SAFETY DATA SHEET

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

Section 1. Identification of the material and the supplier

Product:	**HML 32**
Chemical name of active ing:	Fatty Acids (potassium salts) Potassium bicarbonate
Product Use:	A fungicide for the control of botrytis and powdery mildew on grapes. An adjuvant to improve coverage of fungicides on grapes
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 hazardous according to the EPA Hazardous Substances (Classification) Notice 2017

EPA Approval No: HSR101043

HSNO Classification	Hazard Code	Hazard Statement	GHS Category
9.1D	H401	Toxic to aquatic life.	Aquatic Acute 2

Prevention Code	Prevention Statement
P103	Read label before use.
P273	Avoid release to the environment.

Response Code	Response Statement
None allocated	

Storage Code	Storage Statement
None allocated	

Disposal Code	Disposal Statement
P501	Dispose of according to Local Regulations or Authorities

Section 3. Composition / Information on Hazardous Ingredients

Ingredients	Wt%	CAS NUMBER.
Fatty acids as potassium salts	15-18	67762-39-4
Potassium bicarbonate	24-28	298-14-6
Water	To bal	7732-18-5

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: Treat symptomatically.

Section 5. Fire Fighting Measures

Hazard Type	Non Flammable.
Hazards from decomposition products	None known.
Suitable Extinguishing media	Dry powder, carbon dioxide or water spray.
Precautions for firefighters and special protective clothing	Wear protective clothing.
HAZCHEM CODE	**1Z**

Section 6. Accidental Release Measures

Wear protective gear as detailed in Section 8. Evacuate all unnecessary personnel. Prevent runoff from entering streams, ponds, lakes, water courses, stormwater or sewer systems.

Prevent further spillage. Absorb spilled product and place in sealable container for disposal. Wash down affected area with water. Absorb and collect washings and place in the same sealable container for disposal. Seek advice from the local authority regarding 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: Plastic HDPE 20 litre containers.

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

No special ventilation required in enclosed areas.

Personal Protection Equipment

Eyes	Wear safety glasses with side shields or goggles if splash hazards exist. Avoid wearing contact lenses.
Hands and skin	Use gloves chemically resistant (eg nitrile or neoprene) when prolonged or frequently repeated contact could occur. Wear long sleeved shirt, long pants.
Respiratory	Respiratory protection is not required.
General	When handling, do not eat, drink or smoke. Wash hands thoroughly after handling. Wash clothing separately before re-use.

Section 9 Physical and Chemical Properties

Appearance	Liquid free of foreign particles, no separation on standing
Colour	White
Odour	Not available
Odour Threshold	Not available
pH	8.5 – 10.0
Boiling Point	Not available
Melting Point	Not available
Freezing Point	Not available
Flash Point	Not available
Flammability	Not available
Upper and Lower Explosive Limits	Not available
Vapour Pressure	Non-volatile
Relative Vapour Density	Not available
Specific Gravity	1.08 - 1.16
Water Solubility	100%
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	Excess heat.
Incompatible Materials	Oxidising agents, acids.
Hazardous Decomposition Products	None known.

Section 11 Toxicological Information

Acute Effects:

Swallowed	Not applicable.
Dermal	Not applicable.
Inhalation	Not applicable.
Eye	May cause mild eye irritation.
Skin	May cause mild irritation through prolonged 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.

Section 12. Ecotoxicological Information

HSNO Classes: 9.1D = Toxic to aquatic life. Biocidal. Not toxic to bees.

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

Do not allow product to reach groundwater, watercourse or sewerage system.

Section 13. Disposal Considerations

Disposal Method:
Triple rinse container and dispose according to Local Regulations. Treat rinsate as a hazardous substance and dispose of appropriately.

Precautions or methods to avoid: Do not contaminate any waterway with chemical, rinsate, or empty container.

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 classified hazardous according to the EPA Hazardous Substances (Classification) Notice 2017

EPA Approval Code: HSR101043
HSNO Classification: 9.1D

HSW (HS) Regulations 2017 and EPA Notices	Trigger Quantity
Certified Handler	Not required
Location Certificate	Not required
Tracking Trigger Quantities	Not required
Signage Trigger Quantities	10000L (9.1D)
Emergency Response Plan	10000L (9.1D)
Secondary Containment	10000L (9.1D)
Restriction of Use	Only use for the intended purpose.

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

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Please contact the New Zealand distributor, if further information is required.

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