SAFETY DATA SHEET
CORTEVA AGRISCIENCE AUSTRALIA PTY LTD

Product name: VIGILANT® II Herbicide **Issue Date:** 22.04.2026

CORTEVA AGRISCIENCE AUSTRALIA PTY LTD encourages you and expects you to read and understand the entire SDS as there is important information throughout the document. This SDS provides users with information relating to the protection of human health and safety at the workplace, protection of the environment and supports emergency response. Product users and applicators should primarily refer to the product label attached to or accompanying the product container. This Safety Data Sheet adheres to the standards and regulatory requirements of Australia and may not meet the regulatory requirements in other countries.

SECTION 1: IDENTIFICATION

Product name: VIGILANT® II Herbicide

Recommended use of the chemical and restrictions on use
Identified uses: End use herbicide product

COMPANY IDENTIFICATION
CORTEVA AGRISCIENCE AUSTRALIA PTY LTD
LEVEL 9, 67 ALBERT AVENUE
CHATSWOOD NSW 2067
AUSTRALIA

Customer Information Number: 1800-700-096
aucustomerservice@corteva.com

EMERGENCY TELEPHONE NUMBER
24-Hour Emergency Contact:1800-370-754
For advice, contact a doctor (at once) or the Australian Poisons Information Centre: 131 126
Transport Emergency Only Dial: 000

SECTION 2: HAZARDSIDENTIFICATION

GHS Classification
Acute aquatic toxicity - Category 2
Chronic aquatic toxicity - Category 1

GHS label elements
Hazard pictograms



Signal word: **WARNING!**

Hazard statements
Toxic to aquatic life.
Very toxic to aquatic life with long lasting effects.

Precautionary statements
Prevention
Avoid release to the environment.

Response
Collect spillage.

Disposal
Dispose of contents/ container to an approved waste disposal plant.

Other hazards
No data available

SECTION 3: COMPOSITION AND INFORMATION ON INGREDIENTS

This product is a mixture.

Component	CAS No.	Concentration
Aminopyralid Triisopropanolamine Salt	566191-89-7	0.83%
Picloram Potassium Salt	2545-60-0	4.98 %
Potassium hydroxide	1310-58-3	0.5 - 1 %

SECTION 4: FIRST AID MEASURES

Description of first aid measures
General advice: If potential for exposure exists refer to Section 8 for specific personal protective equipment.

Inhalation: Move person to fresh air. If person is not breathing, call an emergency responder or ambulance, then give artificial respiration; if by mouth-to-mouth use rescuer protection (pocket mask etc). Call a poison control center or doctor for treatment advice.

Skin contact: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

Eye contact: Hold eyes open and rinse slowly and gently with water for 15 - 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eyes. Call a poison control center or doctor for treatment advice.

Ingestion: No emergency medical treatment necessary.

Most important symptoms and effects, both acute and delayed: None known.

Indication of any immediate medical attention and special treatment needed
Notes to physician: No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient. Have the Safety Data Sheet, and if available, the product container or label with you when calling a poison control center or doctor or going for treatment.

SECTION 5: FIREFIGHTING MEASURES

Suitable extinguishing media: This material does not burn. If exposed to fire from another source, use suitable extinguishing agent for that fire.

Unsuitable extinguishing media: None known.

Special hazards arising from the substance or mixture
Hazardous combustion products: Fire conditions may cause this product to decompose. Exposure to combustion products may be a hazard to health.

Unusual Fire and Explosion Hazards: None known.

Advice for firefighters
Fire Fighting Procedures: Evacuate area. Remove undamaged containers from fire area if it is safe to do so. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Use water spray to cool unopened containers.

Special protective equipment for firefighters: Wear positive-pressure self-contained breathing apparatus (SCBA) and protective firefighting clothing (includes firefighting helmet, coat, trousers, boots, and gloves). If protective equipment is not available or not used, fight fire from a protected location or safe distance.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures: Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection.

