

SAFETY DATA SHEET

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

Section 1. Identification of the material and the supplier

Product: Endow 600SC
 Product Use: Insecticide
 Restriction of Use: Refer to Section 15

New Zealand Supplier: **Adria Crop Protection Solutions**
 Address: 407 State Highway 16
 Kumeu 0841,
 Auckland

Telephone: +64 9 412 9817
 Fax: +64 9 412 9807
 Website: www.adria.nz

**Emergency No: 0800 734 607 (24hr)3
 0800 764 766 (National Poison Centre)**

Date of SDS Preparation: 16th March 2021

Section 2. Hazards Identification

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

EPA Approval No: HSR101319

Pictograms:



Toxic Chronic Ecotoxic

Signal Word: **Warning**

HSNO Classification	Hazard Code	Hazard Statement	GHS Category
6.1D (oral)	H302	Harmful if swallowed.	Acute Tox. 4
6.3B	H316	Causes mild skin irritation.	Skin Irrit. 3
6.4A	H319	Causes serious eye irritation.	Eye Irrit. 2A
6.9B	H373	May cause damage to organs through prolonged or repeated exposure.	STOT RE 2
9.1A	H400	Very toxic to aquatic life.	Aquatic Acute 1
9.2B	H422	Toxic to the soil environment.	-
9.3B	H432	Toxic to terrestrial vertebrates.	-
9.4A	H441	Very toxic to terrestrial invertebrates.	-

Prevention Code	Prevention Statement
P102	Keep out of reach of children.
P103	Read label before use.
P260	Do not breathe fumes, vapours or spray.
P264	Wash hands thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P273	Avoid release to the environment.
P280	Wear protective clothing as detailed in Section 8.
P281	Use personal protective equipment as required.

Response code	Response Statement
P101	If medical advice is needed, have product container or label at hand.
P314	Get medical advice/attention if you feel unwell.
P330	Rinse mouth.
P338	Remove contact lenses, if present and easy to do. Continue rinsing.
P391	Collect spillage.
P301 + P312	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
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	-

Disposal Code	Disposal Statement
P501	Refer to Section 13.

Section 3. Composition / Information on Hazardous Ingredients

Ingredients	Content (%w/w)	CAS NUMBER.
Clothianidin	60.00	210880-92-5
Not hazardous	To bal	

Section 4. First Aid Measures

Routes of Exposure:

If in Eyes	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
If on Skin	Wash affected areas with soap and water. If skin irritation occurs: Get medical advice/attention.
If Swallowed	Rinse mouth. 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. Immediately call a POISON CENTER or doctor/physician.
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

Product Name: Endow 600SC
Date of SDS: 16th March 2021

SDS Prepared by: Technical Compliance Consultants (NZ) Ltd
Tel: 64 9 475 5240 www.techcomp.co.nz

Symptoms:

Ingestion: Harmful if swallowed.

Inhalation: Not applicable.

Skin: Causes mild skin irritation.

Eye: Causes serious eye irritation.

Chronic: May cause damage to organs through prolonged or repeated exposure.

Section 5. Fire Fighting Measures

Hazard Type	This product is not flammable or combustible.
Hazards from products	Products of combustion are toxic and or irritants. Specific hazards in a fire: Hydrogen chloride, hydrogen cyanide, carbon monoxide and nitrogen oxides.
Suitable Extinguishing media	Use water (not direct jet), foam, dry chemical, carbon dioxide or sand to extinguish fires.
Recommended protective clothing & Precautions for firefighters	Wear Self-contained breathing apparatus and appropriate chemical-protective clothing.
HAZCHEM CODE	2Z

Section 6. Accidental Release Measures

Personal precautions:

Use protective clothing as per Section 8. Avoid contact with skin, eyes and clothing. Remove contaminated clothes and shoes immediately.

Environmental precautions:

Do not discharge into drains/surface waters/groundwater. Do not discharge into the subsoil/soil.

Spill and Disposal procedures:

Absorb spills with inert material and place in waste containers. Wash area with water and absorb with further inert material. Triple rinse container and add residue to spray tank. Return empty container to an AgRecovery collection point for disposal. Dispose of waste safely, according to local Council regulations.

Section 7. Handling and Storage

Precautions for Handling:

- Read label before use.
- Do not breathe fumes, vapours or spray.
- Wash hands thoroughly after handling.
- Do not eat, drink or smoke when using this product.
- Avoid release to the environment.
- Wear protective clothing as detailed in Section 8.
- Use personal protective equipment as required.

