

SAFETY DATA SHEET

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

Section 1. Identification of the material and the supplier

Product: **Solvo 360CS**
 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
 Website: www.adria.nz

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

Date of SDS Preparation: 28 March 2023 v2

Section 2. Hazards Identification

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

EPA Approval No: HSR100704

Pictograms



Signal Word: **DANGER**

GHS Classification and Category	Hazard Code	Hazard Statement
Flammable Liquids Cat. 4	H227	Combustible liquid.
Aspiration hazard Cat. 1	H304	May be fatal if swallowed and enters airways.
Respiratory sensitisation Cat. 1	H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Skin sensitisation Cat. 1	H317	May cause an allergic skin reaction.
Hazardous to the aquatic environment chronic Cat. 2	H411	Toxic to aquatic life with long lasting effects.
Hazardous to soil organisms	H421	Hazardous to soil organisms
Hazardous to terrestrial vertebrates	H433	Hazardous to terrestrial vertebrates

Prevention Code	Prevention Statement
P102	Keep out of reach of children.
P103	Read carefully and follow all instructions.
P210	Keep away from heat, sparks, open flames or hot surfaces. No smoking.
P261	Avoid breathing fume, vapours or spray.
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.
P285	In case of inadequate ventilation wear respiratory protection.

Response code	Response Statement
P101	If medical advice is needed, have product container or label at hand.
P331	Do NOT induce vomiting.
P363	Wash contaminated clothing before reuse.
P391	Collect spillage.
P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
P304 + P341	IF INHALED: If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing.
P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.
P342 + P311	If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.
P370 + P378	In case of fire: Use dry chemical, foam, water fog or water spray for extinction.

Storage Code	Storage Statement
P405	Store locked up.
P403 + P235	Store in a well-ventilated place. Keep cool.

Disposal Code	Disposal Statement
P501	Refer to Section 13.

Section 3. Composition / Information on Hazardous Ingredients

Ingredients	Content (%w/v)	CAS NUMBER.
Clomazone	36	81777-89-1
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	Take off contaminated clothing and wash before re-use. Wash with plenty of soap and water. If skin irritation or rash 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. Seek medical attention if needed. Call a POISON CENTRE 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. Apply artificial respiration if not breathing. Get medical advice if breathing becomes difficult.

Most important symptoms and effects, both acute and delayed

Symptoms:

- Ingestion:** May be fatal if swallowed and enters airways.
- Inhalation:** May cause allergy or asthma symptoms or breathing difficulties if inhaled.
- Skin:** May cause an allergic skin reaction.
- Eye:** Not applicable.
- Chronic:** Not applicable.

Treatment: Treat according to symptoms (decontamination, vital functions). No known specific antidote.

Section 5. Fire Fighting Measures

Hazard Type	This product is combustible.
Hazards from products	During a fire, irritating and possibly toxic gases may be generated by thermal decomposition or combustion.
Suitable Extinguishing media	Extinguish warehouse and factory fires using dry chemical extinguisher, alcohol-resistant foam, carbon dioxide.
Recommended protective clothing & Precautions for firefighters	Wear SCBA and chemical-protective clothing. Exercise caution when fighting any chemical fire.
HAZCHEM CODE	3Z

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. Dispose of waste safely, according to Local Council regulations.

Section 7. Handling and Storage

Precautions for Handling:

- Read carefully and follow all instructions.
- Keep away from heat, sparks, open flames or hot surfaces. No smoking.
- Avoid breathing fume, vapours or spray.
- Contaminated work clothing should not be allowed out of the workplace.
- Ensure adequate ventilation.
- Cleaning water should be disposed of in appropriate manner.
- Avoid release to the environment.
- Wear protective clothing as detailed in Section 8.
- In case of inadequate ventilation wear respiratory protection.

Precautions for Storage:

- Keep away from children.
- Store locked up.
- Store in original container tightly closed and in a locked, cool, dry, ventilated area away from foodstuffs, fertilisers and seeds.
- Protect from extreme temperatures.
- Store away from incompatible materials listed in Section 10.

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 APRIL 2022 13TH EDITION.

Engineering Controls / Industrial Hygiene

Provide local exhaust or general room ventilation to minimize dust and/or vapour concentrations.

