

# SAFETY DATA SHEET

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

## Section 1. Identification of the material and the supplier

Product: **Linuron 400SC**  
 Product Use: Herbicide  
 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: 29 October 2018

## Section 2. Hazards Identification

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

**EPA Approval No: HSR100376**

### Pictograms



Toxic /Allergic Chronic Ecotoxic

Signal Word: **DANGER**

HSNO Classification	Hazard Code	Hazard Statement	GHS Category
6.1E (oral)	H303	May be harmful if swallowed.	Acute Tox. 5
6.4A	H319	Causes serious eye irritation.	Eye Irrit. 2A
6.8B	H361	Suspected of damaging fertility or the unborn child ...	Repr. 2
6.9A	H372	Causes damage to organs through single, prolonged or repeated exposure.	STOT RE 1
9.1A	HH410	Very toxic to aquatic life with long lasting effects.	Aquatic Chronic 1
9.2A	H421	Very toxic to the soil environment.	-
9.3B	H432	Toxic to terrestrial vertebrates.	-

<b>Prevention Code</b>	<b>Prevention Statement</b>
P102	Keep out of reach of children.
P103	Read label before use.
P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
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.

<b>Response code</b>	<b>Response Statement</b>
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.
P391	Collect spillage.
P305 + P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P307 + P311	IF exposed: Call a POISON CENTER or doctor/physician.
P308 + P313	IF exposed or concerned: Get medical advice/ attention.
P337 + P313	If eye irritation persists: Get medical advice/attention.

<b>Storage Code</b>	<b>Storage Statement</b>
P405	Store locked up.

<b>Disposal Code</b>	<b>Disposal Statement</b>
P501	Refer to Section 13.

### **Section 3. Composition / Information on Hazardous Ingredients**

<b>Ingredients</b>	<b>Content (%w/v)</b>	<b>CAS NUMBER.</b>
Linuron	40	330-55-2
Other ingredients determined not to be 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** Immediately flush body and clothes with large amounts of water. Remove contaminated clothing and footwear. Wash affected areas immediately with soap and water. Do not rub skin. Wash contaminated clothing before re-use. If a large area is affected or if irritation persists, seek medical assistance.

**If Swallowed** Do NOT induce vomiting if swallowed unless advised otherwise by a physician. Never give anything by mouth to a person who is unconscious or having convulsions. Wash mouth with water and seek medical attention immediately. For advice, contact the National Poisons Centre on 0800 POISON (0800 764766) or seek medical attention immediately.

**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. Call a POISON CENTRE or a doctor immediately.

### Most important symptoms and effects, both acute and delayed

Symptoms:

**Ingestion:** May be harmful if swallowed.

**Inhalation:** Not applicable.

**Skin:** Not applicable.

**Eye:** Not applicable.

**Chronic:** Causes damage to organs through single or repeated or prolonged exposure. Suspected of damaging fertility or unborn child.

**Treatment:** No known specific antidote. Treat symptomatically and supportively (decontamination, vital functions).

## Section 5. Fire Fighting Measures

<b>Hazard Type</b>	This product is non-flammable.
<b>Hazards from products</b>	Thermal decomposition generates: carbon dioxide, carbon monoxide, nitrogen oxide, sulfur oxide, sulfides.
<b>Suitable Extinguishing media</b>	Dry chemical, carbon dioxide, water fog or fine spray, alcohol resistant foam.
<b>Recommended protective clothing &amp; Precautions for firefighters</b>	Wear SCBA and appropriate chemical-protective clothing. Use self-contained breathing apparatus.
<b>HAZCHEM CODE</b>	<b>2X</b>

## Section 6. Accidental Release Measures

### Personal precautions:

Use protective clothing as detailed in 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. Notify authorities if product enters sewers or public waters.

### Spill and Disposal procedures:

Absorb spills with inert material and place in waste containers. Wash area with water and absorb with further inert material. Dispose of waste safely, according to local Council regulations.

## Section 7. Handling and Storage

### Precautions for Handling:

- Read label before use.
- Obtain special instructions before use.
- Do not handle until all safety precautions have been read and understood.
- 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.
- Ensure adequate ventilation.
- Cleaning water should be disposed of in appropriate manner.

### Precautions for Storage:

- Keep away from children.
- Store in tightly closed containers in a cool, dry, well-ventilated place, out of direct sunlight, and away from pharmaceuticals, cosmetics, fertilizers, stockfeed, foodstuffs or children.
- Protect against freezing.
- Store away from incompatible materials listed in Section 10.

## 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 short-term and time-weighted average exposures apply. Workplace Exposure Standards and Biological Exposure Indices NOV 2017 9TH EDITION.

### Engineering Controls / Industrial Hygiene

Ensure adequate ventilation.

