



Product Name: Korrex™ II Herbicide

Korrex™ II Herbicide is a combination of the following products:

Korrex™ A Herbicide, PCP: 31405

Korrex™ B Herbicide, PCP: 31205

The Safety Data Sheets are attached

COMPANY IDENTIFICATION

CORTEVA AGRISCIENCE CANADA COMPANY
#2450, 215 - 2ND STREET S.W.
CALGARY AB, T2P 1M4
CANADA

Customer Information Number : 800-667-3852

E-mail address : solutions@corteva.com

EMERGENCY TELEPHONE

24-Hour Emergency Contact : 1-888-226-8832

Local Emergency Contact : 1-888-226-8832

Product name: KORREX™ A Herbicide

Issue Date: 12/17/2020

CORTEVA AGRISCIENCE CANADA COMPANY 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.

1. IDENTIFICATION

Product name: KORREX™ A Herbicide

Recommended use of the chemical and restrictions on use

Identified uses: End use herbicide product

COMPANY IDENTIFICATION

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2. HAZARDS IDENTIFICATION

Hazard classification

This product is hazardous under the criteria of the Hazardous Products Regulation (HPR) as implemented under the Workplace Hazardous Materials Information System (WHMIS 2015).

Eye irritation - Category 2A

Label elements

Hazard pictograms



Signal Word: **WARNING!**

Hazards

Causes serious eye irritation.

Precautionary statements**Prevention**

Wash skin thoroughly after handling.
Wear eye protection/ face protection.

Response

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.

Other hazards

No data available

3. COMPOSITION/INFORMATION ON INGREDIENTS

This product is a mixture.

Component	CASRN	Concentration
Florasulam	145701-23-1	25.0%
Starch	9005-25-8	19.0%
Kaolin	1332-58-7	>= 1.4 - <= 39.1 %
Titanium dioxide	13463-67-7	1.1%
Silica, crystalline (quartz)	14808-60-7	0.4%
Methylene chloride	75-09-2	0.02%
Balance	Not available	>= 15.38 - <= 53.08 %

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. Suitable emergency eye wash facility should be available in work area.

Ingestion: No emergency medical treatment necessary.

Most important symptoms and effects, both acute and delayed:

Aside from the information found under Description of first aid measures (above) and Indication of immediate medical attention and special treatment needed (below), any additional important symptoms and effects are described in Section 11: Toxicology Information.

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.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media: Water spray Alcohol-resistant foam

Unsuitable extinguishing media: Dry chemical

Special hazards arising from the substance or mixture

Hazardous combustion products: No data available

Unusual Fire and Explosion Hazards: Exposure to combustion products may be a hazard to health. Applying foam will release significant amounts of hydrogen gas that can be trapped under the foam blanket. Do not allow run-off from fire fighting to enter drains or water courses.

Advice for firefighters

Fire Fighting Procedures: Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

Do not allow extinguishing medium to contact container contents. Most fire extinguishing media will cause hydrogen evolution, and once the fire is put out, may accumulate in poorly ventilated or confined areas and result in flash fire or explosion if ignited. Remove undamaged containers from fire area if it is safe to do so. Evacuate area. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Use water spray to cool unopened containers. Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

Special protective equipment for firefighters: Wear self-contained breathing apparatus for firefighting if necessary. Use personal protective equipment.

6. ACCIDENTAL RELEASE MEASURES

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

Environmental precautions: If the product contaminates rivers and lakes or drains inform respective authorities. Discharge into the environment must be avoided. Prevent further leakage or spillage if safe to do so. Retain and dispose of contaminated wash water. Local authorities should be advised if significant spillages cannot be contained. Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological Information.

Methods and materials for containment and cleaning up: Local or national regulations may apply to releases and disposal of this material, as well as those materials and items employed in. Pick up and arrange disposal without creating dust. 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 overpressurization of the container. Keep in suitable, closed containers for disposal. Sweep up or vacuum up spillage and collect in suitable container for disposal. See Section 13, Disposal Considerations, for additional information.

7. HANDLING AND STORAGE

Precautions for safe handling: Do not breathe vapours/dust. Do not smoke. Handle in accordance with good industrial hygiene and safety practice. Smoking, eating and drinking should be prohibited in the application area. Do not get in eyes. Avoid contact with skin and eyes. Avoid prolonged or repeated contact with skin. 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. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Keep in properly labelled containers. Store in accordance with the particular national regulations.

Do not store with the following product types: Strong oxidizing agents.