Precautions for Storage:

- Store away from incompatible materials listed in Section 10.
- Store securely out of reach of children.
- Store in original container tightly closed and in a locked, cool, dry, ventilated area away from foodstuffs, fertilisers and seeds and sources of ignition.
- Protect from extreme temperatures and direct sunlight.

Section 8 Exposure Controls / Personal Protection

WORKPLACE EXPOSURE STANDARDS (provided for guidance only)

Substance**TWA**
ppm mg/m³**STEL**
ppm mg/m³

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 2019 11TH EDITION.

Engineering Controls / Industrial Hygiene

Local exhaust and general ventilation must be adequate to meet exposure standards. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

Personal Protection Equipment

Eyes	Chemical goggles or face shield with safety glasses.
Hands	Wear suitable gloves resistant to chemical penetration e.g. nitrile rubber gloves with a minimum thickness of 0.4 mm.
Skin	Body protection (chemical protection suit, boots) must be chosen depending on activity and possible exposure.
Respiratory	Wear respiratory protection if ventilation is inadequate. Use particle filter with medium efficiency for solid and liquid particles.
General	Keep away from food, drink and animal feedstuffs. No eating, drinking or smoking during use and wash hands and face before breaks and after work. Clean protective gear and contaminated equipment with soap or soda solution.

Section 9 Physical and Chemical Properties

Appearance	Liquid, SC
Colour	Pink liquid
Odour	Characteristic
Odour Threshold	No data available
pH	5 – 7 (1% aqueous diltution)
Melting/Boiling Point	No data available
Freezing Point	No data available
Flash Point	Not applicable
Flammability	Non-flammable
Upper and Lower Explosive Limits	Not applicable
Vapour Pressure	No data available
Vapour Density	No data available
Density	1.23 g/mL
Water Solubility	No data available
Ignition Temperature	No data available
Decomposition Temperature	Not available
Viscosity	Not available
Particle Characteristics	Not available
Surface tension	Not available

Section 10. Stability and Reactivity

Stability of Substance	This product is stable under normal conditions.
Possibility of hazardous reactions	None known.
Conditions to Avoid	Avoid intense heat. Keep away from foodstuffs, acids and alkalis.
Incompatible Materials	None under normal conditions. Poisonous fumes may be released during fire.
Hazardous Decomposition Products	No decomposition products expected under normal conditions of use.

**Section 11 Toxicological Information
(Based on the active ingredient Clothianidin)****Acute Effects:**

Acute oral toxicity [LD₅₀ mg/kg]:	Harmful if swallowed: Mice 425 rats (male and female) >5000
Acute inhalation toxicity [LC₅₀ mg/L]:	Not applicable. Rats (male and female) >6.14 (4 h)
Acute dermal toxicity [LD₅₀ mg/kg]:	Not applicable. Rats (male and female) >2000
Skin irritation:	Causes mild skin irritant.
Eye irritation:	Causes serious eye irritation.
Mutagenicity:	In vitro and in vivo tests showed no mutagenic or genotoxic properties for the active ingredient
Carcinogenicity:	Lifetime feeding studies in rats and mice showed no carcinogenic properties for the active ingredient
Toxicity to reproduction:	Reproduction toxicity was observed in a two-generation study in rats at dose levels toxic to parent animals.
Developmental toxicity:	No developmental toxicity was observed in rats by the active ingredient. Developmental toxicity was observed in rabbits only at dose levels toxic to the dams. The developmental effects are related to maternal toxicity.
Aspiration	No data available
STOT/SE	No data available
STOT/RE	May cause damage to organs through prolonged or repeated exposure.