### Personal Protection Equipment



<b>Eyes</b>	Wear safety goggles with side-shields. Chemical goggles are recommended where contact with the liquid is likely to occur.
<b>Hands</b>	Suitable chemical resistant safety gloves (e.g. nitrile rubber (.4mm)).
<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. 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. Females of childbearing age should not come into contact with the product. Use personal protection if required. Keep away from food, drink and animal feedstuffs. No eating, drinking or smoking during use. Wash hands and face before breaks and after work.

## Section 9 Physical and Chemical Properties

<b>Appearance</b>	Viscous liquid
<b>Colour</b>	Grey to off-white
<b>Odour</b>	Characteristic
<b>Odour Threshold</b>	Not available
<b>pH</b>	6.0-9.0
<b>Melting Point/Boiling Point</b>	93 - 95°C
<b>Freezing Point</b>	Not available
<b>Flash Point</b>	Not available
<b>Flammability</b>	Not available
<b>Upper and Lower Explosive Limits</b>	Not available

<b>Vapour Pressure</b>	Not available
<b>Vapour Density</b>	Not available
<b>Density</b>	1.19g/L(20°C)
<b>Water Solubility</b>	Not available
<b>Partition Coefficient:</b>	Not available
<b>Ignition Temperature</b>	Not available
<b>Decomposition Temperature</b>	Not available
<b>Viscosity</b>	Not available
<b>Particle Characteristics</b>	Not available

## Section 10. Stability and Reactivity

<b>Stability of Substance</b>	Stable under normal storage and handling conditions.
<b>Possibility of hazardous reactions</b>	Chlorine compounds, nitrogen oxides
<b>Conditions to Avoid</b>	Temperature extremes
<b>Incompatible Materials</b>	Oxidizing agents, acids.
<b>Hazardous Decomposition Products</b>	Thermal decomposition generates: carbon dioxide, carbon monoxide, nitrogen oxide, sulfur oxide, sulfides.

## Section 11 Toxicological Information

### Acute Effects:

<b>Swallowed</b>	May be harmful if swallowed. Acute oral toxicity (LD50): > 4000 mg/kg [Rat].
<b>Dermal</b>	Not applicable. LD50 >4,000 mg/kg (rat)
<b>Inhalation</b>	Not applicable. LD50 (4h) rat > 2.0 mg/l.
<b>Eye</b>	Causes serious eye irritation.
<b>Skin</b>	Not applicable.

### Chronic Effects:

<b>Carcinogenicity</b>	Not applicable.
<b>Reproductive Toxicity</b>	Suspected of damaging fertility or unborn child.
<b>Germ Cell Mutagenicity</b>	Not applicable.
<b>Aspiration</b>	Not applicable.
<b>STOT/SE</b>	Causes damage to organs through single exposure.
<b>STOT/RE</b>	Causes damage to organs through prolonged or repeated exposure.

## Section 12. Ecotoxicological Information

<b>Ecological effects information</b>	9.1A = Very toxic to aquatic life with long lasting effects. 9.2A = Very toxic to the soil environment. 9.3B = Toxic to terrestrial vertebrates.
<b>Persistence and degradability</b>	No data available
<b>Bioaccumulation</b>	No data available
<b>Mobility in Soil</b>	No data available
<b>Other adverse effects</b>	No data available
<b>Acute fish toxicity:</b>	LC50 (96h): 4.36mg/l for carp; 3.19mg/l for rainbow trout
<b>Toxicity for daphnia:</b>	EC50 (48h) > 0.74 mg/l.
<b>Toxicity to algae:</b>	EC50 (96 h) > 0.015 mg/l for green algae.
<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 5433:2012**



### 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 (LINURON 40%), LIQUID, N.O.S.</b>
<b>Marine Pollutant</b>	Yes
<b>Special Provisions-Limited Quantities</b>	If the product's individual container is below 5L, 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: HSR100376

HSNO Classification: 6.1E(oral), 6.4A, 6.8B, 6.9A, 9.1A, 9.2A, 9.3B

<b>HSW (HS) Regulations 2017</b>	<b>Trigger Quantity</b>
Certified Handlers	Not required
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 <a href="http://www.epa.govt.nz">www.epa.govt.nz</a> for controls document - HSR100376
<b>HSNO Additional Controls (Restrictions of use)</b>	
77A	a) The substance must not be applied into or onto water.
<b>Hazardous Property Controls Notice 2017</b>	
HPC Notice Part 4 Clause 47	Equipment for class 9 substances must be appropriate

HPC Notice Part 4 Clause 48	Records of application of class 9 pesticides and plant growth regulators
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 C	Qualifications required for application of class 9 pesticides.
<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	P8772

## 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 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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