Environmental precautions: Discharge into the environment must be avoided. Prevent further leakage or spillage if safe to do so. Prevent spreading over a wide area (e.g. by containment or oil barriers). Retain and dispose of contaminated wash water. Local authorities should be advised if significant spillages cannot be contained.

Methods and materials for containment and cleaning up: Clean up remaining materials from spill with suitable absorbant. Wipe up with absorbent material (e.g. cloth, fleece). Keep in suitable, closed containers for disposal. For large spills, provide dyking or other appropriate containment to keep material from spreading. If dyked material can be pumped, recovered material should be stored in a vented container. The vent must prevent the ingress of water as further reaction with spilled materials can take place which could lead to over pressurisation of the container. See Section 13, Disposal Considerations, for additional information.

SECTION 7: HANDLING AND STORAGE

Advice on safe handling: Do not breathe vapours/dust. Handle in accordance with good industrial hygiene and safety practice. Smoking, eating and drinking should be prohibited in the application area. Take care to prevent spills, waste and minimize release to the environment. Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection.

Conditions for safe storage: Store in a closed container. Keep in properly labelled containers. Store in accordance with the particular national regulations. Do not store near strong oxidising agents.

SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

RECOMMENDATIONS IN THIS SECTION ARE FOR MANUFACTURING, COMMERCIAL BLENDING AND PACKAGING WORKERS. APPLICATORS AND HANDLERS SHOULD SEE THE PRODUCT LABEL FOR PROPER PERSONAL PROTECTIVE EQUIPMENT AND CLOTHING.

Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Xanthan gum	11138-66-2	TWA (inhalable fraction)	10 mg/m3	Corteva OEL
		TWA (Respirable fraction)	3 mg/m3	Corteva OEL
potassium hydroxide	1310-58-3	Peak limit	2 mg/m3	AU OEL
		C	2 mg/m3	ACGIH

Exposure controls
Engineering controls: Use local exhaust ventilation, or other engineering controls to maintain airborne levels below exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, general ventilation should be sufficient for most operations.

Individual protection measures
Eye/face protection: Use safety glasses (with side shields).
Skin protection
Hand protection: Chemical protective gloves should not be needed when handling this material. Consistent with general hygienic practice for any material, skin contact should be minimized.
Other protection: No precautions other than clean body-covering clothing should be needed.
Respiratory protection: Respiratory protection should be worn when there is a potential to exceed the exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, wear respiratory protection when adverse effects, such as respiratory irritation or discomfort have been experienced, or where indicated by your risk assessment process. For most conditions no respiratory protection should be needed; however, if discomfort is experienced, use an approved air-purifying respirator.

Other Information: Selection and use of personal protective equipment should be in accordance with the recommendations in one or more of the relevant Australian/New Zealand Standards, including:
AS/NZS 1336: Eye and face protection – Guidelines.
AS/NZS 1337: Personal eye protection - Eye and face protectors for occupational applications.
AS/NZS 1715: Selection, use and maintenance of respiratory protective equipment.

AS/NZS 2161: Occupational protective gloves.
AS/NZS 2210: Occupational protective footwear.
AS/NZS 4501: Occupational protective clothing Set

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance	
Physical state	Gel
Colour	Blue
Odour	Characteristic
Odour Threshold	No test data available
pH	No test data available
Melting point/range	Not applicable
Freezing point	No test data available
Boiling point (760 mmHg)	No test data available
Flash point (closed cup)	> 100 °C *Pensky-Martens Closed Cup ASTM D 93*
Evaporation Rate (Butyl Acetate = 1)	No test data available
Flammability (solid, gas)	Not applicable
Lower explosion limit	No test data available
Upper explosion limit	No test data available
Vapour Pressure	No test data available
Relative Vapour Density (air = 1)	No test data available
Water solubility	No test data available
Auto-ignition temperature	No test data available
Dynamic Viscosity	4,359.0 mPa.s at 20 °C; 2,058.0 mPa.s at 40 °C
Explosive properties	No test data available
Oxidizing properties	No significant increase (> 5 °C) in temperature.
Density	1.04 g/cm3 at 20 °C *Digital density meter*

NOTE: The physical data presented above are typical values and should not be construed as a specification.

