

SAFETY DATA SHEET

Section 1. Identification of the material and the supplier

Product: **Carnauba Natural**
 Item Code:
 Product Use: Carnauba based, morpholine free apple coating.
 Restriction of Use: Refer to Section 15

New Zealand Supplier: Horticulture Ltd
 Address: 10 Firth Street
 Drury, 2113

Telephone: +64 9 294 8453
 Fax Number: +64 9 294 7272

Emergency Telephone: 0800 764 766 (National Poison Centre)

Date of SDS Preparation: 7 September 2018

Section 2. Hazards Identification

This substance is hazardous according to the EPA Hazardous Substances (Classification) Notice 2017

EPA Approval No: HSR001563

Pictograms



Irritant

Signal Word: Warning

HSNO Classification	Hazard Code	Hazard Statement	GHS Category
6.1E (oral)	H303	May be harmful if swallowed.	Acute Tox. 5
6.3A	H315	Causes skin irritation.	Skin Irrit. 2
6.4A	H319	Causes serious eye irritation.	Eye Irrit. 2A
9.1D	H401	Toxic to aquatic life.	Aquatic Acute 2

Prevention Code	Prevention Statement
P102	Keep out of reach of children.
P103	Read label before use.
P264	Wash hands thoroughly after handling.
P273	Avoid release to the environment.
P280	Wear protective clothing as detailed in Section 8.

Response Code	Response Statement
P101	If medical advice is needed, have product container or label at hand.
P312	Call a POISON CENTER or doctor/physician if you feel unwell.
P362	Take off contaminated clothing and wash before re-use.
P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
P305 + P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P332 + P313	If skin irritation occurs: Get medical advice/ attention.
P337 + P313	If eye irritation persists: Get medical advice/attention.

Storage Code	Storage Statement
None allocated	Store in a cool, dry, well-ventilated place and out of direct sunlight. Store away from foodstuffs. Store away from incompatible materials described in Section 10. Store away from sources of heat and/or ignition. Keep container standing upright. Keep containers closed when not in use - check regularly for leaks.

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

Section 3. Composition / Information on Ingredients

Ingredients	Wt%	CAS NUMBER.
Ammonium hydroxide	1-10	1336-21-6
Non hazardous	To Bal	

Section 4. First Aid Measures

Routes of Exposure:

If in Eyes	Rinse cautiously with water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice.
If on Skin	Take off contaminated clothing and wash before re-use. Wash with plenty of soap and water. If skin irritation occurs: get medical advice/attention.
If Swallowed	Clean mouth with water and drink afterwards plenty of water. Call a POISON CENTER or doctor/physician if you feel unwell.
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. Get medical advice if breathing becomes difficult.

Most important symptoms and effects, both acute and delayed

Symptoms:

Ingestion:	May be harmful if swallowed. Swallowing can result in nausea, vomiting and irritation of the gastrointestinal tract.
Inhalation:	Material may be an irritant to mucous membranes and respiratory tract.
Skin:	Causes skin irritation.
Eyes:	Causes severe eye irritation.

Section 5. Fire Fighting Measures

Hazard Type	Non Flammable
Hazards from products	Non-combustible material. On decomposition: Oxides of carbon and nitrogen, smoke and other toxic fumes.

Suitable Extinguishing media	If material is involved in a fire use water fog (or if unavailable fine water spray), alcohol resistant foam, standard foam, dry agent (carbon dioxide, dry chemical powder).
Precautions for firefighters and special protective clothing	Not applicable.
HAZCHEM CODE	1Z

Section 6. Accidental Release Measures

Small Spills

Wear protective equipment to prevent skin and eye contamination. Avoid inhalation of vapours or dust. Wipe up with absorbent (clean rag or paper towels). Collect and seal in properly labelled containers or drums for disposal.

Large Spills

Clear area of all unprotected personnel. Slippery when spilt. Avoid accidents, clean up immediately. Wear protective equipment to prevent skin and eye contamination and the inhalation of vapours. Work up wind or increase ventilation. Contain - prevent run off into drains and waterways. Use absorbent (soil, sand or other inert material). Collect and seal in properly labelled containers or drums for disposal. If contamination of crops, sewers or waterways has occurred advise local emergency services.