Section 12. Ecotoxicological Information

Ecological effects information	9.1A = Very toxic to aquatic life with long lasting effects. 9.2B = Toxic to the soil environment. 9.3B = Toxic to terrestrial vertebrates. 9.4A = Very toxic to terrestrial invertebrates.
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Acute fish toxicity [LC₅₀ mg/L] (96 h):	Rainbow trout >100, carp >100, bluegill sunfish >120 mg/l.
Toxicity for daphnia [EC₅₀ mg/L] (48 h):	>120 mg/l
Toxicity to algae [ErC₅₀ mg/L] (72 h):	<i>Scenedesmus subspicatus</i> >270 mg/l. E _b C ₅₀ (96 h) for <i>Selenastrum capricornutum</i> 55 mg/l
Toxicity for birds [LD₅₀ mg/kg]	bobwhite quail >2000 mg/kg; for Japanese quail 430 mg/kg. Dietary LC ₅₀ for bobwhite quail and mallard ducks >5200 mg/kg diet.
Toxicity for worms [LC₅₀ mg/kg] (14 d)	earthworms 13.2 mg/kg soil

Toxicity bees [LD50 µg/bee]	>0.0439 (contact), 0.00379 (oral)
12.2 Persistence and degradability:	Clothianidin is not rapidly biodegradable
12.3 Bioaccumulative potential:	Clothianidin does not bioaccumulate
12.4 Mobility in soil	Soil DT ₅₀ (lab, aerobic) 143–1001 d. K _{oc} 84–345 (<i>EU Rev. Rep.</i>).
12.5 Results of PBT and vPvB assesment	This substance is not considered to be persistent, bioaccumulative and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulative (vPvB).
12.6 Other adverse effects	No other effects
Precautions:	Do not allow to enter waterways.

Section 13. Disposal Considerations

Disposal Method:

Triple rinse container and add residue to spray tank. Return empty container to an AgRecovery collection point for disposal.



Empty container precautions:

Avoid contamination of any water supply with chemical or empty container.

Precautions or methods to avoid: Avoid release to the environment.

Section 14 Transport Information

This product is classified as a Dangerous Good for transport in NZ; NZS 5433:2012



Road, Rail, Sea and Air Transport

UN No	3082
Class - Primary	9
Packing Group	III
Proper Shipping Name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS 60% CLOTHIANIDIN)
Marine Pollutant	Yes
Special Provisions-Limited Quantities	If the product's individual container is below 5L/kg, it can be transported as a non-DG as long as the product packaging is still labelled as per DG requirements and the driver is given safety information in accordance with Chapter 3.4 of the UNRTDG.

Section 15 Regulatory Information

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

EPA Approval Code: HSR101319

HSNO Classification: 6.1D (Oral), 6.3B, 6.4A, 6.9B (Oral), 9.1A, 9.2B, 9.3B, 9.4A

HSW (HS) Regulations 2017	Trigger Quantity
Certified Handlers	Not required

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Location Certificate	Not required
Signage Trigger Quantities (Schedule 3)	100L (9.1A)
Emergency Response Plan (Schedule 5)	100L (9.1A)
Secondary Containment (Schedule 5)	100L (9.1A)
Tracking (Schedule 26)	Not required
For all further controls	Refer to EPA www.epa.govt.nz for controls document - HSR100355
HSNO Additional Controls (Restrictions of use)	
77A	This substance must only be applied in a purpose-built seed coating machine, in a treatment plant.
77A	Any person treating seeds treated with this substance must ensure that the seeds are film coated at the time of treatment.
77A	This substance must only be applied as a seed treatment.
77A	Information must be provided with seeds coated with this substance that indicates the substance that the seeds have been treated with, its hazardous properties and precautions to be taken in handling the seeds.
77A – A Maximum application rate is set for this substance	Seeds treated with this substance must not be sowed at a density that would result in concentrations exceeding 0.06 kg clothianidin / ha
Hazardous Property Controls Notice 2017	
HPC Notice Part 1	Hazardous Property Controls preliminary provisions
HPC Notice Part 3	Hazardous substances in a place other than a workplace.
HPC Notice Part 4 Subpart A	Site and storage controls for class 9 substances
HPC Notice Part 4 Subpart B	Use of class 9 substances in any place.
HPC Notice Part 4 Subpart C	Qualifications required for application of class 9 pesticides.
ACVM Act and Regulations	
ACVM Approval No See www.foodsafety.govt.nz for registration controls	P9660

Section 16 Other Information

For proper and safe use of this product, please refer to the approval conditions laid down on the product label. The data contained in this safety data sheet is based on our current knowledge and describes the product only with regard to safety requirements. The data does not describe the products properties. Neither should any agreed property nor the suitability of the product for any specific purpose be deduced from the data contained in the safety data sheet. It is the responsibility of the recipient of the product to ensure any existing laws and legislation are observed.

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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Please contact Adria, if further information is required.

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