SAFETY DATA SHEET

According to
HSNO Hazardous Substances (Safety Data Sheets) Notice 2017

Section 1. Identification of the material and the supplier

Product:	**HML Potum**
Chemical name of active ing:	Potassium Bicarbonate
Product Use:	As a high analysis, food grade input. As a high analysis, food grade, active ingredient within a pesticide product or as an additive to registered potassium bicarbonate pesticide products that already contain suitable adjuvant/s to increase the overall level of potassium bicarbonate.
Restriction of Use:	Refer to Section 15
New Zealand Supplier:	**Henry Manufacturing Limited**
Address:	140 Clovelly Road Bucklands Beach Auckland 2012
Telephone:	+64 21 294 1490
Emergency No:	**0800 764 766 (National Poison Centre)**
Date of SDS Preparation:	20 June 2018

Section 2. Hazards Identification

This substance is NOT hazardous according to the EPA Hazardous Substances (Classification) Notice 2017

Section 3. Composition / Information on Hazardous Ingredients

Ingredients	Wt%	CAS NUMBER.
Potassium bicarbonate	>99	298-14-6

Section 4. First Aid Measures

Routes of Exposure:

If in Eyes	Rinse cautiously with water for 15 minutes. If eye irritation persists: Get medical advice.
If on Skin	Wash with plenty of soap and water. If skin irritation occurs: get medical advice/attention.
If Swallowed	Do not induce vomiting. Wash out mouth with water. Never give anything to the mouth of an unconscious person. If vomiting occurs, place victim face downwards, with the head turned to the side and lower than the hips to prevent vomit entering the lungs. Seek medical attention if needed.
If Inhaled	Remove person to fresh air. Remove contaminated clothing and loosen remaining clothing. Allow person to assume most comfortable position

and keep warm. Keep at rest until fully recovered. Apply artificial respiration if not breathing. Get medical advice if breathing becomes difficult.

Most important symptoms and effects, both acute and delayed

Symptoms:

Ingestion: Not applicable.
Inhalation: Not applicable.
Skin: Not applicable.
Eye: Not applicable.
Chronic: Not applicable.
Note to physician: Ingestion of large doses may produce systemic alkalosis. Treat symptomatically.

Section 5. Fire Fighting Measures

Hazard Type	Non Flammable.
Hazards from decomposition products	Thermal decomposition may emit carbon dioxide, oxides of sulphur and potassium oxide
Suitable Extinguishing media	Non-combustible solid – use extinguishing media for underlying cause of fire.
Precautions for firefighters and special protective clothing	Use protective clothing and breathing as may be appropriate for surrounding fire.
HAZCHEM CODE	**None allocated**

Section 6. Accidental Release Measures

Wear protective gear as detailed in Section 8. Evacuate all unnecessary personnel.

Prevent further spillage. If uncontaminated, sweep up or collect and reuse product. If contaminated with other material, place in a recovery drum for proper disposal.

Section 7. Handling and Storage

Precautions for Handling:

- Read label before use.
- Avoid contact with eyes and skin.
- Wear protective clothing as detailed in Section 8.

Precautions for Storage:

- Store away from incompatible materials listed in Section 10.
- Keep only in the original container.
- Keep in a cool, dry, well ventilated place away from direct sunlight.
- Protect from frost.
- Store at 10-30^{o}C.
- Packaging Material: Multilayered paper bag with a Poly Propylene lining, net weight 10 or 25 kilograms when packed.

Section 8 Exposure Controls / Personal Protection

WORKPLACE EXPOSURE STANDARDS (provided for guidance only)

	TWA		**STEL**	
Substance	**ppm**	**mg/m^3**	**ppm**	**mg/m^3**

No ingredients have exposure limits

Workplace Exposure Standard – Time Weighted Average (WES-TWA).The time-weighted average exposure standard designed to protect the worker from the effects of long-term exposure. Workplace Exposure Standard – Short-Term Exposure Limit (WESSTEL). The 15-minute average exposure standard. Applies to any 15- Minute period in the working day and is designed to protect the worker against adverse effects of irritation, chronic or irreversible tissue change, or narcosis that may increase the likelihood of accidents. The WES-STEL is not an alternative to the WES-TWA; both the short-term and time-weighted average exposures apply. Workplace Exposure Standards and Biological Exposure Indices NOV 2017 9TH EDITION.

Engineering Controls

Local exhaust normally sufficient. No special ventilation required in enclosed areas.