Section 7. Handling and Storage

Precautions for Handling:

- Read label before use.
- Wash hands thoroughly after handling.
- Avoid eye contact and skin contact.
- Avoid inhalation of vapour, mist or aerosols.
- Wear protective clothing as detailed in Section 8.

Precautions for Storage:

- Keep out of reach of children.
- Store in a cool, dry, well-ventilated place and out of direct sunlight.
- Store away from foodstuffs.
- Store away from incompatible materials described in Section 10.
- Store away from sources of heat and/or ignition.
- Keep container standing upright.
- Keep containers closed when not in use - check regularly for leaks.

Section 8 Exposure Controls / Personal Protection

WORKPLACE EXPOSURE STANDARDS (provided for guidance only)

Substance	TWA		STEL	
	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.

Engineering Controls

Natural ventilation should be adequate under normal use conditions.

Personal Protection



Eyes	Wear goggles with side shields. Avoid wearing contact lenses.
Hands and Skin	Wear protective gloves
Respiratory	Not required.
General	Keep away from food, drink and animal feeding stuffs. When using do not eat, drink or smoke. Wash hands prior to eating, drinking or smoking. Avoid contact with clothing. Avoid eye contact and skin contact. Avoid inhalation of vapour, mist or aerosols. Ensure that eyewash stations and safety showers are close to the workstation location.

Section 9 Physical and Chemical Properties

Appearance	Liquid - Aqueous Formulation
Colour	Opaque, brown.
Odour	Ammonia
Odour Threshold	Not available
pH	10.0 - 11.0
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	Not available
Vapour Density	Not available
Specific Gravity (20°C)	1.005-1.015
Solubilities	Completely soluble with water.
Partition Coefficient:	Not available
Auto-ignition Temperature	Not available
Decomposition Temperature	Not available
Kinematic Viscosity	Not available
Particle Size	Not available

Section 10. Stability and Reactivity

Stability of Substance	This product is stable under normal conditions.
Conditions to Avoid	Elevated temperatures and sources of ignition.
Incompatible Materials	Oxidising agents.
Hazardous Decomposition Products	Oxides of carbon and nitrogen, smoke and other toxic fumes.

Section 11 Toxicological Information

Acute Effects:

Swallowed	May be harmful if swallowed. Swallowing can result in nausea, vomiting and irritation of the gastrointestinal tract. >2000mg/kg
Dermal	Not applicable. >2000mg/kg
Inhalation	Material may be an irritant to mucous membranes and respiratory tract. >20mg/L
Eye	Causes severe irritation to eyes
Skin	Causes skin irritation.

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.

Individual component information:**Acute Toxicity:**

Chemical Name	Oral – LD50	Dermal – LD50	Inhalation – LC50
Ammonia (Cas No 1336-21-6)	350-370 mg/kg	-	-

Section 12. Ecotoxicological Information

HSNO Classes: 9.1D = Toxic to aquatic life.

Components:**Ammonium(Cas No 1336-21-6):****Fish:**

SPECIES: Coho salmon
 TYPE OF EXPOSURE: Flow through
 DURATION: 96 hr
 ENDPOINT: LC50
 VALUE: 0.45 mg/l

Crustacean:

SPECIES: Daphnia magna
 TYPE OF EXPOSURE:
 DURATION: 48 hr
 ENDPOINT: LC50
 VALUE: 0.66 mg/l

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 to enter waterways.

Section 13. Disposal Considerations

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

Precautions and methods to avoid: Do not allow to enter waterways

Section 14 Transport Information

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

Section 15 Regulatory Information

HSNO Controls:

Trigger quantities:

	Trigger Quantity
Certified Handler	Not required
Location Certificate	Not required
Tracking Trigger Quantities	Not required
Signage Trigger Quantities	10000kg(9.1D)
Emergency Response Plan	10000kg(9.1D)
Secondary Containment	10000kg(9.1D)
Restriction of Use	None

Section 16 Other Information**Glossary**

EC ₅₀	Median effective concentration.
EEL	Environmental Exposure Limit.
EPA	Environmental Protection Authority
HSNO	Hazardous Substances and New Organisms.
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 issued by TCC (NZ) Ltd and serves as their 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

The information herein is given in good faith, but no warranty, express or implied is made.

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

Issue Date: 7 September 2018

Review Date: 7 September 2023