allocated

14.5 Environmental hazards — No information provided

14.6 Special precautions for user

Hazchem code — None Allocated

15. REGULATORY INFORMATION

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

Poison schedule

A poison schedule number has not been allocated to this product using the criteria in the Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP).

Classifications

Safework Australia criteria is based on the Globally Harmonised System (GHS) of Classification and Labelling of Chemicals.

The classifications and phrases listed below are based on the Approved Criteria for Classifying Hazardous Substances [NOHSC: 1008(2004)].

Hazard codes

Xi	Irritant

Risk phrases

R37	Irritating to respiratory system.
R41	Risk of serious damage to eyes.

Safety phrases

S23	Do not breathe gas/fumes/vapour/spray (where applicable).
S25	Avoid contact with eyes.
S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S36/39	Wear suitable protective clothing and eye/face protection.

Inventory listing(s)

AUSTRALIA: AICS (Australian Inventory of Chemical Substances)

All components are listed on AICS, or are exempt.

16. OTHER INFORMATION

Additional information

EXPOSURE STANDARDS - TIME WEIGHTED AVERAGES:

Exposure standards are established on the premise of an 8 hour work period of normal intensity, under normal climatic conditions and where a 16 hour break between shifts exists to enable the body to eliminate absorbed contaminants. In the following circumstances, exposure standards must be reduced: Strenuous work conditions; hot, humid climates; high altitude conditions; extended shifts (which increase the exposure period and shorten the period of recuperation).

PERSONAL PROTECTIVE EQUIPMENT GUIDELINES:

The recommendation for protective equipment contained within this report is provided as a guide only. Factors such as method of application, working environment, quantity used, product concentration and the availability of engineering controls should be considered before final selection of personal protective equipment is made

HEALTH EFFECTS FROM EXPOSURE:

It should be noted that the effects from exposure to this product will depend on several factors including: frequency and duration of use; quantity used; effectiveness of control measures; protective equipment used and method of application. Given that it is impractical to prepare a report which would encompass all possible scenarios, it is anticipated that users will assess the risks and apply control methods where appropriate.

Abbreviations

ACGIH	American Conference of Governmental Industrial Hygienists
CAS #	Chemical Abstract Service number - used to uniquely identify chemical compounds
CNS	Central Nervous System
EC No.	EC No - European Community Number
EMS	Emergency Schedules (Emergency Procedures for Ships Carrying Dangerous Goods)
GHS	Globally Harmonized System
GTEPG	Group Text Emergency Procedure Guide
IARC	International Agency for Research on Cancer
LC50	Lethal Concentration, 50% / Median Lethal Concentration
LD50	Lethal Dose, 50% / Median Lethal Dose
mg/m³	Milligrams per Cubic Metre
OEL	Occupational Exposure Limit
pH	relates to hydrogen ion concentration using a scale of 0 (high acidic) to 14 (highly alkaline).
ppm	Parts Per Million
STEL	Short-Term Exposure Limit
STOT-RE	Specific target organ toxicity (repeated exposure)
STOT-SE	Specific target organ toxicity (single exposure)
SUSMP	Standard for the Uniform Scheduling of Medicines and Poisons
SWA	Safe Work Australia
TLV	Threshold Limit Value
TWA	Time Weighted Average

Disclaimer

This document has been prepared by Rural Liquid Fertilisers (RLF), and is believed to represent the current state of knowledge as to the appropriate safety and handling precautions for the product at the time of issue.

While RLF has taken all due care to include accurate and up-to-date information in this SDS, it does not provide any warranty as to accuracy or completeness. As far as lawfully possible, RLF accepts no liability for any loss, injury or damage (including consequential loss) which may be suffered or incurred by any person as a consequence of their reliance on the information contained in this SDS.

As the use of the products described in this document is outside the control of RLF, we make no representation or warranty concerning the suitability or fitness of this product for any purpose. It is your sole responsibility to ensure that the product will have the qualities and attributes that will make them fit for and ordinary or special purpose required of them, even if that purpose is made known to us at any time. This includes responsibility on your part to conduct in a timely manner all appropriate tests and quality checks on the product and any goods made from them. We disclaim any liability if any products are not suitable or fit for any such purpose.

Revision: 7
SDS Date: 24 October 2016
End of SDS