SECTION 10: STABILITY AND REACTIVITY

Reactivity: Not classified as a reactivity hazard.

Chemical stability: No decomposition if stored and applied as directed. Stable under normal conditions.

Possibility of hazardous reactions: Stable under recommended storage conditions. No hazards to be specially mentioned.

Conditions to avoid: Active ingredient decomposes at elevated temperatures.

Incompatible materials: None known.

Hazardous decomposition products: None.

SECTION 11: TOXICOLOGICAL INFORMATION

Acute toxicity

Product

Acute oral toxicity

Very low toxicity if swallowed. Harmful effects not anticipated from swallowing small amounts.
LD50, Rat, female, > 5,000 mg/kg. OECD Test Guideline 423.

Acute inhalation toxicity

No adverse effects are anticipated from single exposure to mist. Excessive exposure may cause irritation to upper respiratory tract (nose and throat).
LC50, Rat, male and female, 4 Hour, dust/mist, > 5.08 mg/L. OECD Test Guideline 403. No deaths occurred at this concentration.

Acute dermal toxicity

Prolonged skin contact is unlikely to result in absorption of harmful amounts.
LD50, Rat, male and female, > 5,000 mg/kg. OECD Test Guideline 402

Aminopyralid Triisopropanolamine Salt

Acute oral toxicity

For similar materials: LD50, Rat, female, > 5,000 mg/kg.

Acute inhalation toxicity

For similar materials: LC50, Rat, male and female, 4 Hour, dust/mist, > 5.79 mg/L. The substance or mixture has no acute inhalation toxicity.

Acute dermal toxicity

For similar materials: LD50, Rat, > 5,000 mg/kg

Picloram potassium salt

Acute oral toxicity

LD50, Rat, female, > 2,675 mg/kg.

Acute inhalation toxicity

For similar materials: LC50, Rat, male and female, 4 Hour, dust/mist, > 1.6 mg/L. Maximum attainable concentration. No deaths occurred at this concentration. The substance or mixture has no acute inhalation toxicity.

Acute dermal toxicity

For similar materials: LD50, Rabbit, > 2,000 mg/kg. Estimated. The substance or mixture has no acute dermal toxicity

Skin corrosion/irritation

Product: Rabbit: No skin irritation. OECD Test Guideline 404
Aminopyralid Triisopropanolamine Salt: No skin irritation.
Picloram potassium salt: Rabbit: No skin irritation.

Serious eye damage/eye irritation
Product: Rabbit: No eye irritation. OECD Test Guideline 405.
Aminopyralid Triisopropanolamine Salt: No eye irritation.
Picloram potassium salt: Eye irritation.

Sensitization
Product: Local lymph node assay. Mouse. Does not cause skin sensitisation. OECD Test Guideline 429.
Aminopyralid Triisopropanolamine Salt: For similar materials: Guinea pig: Does not cause skin sensitisation.
Picloram potassium salt: For similar materials - picloram: Guinea pig: Does not cause skin sensitisation.

Chronic toxicity
Germ cell mutagenicity
Aminopyralid Triisopropanolamine Salt: For similar active ingredient(s): Aminopyralid. In vitro genetic toxicity studies were predominantly negative. Animal genetic toxicity studies were negative
Picloram potassium salt: For similar active ingredients: The preponderance of data shows picloram to be non-mutagenic in 'in vitro' (test tube) tests and in animal test systems.

Carcinogenicity
Aminopyralid Triisopropanolamine Salt: For similar active ingredients - Aminopyralid. Did not cause cancer in laboratory animals.
Picloram potassium salt: For similar active ingredients - Picloram acid: Did not cause cancer in laboratory animals.

Reproductive toxicity
Aminopyralid Triisopropanolamine Salt: For similar active ingredients – Aminopyralid: In animal studies, did not interfere with reproduction. Did not cause birth defects or other effects in the foetus even at doses which caused toxic effects in the mother.
Picloram potassium salt: For similar active ingredients - Picloram acid: In animal studies, did not interfere with reproduction. Did not cause birth defects or any other foetal effects in laboratory animals.