Personal Protection Equipment

Eyes	Use Safety glasses if exposure possible.
Hands and skin	Impermeable gloves. Wear long sleeved shirt, long pants.
Respiratory	If dust concentrations exceed recommended permissible exposure limits, use approved dust respirator.
General	Keep out of reach of children. Do not store with food, feed or other material to be used or consumed by humans or animals. Do not contaminate water supplies, lakes, streams or ponds. Protect against physical damage. Store in a cool dry place, separate from incompatible materials (acids).

Section 9 Physical and Chemical Properties

Appearance	Powder
Colour	White
Odour	Not available
Odour Threshold	Not available
pH	8 – 8.6
Boiling Point	Not available
Melting Point	100-120^{0}C
Freezing Point	100-120^{0}C
Flash Point	Non combustible
Flammability	Not available
Upper and Lower Explosive Limits	Not available
Vapour Pressure	Non-volatile
Relative Vapour Density	Not available
Density	2.17g/cc
Water Solubility	Soluble in water
Partition Coefficient:	Not available
Auto-ignition Temperature	Not available
Decomposition Temperature	Not available
Dynamic Viscosity	Not available
Particle Characteristics	Not available
Evaporation Rate	Not available
Other physio-chemical properties:	Not available

Section 10. Stability and Reactivity

Stability of Substance	This product is stable under normal conditions.
Hazardous polymerization	Not subject to polymerization.
Possibility of hazardous reactions	None expected.
Conditions to Avoid	Exposure to high humidity or other damp/moist conditions may cake product
Incompatible Materials	Acids.

Hazardous Decomposition Products	Thermal decomposition may emit carbon dioxide, oxides of sulphur and potassium oxide

Section 11 Toxicological Information

Acute Effects:

Swallowed	Low toxicity. Ingestion of large amounts may cause abdominal discomfort and injury.
Dermal	Not applicable.
Inhalation	Inhalation of product dust may irritate the respiratory tract.
Eye	May be irritating but not expected to result in injury. Effects will be minimized with washing.
Skin	Not a primary skin irritant. Irritation is possible with prolonged or repeated exposure.

Chronic Effects:

Carcinogenicity	Not applicable.
Reproductive Toxicity	Not applicable.
Germ Cell Mutagenicity	Not applicable.
Aspiration	Not applicable.
STOT/SE	Not applicable.
STOT/RE	Not applicable.
Other	Pre-existing respiratory disease, including asthma and emphysema may be aggravated.

Section 12. Ecotoxicological Information

This product is not known to be hazardous to the environment.

Persistence and degradability	No data available.
Bioaccumulation	No data available.
Mobility in Soil	No data available.
Other adverse effects	No data available.

Section 13. Disposal Considerations

Disposal Method:
Triple rinse container and dispose according to Local Regulations.

Precautions or methods to avoid: None known.

Section 14 Transport Information

This product is NOT classified as a Dangerous Good for transport in NZ ; NZS 5433:2012

Section 15 Regulatory Information

This substance is NOT classified hazardous according to the EPA Hazardous Substances (Classification) Notice 2017

Section 16 Other Information

Glossary

EC_{50} Median effective concentration.

EEL	Environmental Exposure Limit.
EPA	Environmental Protection Authority
HSNO	Hazardous Substances and New Organisms.
HSW	Health and Safety at Work.
LC_{50}	Lethal concentration that will kill 50% of the test organisms inhaling or ingesting it.
LD_{50}	Lethal dose to kill 50% of test animals/organisms.
LEL	Lower explosive level.
OSHA	American Occupational Safety and Health Administration.
TEL	Tolerable Exposure Limit.
TLV	Threshold Limit Value-an exposure limit set by responsible authority.
UEL	Upper Explosive Level
WES	Workplace Exposure Limit

References:

1. EPA Hazardous Substances (Safety Data Sheets) Notice 2017
2. Workplace Exposure Standards and Biological Exposure Indices Nov 2017 edition.
3. Assigning a hazardous substance to a HSNO Approval (Aug 2013).
4. Transport of Dangerous goods on land NZS 5433:2012
5. HSW (Hazardous Substances) Regulations 2017

Disclaimer

This document has been prepared by TCC (NZ) Ltd and serves as the suppliers Safety Data Sheet ('SDS'). It is based on information concerning the product which has been provided to TCC (NZ) Ltd or obtained from third party sources 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. Further clarification regarding any aspect of the product should be obtained directly from the manufacturer. While TCC (NZ) have 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, TCC (NZ) Ltd accept 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

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