Personal Protection Equipment

Eyes	Safety goggles with side-shields.
Skin	Suitable chemical resistant safety gloves (e.g. nitrile rubber (.4mm)). Body protection (chemical protection suit, boots) must be chosen depending on activity and possible exposure.
Respiratory	Respirator (organic vapour and particulate matter) should be used if airborne particles are generated when handling this material.
General	Avoid contact with skin and eyes and inhalation of dust from concentrate or spray mist. When mixing or applying, wear protective clothing, including face shield, impervious gloves and footwear. If clothing becomes contaminated with product, remove clothing immediately. DO NOT eat, drink or smoke while using. Wash hands and exposed skin thoroughly with soap and water before meals and after work. Wash protective clothing daily after work.

Section 9**Physical and Chemical Properties**

Appearance	Liquid
Colour	Borwn
Odour	Characteristic
Odour Threshold	Not available
pH	10.5
Melting Point/Boiling Point	Not available
Freezing Point	Not available
Flash Point	>93°C
Flammability	Not available
Upper and Lower Explosive Limits	Not available
Vapour Pressure	Not available
Vapour Density	Not available
Density	1.080
Water Solubility	Not available
Octanol/water partition coefficient:	Not available
Auto Ignition Temperature	Not available
Decomposition Temperature	Not available
Viscosity	Not available
Particle Characteristics	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	Heat and light.
Incompatible Materials	None known.
Hazardous Decomposition Products	None known.

Section 11 Toxicological Information**Acute Effects:**

Swallowed	Not applicable. LD50: > 2,000 mg/kg (rat).
Dermal	Not applicable. LD50: > 2,000 mg/kg (rabbit).
Inhalation	May cause allergy or asthma symptoms or breathing difficulties if inhaled. 4 h LD50: >12 mg/L (4h)
Eye	Not applicable.
Skin	May cause an allergic skin reaction.

Chronic Effects:

Carcinogenicity	Not applicable.
Reproductive Toxicity	Not applicable.
Germ Cell Mutagenicity	Not applicable.
Aspiration	May be fatal if swallowed and enters airways.
STOT/SE	Not applicable.
STOT/RE	Not applicable.

Individual component information:**Acute Toxicity:**

Chemical Name	Oral – LD50	Dermal – LD50	Inhalation – LC50
Clomazone (81777-89-1)	1369 mg/kg (rat(f))	-	4.8mg/l (rat) Dust/mist

Section 12. Ecotoxicological Information

Ecological effects information	Toxic to aquatic life with long lasting effects. Hazardous to soil organisms. Hazardous 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
Acute fish toxicity:	Clomazone: Atlantic silverside (96hr) = LC50 = 6.26mg/l Chronic: Rainbow Trout = LOEC = 0.0000093mg/l
Toxicity for crustacean:	Clomazone: Acute: Daphnia Magna (48hr) = LC50 = 5.2mg/l Chronic: Daphnia Magna (21 days) = NOEL = 2.2mg/l
Toxicity to algae:	Clomazone: Algae (48hr) = 2.10mg/l
Very ecotoxic in the soil environment	Lettuce (Lactuca sativa) Seedling Emergence 28 days = EC=0.0004mg/kg dry soil
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 5433:2020



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. (Clomazone)
Marine Pollutant	Yes
Special Provisions-Limited Quantities	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 2020

EPA Approval Code: HSR100704

HSW (HS) Regulations 2017	Trigger Quantity
Certified Handlers	Not required
Location Certificate	Not required
Signage Trigger Quantities (Schedule 3)	1000L
Fire Extinguishers (Schedule 4)	500L – 2 extinguishers
Emergency Response Plan (Schedule 5)	1000L
Secondary Containment (Schedule 5)	1000L
Tracking (Schedule 26)	Not required
HSNO Additional Controls (Restrictions of use)	Refer to EPA www.epa.govt.nz for controls document - HSR100704
Hazardous Property Controls Notice 2017	
HPC Notice Part 4 Subpart B- Use of ecotoxic substances in any place	The maximum application rate for this substance is 244.9 g of the technical grade active ingredient per hectare in 200-300 L of water.

ACVM Act and Regulations

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

P8525

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

EC50	Median effective concentration.
EEL	Environmental Exposure Limit.
EPA	Environmental Protection Authority
HSNO	Hazardous Substances and New Organisms.
HSW	Health and Safety at Work.
LC50	Lethal concentration that will kill 50% of the test organisms inhaling or ingesting it.
LD50	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:

EPA Hazardous Substances (Safety Data Sheets) Notice 2017
Workplace Exposure Standards and Biological Exposure Indices April 2022 edition.
Assigning a hazardous substance to a HSNO Approval (Aug 2013).
Transport of Dangerous goods on land NZS 5433:2020
HSW (Hazardous Substances) Regulations 2017

Disclaimer

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