

## 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)**  
**0800 764 766 (National Poison Centre)**

Date of SDS Preparation: 8 January 2025 v2

### Section 2. Hazards Identification

This substance is hazardous according to the EPA Hazardous Substances (Classification) Notice 2020

**EPA Approval No: HSR101319**

**Pictograms:**



Signal Word: **Warning**

GHS Classification and Category	Hazard Code	Hazard Statement
Acute oral toxicity Cat. 4	H302	Harmful if swallowed.
Eye irritation Cat. 2	H319	Causes serious eye irritation.
Specific target organ toxicity – repeated exposure Cat. 2	H373	May cause damage to organs through prolonged or repeated exposure.
Hazardous to the aquatic environment acute Cat. 1	H400	Very toxic to aquatic life.
Hazardous to the aquatic environment chronic Cat. 1	H410	Very toxic to aquatic life with long lasting effects.
Hazardous to soil organisms.	H422	Hazardous to soil organisms
Hazardous to terrestrial vertebrates.	H432	Hazardous to terrestrial vertebrates
Hazardous to terrestrial invertebrates.	H441	Hazardous to terrestrial invertebrates

Prevention Code	Prevention Statement
P102	Keep out of reach of children.
P103	Read carefully and follow all instructions..
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.

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.
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.
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

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**

<b>Hazard Type</b>	This product is not flammable or combustible.
<b>Hazards from products</b>	Products of combustion are toxic and or irritants. Specific hazards in a fire: Hydrogen chloride, hydrogen cyanide, carbon monoxide and nitrogen oxides.
<b>Suitable Extinguishing media</b>	Use water (not direct jet), foam, dry chemical, carbon dioxide or sand to extinguish fires.
<b>Recommended protective clothing &amp; Precautions for firefighters</b>	Wear Self-contained breathing apparatus and appropriate chemical-protective clothing.
<b>HAZCHEM CODE</b>	<b>3Z</b>

**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.

**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		STEL	
	ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>

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

## 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



<b>Eyes</b>	Chemical goggles or face shield with safety glasses.
<b>Hands</b>	Wear suitable gloves resistant to chemical penetration e.g. nitrile rubber gloves with a minimum thickness of 0.4 mm.
<b>Skin</b>	Body protection (chemical protection suit, boots) must be chosen depending on activity and possible exposure.
<b>Respiratory</b>	Wear respiratory protection if ventilation is inadequate. Use particle filter with medium efficiency for solid and liquid particles.
<b>General</b>	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

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

## Section 10. Stability and Reactivity

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

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

**Acute Effects:**

<b>Acute oral toxicity [LD<sub>50</sub> mg/kg]:</b>	Harmful if swallowed: Mice 425 rats (male and female) >5000
<b>Acute inhalation toxicity [LC<sub>50</sub> mg/L]:</b>	Not applicable. Rats (male and female) >6.14 (4 h)
<b>Acute dermal toxicity [LD<sub>50</sub> mg/kg]:</b>	Not applicable. Rats (male and female) >2000
<b>Skin irritation:</b>	Not applicable.
<b>Eye irritation:</b>	Causes serious eye irritation.
<b>Mutagenicity:</b>	In vitro and in vivo tests showed no mutagenic or genotoxic properties for the active ingredient
<b>Carcinogenicity:</b>	Lifetime feeding studies in rats and mice showed no carcinogenic properties for the active ingredient
<b>Toxicity to reproduction:</b>	Reproduction toxicity was observed in a two-generation study in rats at dose levels toxic to parent animals.
<b>Developmental toxicity:</b>	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.
<b>Aspiration</b>	Not applicable.
<b>STOT/SE</b>	Not applicable.
<b>STOT/RE</b>	May cause damage to organs through prolonged or repeated exposure.

**Section 12. Ecotoxicological Information**

<b>Ecological effects information</b>	Very toxic to aquatic life with long lasting effects Hazardous to soil organisms Hazardous to terrestrial vertebrates
<b>Acute fish toxicity [LC<sub>50</sub> mg/L] (96 h):</b>	Rainbow trout >100, carp >100, bluegill sunfish >120 mg/l.
<b>Toxicity for daphnia [EC<sub>50</sub> mg/L] (48 h):</b>	>120 mg/l
<b>Toxicity to algae [ErC<sub>50</sub> mg/L] (72 h):</b>	<i>Scenedesmus subspicatus</i> >270 mg/l. E <sub>b</sub> C <sub>50</sub> (96 h) for <i>Selenastrum capricornutum</i> 55 mg/l
<b>Toxicity for birds [LD<sub>50</sub> mg/kg]</b>	bobwhite quail >2000 mg/kg; for Japanese quail 430 mg/kg. Dietary LC <sub>50</sub> for bobwhite quail and mallard ducks >5200 mg/kg diet.
<b>Toxicity for worms [LC<sub>50</sub> mg/kg] (14 d)</b>	earthworms 13.2 mg/kg soil
<b>Toxicity bees [LD<sub>50</sub> µg/bee]</b>	>0.0439 (contact), 0.00379 (oral)
<b>12.2 Persistence and degradability:</b>	Clothianidin is not rapidly biodegradable
<b>12.3 Bioaccumulative potential:</b>	Clothianidin does not bioaccumulate
<b>12.4 Mobility in soil</b>	Soil DT <sub>50</sub> (lab, aerobic) 143–1001 d. K <sub>oc</sub> 84–345 ( <i>EU Rev. Rep.</i> ).
<b>12.5 Results of PBT and vPvB assesment</b>	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).
<b>12.6 Other adverse effects</b>	No other effects
<b>Precautions:</b>	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 5433:2020



### Road, Rail, Sea and Air Transport

<b>UN No</b>	3082
<b>Class - Primary</b>	9
<b>Packing Group</b>	III
<b>Proper Shipping Name</b>	<b>ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS 60% CLOTHIANIDIN)</b>
<b>Marine Pollutant</b>	Yes
<b>Special Provisions-Limited Quantities</b>	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 2020

EPA Approval Code: HSR101319

<b>HSW (HS) Regulations 2017</b>	<b>Trigger Quantity</b>
Certified Handlers	Not required
Location Certificate	Not required
Signage Trigger Quantities (Schedule 3)	100L
Emergency Response Plan (Schedule 5)	100L
Secondary Containment (Schedule 5)	100L
Tracking (Schedule 26)	Not required
For all further controls	Refer to EPA <a href="http://www.epa.govt.nz">www.epa.govt.nz</a> for controls document - HSR101319
<b>HSNO Additional Controls (Restrictions of use)</b>	
77A - Seed treatment - seed coating requirements	Any person treating seeds treated with this substance must ensure that the seeds are film coated at the time of treatment.
77A - Use restrictions	This substance must only be applied as a seed treatment.

77A- Seed treatment – information requirements	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.
<b>ACVM Act and Regulations</b>	
ACVM Approval No See <a href="http://www.foodsafety.govt.nz">www.foodsafety.govt.nz</a> 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 <sub>50</sub>	Median effective concentration.
EEL	Environmental Exposure Limit.
EPA	Environmental Protection Authority
HSNO	Hazardous Substances and New Organisms.
HSW	Health and Safety at Work.
LC <sub>50</sub>	Lethal concentration that will kill 50% of the test organisms inhaling or ingesting it.
LD <sub>50</sub>	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 2023 14<sup>th</sup> edition.
3. Assigning a hazardous substance to a HSNO Approval (Aug 2013).
4. Transport of Dangerous goods on land NZS 5433:2020
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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