Specific Target Organ Systemic Toxicity (Single Exposure)
Product: Evaluation of available data suggests that this material is not an STOT-SE toxicant.
Aminopyralid Triisopropanolamine Salt: Evaluation of available data suggests that this material is not an STOT-SE toxicant.
Picloram potassium salt: Evaluation of available data suggests that this material is not an STOT-SE toxicant.

Specific Target Organ Systemic Toxicity (Repeated Exposure)
Product: Evaluation of available data suggests that this material is not an STOT-RE toxicant

Repeated dose toxicity
Aminopyralid Triisopropanolamine Salt: For similar active ingredients - Aminopyralid: In animals, effects have been reported on the following organs: Gastrointestinal tract.
Picloram potassium salt: Based on available data, repeated exposures are not anticipated to cause significant adverse effects.

Aspiration Hazard
Product: Based on physical properties, not likely to be an aspiration hazard.
Aminopyralid Triisopropanolamine Salt: Based on physical properties, not likely to be an aspiration hazard.

Picloram potassium salt: Based on physical properties, not likely to be an aspiration hazard.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity

Aminopyralid Triisopropanolamine Salt

Acute toxicity to fish

For similar material(s): Material is practically non-toxic to aquatic organisms on an acute basis (LC50/EC50/EL50/LL50 >100 mg/L in the most sensitive species tested).
For similar material(s): LC50, Oncorhynchus mykiss (rainbow trout), 96 Hour, 360 mg/l

Acute toxicity to aquatic invertebrates

For similar material(s): EC50, Daphnia magna (Water flea), 48 Hour, > 460 mg/l

Acute toxicity to algae/aquatic plants

For similar materials: ErC50 (Myriophyllum spicatum), 14 day: 0.363 mg/L
For similar materials: NOEC (Myriophyllum spicatum), 14 day: 0.0639 mg/L
For similar materials: ErC50, Pseudokirchneriella subcapitata (green algae), 72 Hour, > 1,000 mg/L

M-Factor (acute aquatic toxicity): 1

M-Factor (chronic aquatic toxicity): 1

Toxicity to Terrestrial Organisms

Based on information for a similar material:
Material is practically non-toxic to birds on an acute basis (LD50 > 2,000 mg/kg).
Material is practically non-toxic to birds on a dietary basis (LC50 > 5,000 ppm).

Picloram Potassium Salt

Acute toxicity to fish

For similar material(s): Material is highly toxic to aquatic organisms on an acute basis (LC50/EC50 between 0.1 and 1 mg/L in the most sensitive species tested).
LC50, Lepomis macrochirus (Bluegill sunfish), 96 Hour, 137 mg/L
LC50, Oncorhynchus mykiss (rainbow trout), 96 Hour, 48 mg/L

Acute toxicity to aquatic invertebrates

LC50, Daphnia magna (Water flea), 48 Hour, 212 mg/L

Acute toxicity to algae/aquatic plants

EbC50, Pseudokirchneriella subcapitata (green algae), 120 Hour, Biomass, 85.5 mg/L
For similar material(s): ErC50, Myriophyllum spicaturn, 14 d, 0.558 mg/L
For similar material(s): NOEC, Myriophyllum spicaturn, 14 d, 0.0095 mg/L

M-Factor (acute aquatic toxicity): 1

M-Factor (chronic aquatic toxicity): 10

Toxicity to Above Ground Organisms

Material is practically non-toxic to birds on an acute basis (LD50 > 2,000 mg/kg).
Oral LD50, Anas platyrhynchos (Mallard duck), > 2,250 mg/kg
Oral LD50, Colinus virginianus (Bobwhite quail), > 5,620 mg/kg

Ecotoxicology assessment
Acute aquatic toxicity: Very toxic to aquatic life.
Chronic aquatic toxicity: Very toxic to aquatic life with long lasting effects.

Persistence and degradability
Aminopyralid Triisopropanolamine Salt
Biodegradability: For similar material(s): Aminopyralid. Material is not readily biodegradable according to OECD/EEC guidelines.