Unsuitable materials for containers: None known.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

If exposure limits exist, they are listed below. If no exposure limits are displayed, then no values are applicable.

Consult local authorities for recommended exposure limits.

Component	Regulation	Type of listing	Value/Notation
Starch	ACGIH	TWA	10 mg/m3
	CA AB OEL	TWA	10 mg/m3
	CA QC OEL	TWAEV total dust	10 mg/m3
	CA ON OEL	TWAEV Total	10 mg/m3
	CA BC OEL	TWA Total dust	10 mg/m3
	CA BC OEL	TWA respirable dust fraction	3 mg/m3
Kaolin	ACGIH	TWA Respirable particulate matter	2 mg/m3
	CA AB OEL	TWA Respirable	2 mg/m3
	CA BC OEL	TWA Respirable	2 mg/m3
	CA QC OEL	TWAEV respirable dust	5 mg/m3
Titanium dioxide	ACGIH	TWA	10 mg/m3 , Titanium dioxide
	Dow IHG	TWA	2.4 mg/m3
	CA AB OEL	TWA	10 mg/m3
	CA BC OEL	TWA	10 mg/m3
	CA QC OEL	TWAEV total dust	10 mg/m3
	CA BC OEL	TWA Total dust	10 mg/m3
	CA BC OEL	TWA respirable dust fraction	3 mg/m3

Silica, crystalline (quartz)	ACGIH	TWA Respirable particulate matter	0.025 mg/m3 , Silica
	CA AB OEL	TWA Respirable particulates	0.025 mg/m3
	CA ON OEL	TWA Respirable fraction	0.1 mg/m3
	CA QC OEL	TWAEV respirable dust	0.1 mg/m3
	CA BC OEL	TWA Respirable	0.025 mg/m3 , Silica
	ACGIH	TWA	50 ppm
	ACGIH	TWA	BEI
	Corteva OEL	TWA	25 ppm
	Corteva OEL	STEL	125 ppm
	CA AB OEL	TWA	174 mg/m3 50 ppm
Methylene chloride	CA BC OEL	TWA	25 ppm
	CA ON OEL	TWAEV	175 mg/m3 50 ppm
	CA QC OEL	TWAEV	174 mg/m3 50 ppm
	ACGIH	TWA	BEI

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.

Biological occupational exposure limits

Components	CAS-No.	Control parameters	Biological specimen	Sampling time	Permissible concentration	Basis
Methylene chloride	75-09-2	Dichloromethane	Urine	End of shift (As soon as possible after exposure ceases)	0.3 mg/l	ACGIH BEI

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. Local exhaust ventilation may be necessary for some operations.

Individual protection measures

Eye/face protection: Use chemical goggles.

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, in dusty atmospheres, use an approved particulate respirator.

The following should be effective types of air-purifying respirators: Organic vapor cartridge with a particulate pre-filter.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Physical state	Solid
Color	Tan to brown
Odor	Odorless
Odor Threshold	Odorless
pH	5.0 1% <i>pH Electrode</i> (1% dispersion)
Melting point/range	No test data available
Freezing point	No data available
Boiling point (760 mmHg)	Not applicable
Flash point	closed cup Not applicable
Evaporation Rate (Butyl Acetate = 1)	Not applicable
Flammability (solid, gas)	The product is not flammable. <i>Flammability (solids)</i>
Lower explosion limit	Not applicable
Upper explosion limit	Not applicable
Vapor Pressure	Not applicable
Relative Vapor Density (air = 1)	Not applicable
Relative Density (water = 1)	Not applicable
Water solubility	Dispersible
Partition coefficient: n-octanol/water	No data available
Auto-ignition temperature	381 °C Ramped Temperature
Decomposition temperature	No data available
Kinematic Viscosity	Not applicable
Explosive properties	No data available
Oxidizing properties	No
Solid Density	0.90 g/cm ³
Bulk density	0.82 kg/m ³ <i>Tapped Volumetric</i>
Molecular weight	No data available

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

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: None known.
No hazards to be specially mentioned.

Conditions to avoid: None known.

Incompatible materials: None.

Hazardous decomposition products

No hazardous decomposition products are known.

11. TOXICOLOGICAL INFORMATION

Toxicological information appears in this section when such data is available.

Acute toxicity

Acute oral toxicity

Very low toxicity if swallowed. Harmful effects not anticipated from swallowing small amounts.

As product:

LD50, Rat, female, > 5,000 mg/kg

Acute dermal toxicity

Prolonged skin contact is unlikely to result in absorption of harmful amounts.

