

SAFETY DATA SHEET

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

Section 1. Identification of the material and the supplier

Product: **Troy 480 SL**
 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: 9 November 2018

Section 2. Hazards Identification

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

EPA Approval No: HSR000426

Pictograms



Toxic/Irritant

Signal Word: **Warning**

HSNO Classification	Hazard Code	Hazard Statement	GHS Category
6.1D (oral)	H302	Harmful if swallowed.	Acute Tox. 4
6.4A	H319	Causes serious eye irritation.	Eye Irrit. 2A
6.5B	H317	May cause an allergic skin reaction.	Skin Sens. 1
9.1C	H412	Harmful to aquatic life with long lasting effects.	Aquatic Chronic 3
9.3C	H433	Harmful to terrestrial vertebrates.	

Prevention Code	Prevention Statement
P102	Keep out of reach of children.
P103	Read label before use.

P261	Avoid breathing fumes, vapours and spray.
P264	Wash hands thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P272	Contaminated work clothing should not be allowed out of the workplace.
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.
P330	Rinse mouth.
P363	Wash contaminated clothing before reuse.
P301 + P312	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
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.
P333 + P313	If skin irritation or rash 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/v)	CAS NUMBER.
Bentazone	480g/l	25057-89-0
NaOH (33 %)	10-30%	1310-73-2
Non-hazardous ingredients	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	IF ON SKIN: Remove contaminated clothing. Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention.
If Swallowed	Rinse mouth immediately and then drink plenty of water, seek medical attention. Do not induce vomiting unless told to by a poison control centre or doctor. Never induce vomiting or give anything by mouth if the victim is unconscious or having convulsions. For advice, contact the National Poisons Centre on 0800 POISON (0800 764766).
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:	May cause an allergic skin irritation.

Eye: Causes serious eye irritation.
Chronic: Not applicable.

Treatment: No specific antidote. Supportive care. Treat symptomatically.

Section 5. Fire Fighting Measures

Hazard Type	This product is not flammable.
Hazards from products	In case of fire bentazone decomposes to form toxic gas/vapour (sulphur oxide, nitrogen oxide).
Suitable Extinguishing media	Dry chemical, carbon dioxide, foam, water.
Recommended protective clothing & Precautions for firefighters	Wear self-contained breathing apparatus and chemical-protective clothing. Keep drums cool by spraying with water, extra personal protection: self-contained breathing apparatus.
HAZCHEM CODE	1Z

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:

Contain and collect spillage with non-combustible absorbent materials e.g. sand, earth, vermiculite, diatomaceous earth. 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.
- Avoid breathing fumes, vapours and spray.
- Wash hands thoroughly after handling.
- Do not eat, drink or smoke when using this product.
- Contaminated work clothing should not be allowed out of the workplace.
- Avoid release to the environment.
- Wear protective clothing as detailed in Section 8.

Precautions for Storage:

- Keep away from children.
- Store in a dry well-ventilated place.
- Protect from temperature extremes.
- Protect from direct sunlight.
- Segregate from Food items.
- 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 ³	ppm	mg/m ³

No ingredient has 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



Eyes	Safety goggles with side-shields.
Skin	Gloves (rubber), protective clothing.
Respiratory	In case of spray: ventilation, local exhaust or breathing protection (Filter respirator).
General	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

Appearance	Liquid
Colour	Clear
Odour	Chemical
Odour Threshold	Not available
pH	8.13
pH(1%)	6.79
Boiling Point	100°C
Melting Point	Not available
Freezing Point	Not available
Flash Point	>80°C
Flammability	Not available
Upper and Lower Explosive Limits	Not available
Vapour Pressure	Not available
Vapour Density	Not available
Density	1.19
Water Solubility	Miscible
Octanol/water partition coefficient:	Not available
Auto Ignition Temperature	Not available
Decomposition Temperature	Not available
Viscosity	12.11-14.20 mPas
Particle Characteristics	Not available

Section 10. Stability and Reactivity

Stability of Substance	This product is stable under normal conditions.
Possibility of hazardous reactions	In case of fire, nitrogen oxides, sulphur dioxide and carbon monoxide may be produced.
Conditions to Avoid	Avoid heat, flames, sparks and other sources of ignition.
Incompatible Materials	Oxidising agents.
Hazardous Decomposition Products	Bentazone decomposes when exposed to UV light.

Section 11

Toxicological Information

Acute Effects:

Swallowed	Harmful if swallowed. Bentazone 480 g/l SL: Acute LD50 oral (rats) = >1400-1800 mg/kg
Dermal	Not applicable. Bentazone 480 g/l SL: Acute LD50 dermal (rats) = >5000 mg/kg
Inhalation	Not applicable. Bentazone 480 g/l SL: Acute LC50 inh (rat) - 4 hr = 5.1mg/L
Eye	Causes serious eye irritation.
Skin	May cause an allergic 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.

Section 12. Ecotoxicological Information

Ecological effects information	9.1C = Harmful to aquatic life with long lasting effects. 9.3C = Harmful to terrestrial vertebrates.
Persistence and degradability	No data available
Bioaccumulation	No data available
Mobility in Soil	No data available
Other adverse effects	No data available
Bentazone 480 g/l SL <u>Aquatic organisms</u> LC50 (96h) rainbow trout EC50 (48h) Daphnia magna EBC50 Algae ERC50 Algae EC50 (21 d) Daphnia Magna NOEC (21 d) Daphnia Magna EC50 (21 d) Daphnia Magna NOEC (21 d) Daphnia Magna LC50 (14 d) rainbow trout LC50 (28 d) rainbow trout <u>Beneficial arthropods</u> Aphidius rhopalosiphi LR50 (48 h) Aphidius rhopalosiphi Typhlodromus pyri Poecilus cupreus Chrysoperla carnea <u>Birds</u> LD50 acute, oral bobwhite quail LC50 bobwhite quail LC50 mallard duck <u>Aquatic organisms</u> LC50 (96 h) O. mykiss EC50 (96 h) Daphnia magna EC50 (120 h) A. flos-aque :	> 250 mg/l > 248 mg/l 109 mg/l 251 mg/l > 250 mg/l (survival) 250 mg/l (survival) 236 mg/l (reproduction) 100 mg/l (reproduction) 102 mg/l (juvenile growth) 68 mg/l (juvenile growth) Harmful (category 4) 1020 µl/l Slightly harmful (category 2) Harmless (category 1) Harmless (category 1) ca. 1140 mg/kg > 5000 ppm > 5000 ppm > 100 mg/l 64 mg/l 10.1 mg/l 5.4 mg/l

EC50 (14 d) L. gibba :	
Bees Acute oral toxicity Acute contact toxicity	> 200 µg a.s./bee > 200 µg a.s./bee
Worms LC50 earthworms	> 870 mg a.s./kg dry weight substrate
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 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: HSR000426

HSNO Classification: 6.1D(Oral), 6.4A, 6.5B, 9.1C, 9.3C

HSW (HS) Regulations 2017	Trigger Quantity
Certified Handlers	Not required
Location Certificate	Not required
Signage Trigger Quantities (Schedule 3)	1000L (9.1C)
Emergency Response Plan (Schedule 5)	1000L (9.1C)
Secondary Containment (Schedule 5)	1000L (9.1C)
Tracking (Schedule 26)	Not required
HSNO Additional Controls (Restrictions of use)	Refer to EPA www.epa.govt.nz for controls document - HSR000426
77A	This substance must not be applied onto or into water.
Hazardous Property Controls Notice 2017	
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.

ACVM Act and Regulations

ACVM Approval No
See www.foodsafety.govt.nz for registration controls

P7236

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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