Picloram Potassium Salt
Biodegradability: For similar active ingredient(s). Picloram. Based on stringent OECD test guidelines, this material cannot be considered as readily biodegradable; however, these results do not necessarily mean that the material is not biodegradable under environmental conditions. Biodegradation may occur under aerobic conditions (in the presence of oxygen). Surface photodegradation is expected with exposure to sunlight.

Theoretical Oxygen Demand: 0.86 mg/mg
Chemical Oxygen Demand: 0.64 mg/mg

Bioaccumulative potential
Aminopyralid Triisopropanolamine Salt
Bioaccumulation: For similar active ingredient(s). Aminopyralid. Bioconcentration potential is low (BCF < 100 or Log Pow < 3).

Picloram Potassium Salt
Bioaccumulation: For similar active ingredient(s). Picloram. Bioconcentration potential is moderate (BCF between 100 and 3,000 or Log Pow between 3 and 5). Potential for mobility in soil is very high (Koc between 0 and 50).

Mobility in Soil
Aminopyralid Triisopropanolamine Salt
For similar active ingredient(s). Aminopyralid. Potential for mobility in soil is very high (Koc between 0 and 50).

Picloram Potassium Salt
For similar active ingredient(s). Picloram. Potential for mobility in soil is very high (Koc between 0 and 50).

Other adverse effects
Aminopyralid Triisopropanolamine Salt
This substance is not considered to be persistent, bioaccumulating and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulating (vPvB).
This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

Picloram Potassium Salt
This substance is not considered to be persistent, bioaccumulating and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulating (vPvB).
This substance is not on the Montreal Protocol list of substances that deplete the ozone layer

SECTION 13: DISPOSAL CONSIDERATIONS

Disposal methods: If wastes and/or containers cannot be disposed of according to the product label directions, disposal of this material must be in accordance with your local or area regulatory authorities. This information presented below only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations. If the material as supplied becomes a waste, follow all applicable regional, national and local laws.

SECTION 14: TRANSPORT INFORMATION

International Regulations

UNRTDG

Not regulated as a dangerous good

UN number	:	Not applicable
Proper shipping name	:	Not applicable
Class	:	Not applicable
Subsidiary risk	:	Not applicable
Packing group	:	Not applicable
Labels	:	Not applicable
Environmentally hazardous	:	no

IATA-DGR

Not regulated as a dangerous good

UN/ID No.	:	Not applicable
Proper shipping name	:	Not applicable
Class	:	Not applicable
Subsidiary risk	:	Not applicable
Packing group	:	Not applicable
Labels	:	Not applicable
Packing instruction (cargo aircraft)	:	Not applicable
Packing instruction (passenger aircraft)	:	Not applicable

IMDG-Code

Not regulated as a dangerous good

UN number	:	Not applicable
Proper shipping name	:	Not applicable
Class	:	Not applicable
Subsidiary risk	:	Not applicable
Packing group	:	Not applicable
Labels	:	Not applicable
EmS Code	:	Not applicable
Marine pollutant	:	Not applicable

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

National Regulations

ADG

Not regulated as a dangerous good

UN number	:	Not applicable
Proper shipping name	:	Not applicable
Class	:	Not applicable
Subsidiary risk	:	Not applicable
Packing group	:	Not applicable
Labels	:	Not applicable
Hazchem Code	:	Not applicable

Special precautions for user:
Not applicable.

SECTION 15: REGULATORY INFORMATION

Poison Schedule: S5
APVMA Approval Number: 68484

SECTION 16: ANY OTHER RELEVANT INFORMATION

Revision
Issue Date: 22.04.2026 / Replaces: 14.09.2021
Product code: Q7K-4-1 (GF-2896)

Full text of other abbreviations
ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; ECx - Concentration associated with x% response; EmS - Emergency Schedule; ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - not otherwise specified; NOEC - Non-Observed Effective Concentration; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; (Q)SAR - (Quantitative) Structure Activity Relationship; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SDS - Safety Data Sheet; UN - United Nations.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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