As product:

LD50, Rat, male and female, > 5,000 mg/kg

Acute inhalation toxicity

No adverse effects are anticipated from single exposure to dust. Based on the available data, narcotic effects were not observed. Based on the available data, respiratory irritation was not observed.

As product:

LC50, Rat, male and female, 4 Hour, dust/mist, > 5.36 mg/l No deaths occurred at this concentration.

Skin corrosion/irritation

Prolonged contact is essentially nonirritating to skin.

Serious eye damage/eye irritation

Solid or dust may cause irritation or corneal injury due to mechanical action.

May cause moderate eye irritation.

May cause slight corneal injury.

Sensitization

Did not cause allergic skin reactions when tested in guinea pigs.

For respiratory sensitization:

No relevant data found.

Specific Target Organ Systemic Toxicity (Single Exposure)

Evaluation of available data suggests that this material is not an STOT-SE toxicant.

Specific Target Organ Systemic Toxicity (Repeated Exposure)

For the active ingredient(s):

In animals, effects have been reported on the following organs:

Kidney.

Based on information for component(s):

In animals, effects have been reported on the following organs:

Lung.

May cause abdominal discomfort or diarrhea.

Carcinogenicity

For the active ingredient(s): Did not cause cancer in laboratory animals. A risk assessment has been conducted for this product and has shown, that under normal handling, the minor components will not pose a hazard.

Teratogenicity

For the active ingredient(s): Did not cause birth defects or other effects in the fetus even at doses which caused toxic effects in the mother.

For the minor component(s): Has been toxic to the fetus in laboratory animals at doses toxic to the mother. Did not cause birth defects in laboratory animals.

Reproductive toxicity

In animal studies, active ingredient did not interfere with reproduction.

Mutagenicity

For the active ingredient(s): In vitro genetic toxicity studies were negative. Animal genetic toxicity studies were negative.

For the minor component(s): In vitro genetic toxicity studies were negative in some cases and positive in other cases. Animal genetic toxicity studies were negative.

Aspiration Hazard

Based on physical properties, not likely to be an aspiration hazard.

Carcinogenicity

Component

List

Classification

Titanium dioxide

IARC

Group 2B: Possibly carcinogenic to humans

Silica, crystalline (quartz)

IARC
US NTP
OSHA CARC
ACGIH

Group 1: Carcinogenic to humans
Known to be human carcinogen
OSHA specifically regulated carcinogen
A2: Suspected human carcinogen

Methylene chloride

IARC

US NTP

OSHA CARC
ACGIH

Group 2A: Probably carcinogenic to humans
Reasonably anticipated to be a human carcinogen
OSHA specifically regulated carcinogen
A3: Confirmed animal carcinogen with unknown relevance to humans.

12. ECOLOGICAL INFORMATION

Ecotoxicological information appears in this section when such data is available.

Toxicity

Acute toxicity to fish

Material is very highly toxic to aquatic organisms on an acute basis (LC50/EC50 <0.1 mg/L in the most sensitive species).

LC50, Oncorhynchus mykiss (rainbow trout), semi-static test, 96 Hour, 65.5 mg/l

Acute toxicity to aquatic invertebrates

EC50, Daphnia magna (Water flea), static test, 48 Hour, > 100 mg/l

Acute toxicity to algae/aquatic plants

EC50, Lemna gibba, 7 d, Growth rate inhibition, 0.0055 mg/l

EC50, Algae, 72 Hour, 0.017 mg/l

Toxicity to Above Ground Organisms

oral LD50, Apis mellifera (bees), 48 Hour, > 209.6micrograms/bee

contact LD50, Apis mellifera (bees), 48 Hour, > 200micrograms/bee

Persistence and degradability**Florasulam****Biodegradability:** Material is expected to biodegrade very slowly (in the environment). Fails to pass OECD/EEC tests for ready biodegradability.

10-day Window: Fail

Biodegradation: 2 %**Exposure time:** 28 d**Method:** OECD Test Guideline 301B or Equivalent**Theoretical Oxygen Demand:** 0.85 mg/mg**Biological oxygen demand (BOD)**

Incubation Time	BOD
5 d	0.012 mg/mg

Stability in Water (1/2-life)

, > 30 d

Photodegradation**Atmospheric half-life:** 1.82 Hour**Method:** Estimated.**Starch****Biodegradability:** Biodegradation may occur under aerobic conditions (in the presence of oxygen).**Kaolin****Biodegradability:** Biodegradation is not applicable.**Titanium dioxide****Biodegradability:** Biodegradation is not applicable.**Silica, crystalline (quartz)****Biodegradability:** Biodegradation is not applicable.**Methylene chloride****Biodegradability:** Material is readily biodegradable. Passes OECD test(s) for ready biodegradability.

10-day Window: Pass

Biodegradation: 68 %
Exposure time: 28 d
Method: OECD Test Guideline 301D or Equivalent
10-day Window: Not applicable
Biodegradation: 66 %
Exposure time: 50 Hour
Method: Simulation study

Theoretical Oxygen Demand: 0.38 mg/mg

Photodegradation
Test Type: Half-life (indirect photolysis)
Sensitization: OH radicals
Atmospheric half-life: 79 - 110 d
Method: Estimated.

Balance

Biodegradability: No relevant data found.

Bioaccumulative potential

Florasulam

Bioaccumulation: Bioconcentration potential is low (BCF < 100 or Log Pow < 3).
Partition coefficient: n-octanol/water(log Pow): -1.22
Bioconcentration factor (BCF): 0.8 Fish 28 d Measured

Starch

Bioaccumulation: No bioconcentration is expected because of the relatively high molecular weight (MW greater than 1000).

Titanium dioxide

Bioaccumulation: Partitioning from water to n-octanol is not applicable.

Silica, crystalline (quartz)

Bioaccumulation: Partitioning from water to n-octanol is not applicable.

Methylene chloride

Bioaccumulation: Bioconcentration potential is low (BCF < 100 or Log Pow < 3).
Partition coefficient: n-octanol/water(log Pow): 1.25 at 20 °C Measured
Bioconcentration factor (BCF): 2 - 40 Fish Measured

Balance

Bioaccumulation: No relevant data found.

Mobility in soil

Florasulam

Potential for mobility in soil is very high (Koc between 0 and 50).
Partition coefficient (Koc): 4 - 54

Starch

No relevant data found.

Silica, crystalline (quartz)

No relevant data found.

Methylene chloride

Potential for mobility in soil is very high (Koc between 0 and 50).

Partition coefficient (Koc): 46.8 Estimated.

Balance

No relevant data found.

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.

14. TRANSPORT INFORMATION

TDG

Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.(Florasulam)
UN number	UN 3077
Class	9
Packing group	III
Marine pollutant	Florasulam

Classification for SEA transport (IMO-IMDG):

Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.(Florasulam)
UN number	UN 3077
Class	9
Packing group	III
Marine pollutant	Florasulam
Transport in bulk according to Annex I or II of MARPOL 73/78 and the IBC or IGC Code	Consult IMO regulations before transporting ocean bulk

Classification for AIR transport (IATA/ICAO):

Proper shipping name	Environmentally hazardous substance, solid, n.o.s.(Florasulam)
UN number	UN 3077
Class	9
Packing group	III

Further information:

Marine Pollutants assigned UN number 3077 and 3082 in single or combination packaging containing a net quantity per single or inner packaging of 5 L or less for liquids or having a net mass per single or inner packaging of 5 KG or less for solids may be transported as non-dangerous goods as provided in section 2.10.2.7 of IMDG code, IATA special provision A197, and ADR/RID special provision 375.
NOT REGULATED PER TDG EXEMPTION 1.45.1 FOR ROAD OR RAIL

This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. Transportation classifications may vary by container volume and may be influenced by regional or country variations in regulations. Additional transportation system information can be obtained through an authorized sales or customer service representative. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.

15. REGULATORY INFORMATION

National Fire Code of Canada

Not applicable

Canadian Domestic Substances List (DSL)

This product contains chemical substance(s) exempt from CEPA DSL Inventory requirements. It is regulated as a pesticide subject to Pest Control Products Act (PCPA) requirements.

Pest Control Products Act

Pest Control Products Act (PCPA) Registration Number: 31405

Read the PCPA label, authorized under the Pest Control Products Act, prior to using or handling this pest control product.

This chemical is a pest control product registered by Health Canada Pest Management Regulatory Agency and is subject to certain labelling requirements under the Pest Control Products Act (PCPA). There are Canada-specific environmental requirements for handling, use, and disposal of this pest control product that are indicated on the label. These requirements differ from the classification criteria and hazard information required for GHS-consistent safety data sheets. Following is the hazard information required on the pest control products label:

PCPA Label Hazard Communications:

Read the label and booklet before using. Keep out of reach of children.

WARNING EYE IRRITANT

16. OTHER INFORMATION

Hazard Rating System

NFPA

Health	Flammability	Instability
1	1	0

Revision

Identification Number: 11094499 / Issue Date: 12/17/2020 / Version: 3.0

DAS Code: GF-1352

Most recent revision(s) are noted by the bold, double bars in left-hand margin throughout this document.

Legend

ACGIH	USA. ACGIH Threshold Limit Values (TLV)
ACGIH BEI	ACGIH - Biological Exposure Indices (BEI)
BEI	Biological Exposure Indices
CA AB OEL	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
CA BC OEL	Canada. British Columbia OEL
CA ON OEL	Canada. Ontario OELs
CA QC OEL	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants
Corteva OEL	Corteva Occupational Exposure Limit
Dow IHG	Dow Industrial Hygiene Guideline
STEL	Short term exposure limit

TWA	8-hour time weighted average
TWAEV	time-weighted average exposure value

Full text of other abbreviations

AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; 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; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; 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; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

Information Source and References

This SDS is prepared by Product Regulatory Services and Hazard Communications Groups from information supplied by internal references within our company.

CORTEVA AGRISCIENCE CANADA COMPANY urges each customer or recipient of this (M)SDS to study it carefully and consult appropriate expertise, as necessary or appropriate, to become aware of and understand the data contained in this (M)SDS and any hazards associated with the product. The information herein is provided in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied, is given. Regulatory requirements are subject to change and may differ between various locations. It is the buyer's/user's responsibility to ensure that his activities comply with all federal, state, provincial or local laws. The information presented here pertains only to the product as shipped. Since conditions for use of the product are not under the control of the manufacturer, it is the buyer's/user's duty to determine the conditions necessary for the safe use of this product. Due to the proliferation of sources for information such as manufacturer-specific (M)SDSs, we are not and cannot be responsible for (M)SDSs obtained from any source other than ourselves. If you have obtained an (M)SDS from another source or if you are not sure that the (M)SDS you have is current, please contact us for the most current version.

CA

Product name: KORREX™ B Herbicide

Issue Date: 12/15/2020

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Recommended use of the chemical and restrictions on use

Identified uses: End use herbicide product

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24-Hour Emergency Contact

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Local Emergency Contact

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2. HAZARDS IDENTIFICATION

Hazard classification

This product is hazardous under the criteria of the Hazardous Products Regulation (HPR) as implemented under the Workplace Hazardous Materials Information System (WHMIS 2015).

Serious eye damage - Category 1

Label elements

Hazard pictograms



Signal Word: **DANGER!**

Hazards

Causes serious eye damage.

Precautionary statements**Prevention**

Wear eye protection/ face protection.

Response

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/ doctor.

Other hazards

No data available

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature: Mixture

This product is a mixture.

Component	CASRN	Concentration
3,6-Dichloro-o-anisic acid, compound with dimethylamine (1:1)	2300-66-5	49.77%
Balance	Not available	50.23%

4. FIRST AID MEASURES

Description of first aid measures**General advice:**

First Aid responders should pay attention to self-protection and use the recommended protective clothing (chemical resistant gloves, splash protection). If potential for exposure exists refer to Section 8 for specific personal protective equipment.

Inhalation: Move person to fresh air; if effects occur, consult a physician.

Skin contact: Remove material from skin immediately by washing with soap and plenty of water. Remove contaminated clothing and shoes while washing. Seek medical attention if irritation persists. Wash clothing before reuse. Discard items which cannot be decontaminated, including leather articles such as shoes, belts and watchbands.

Eye contact: Wash immediately and continuously with flowing water for at least 30 minutes. Remove contact lenses after the first 5 minutes and continue washing. Obtain prompt medical consultation, preferably from an ophthalmologist. Suitable emergency eye wash facility should be immediately available.

Ingestion: If swallowed, seek medical attention. Do not induce vomiting unless directed to do so by medical personnel.

Most important symptoms and effects, both acute and delayed:

Aside from the information found under Description of first aid measures (above) and Indication of immediate medical attention and special treatment needed (below), any additional important symptoms and effects are described in Section 11: Toxicology Information.

Indication of any immediate medical attention and special treatment needed

Notes to physician: Chemical eye burns may require extended irrigation. Obtain prompt consultation, preferably from an ophthalmologist. No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

5. FIRE-FIGHTING 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: No data available

Special hazards arising from the substance or mixture

Hazardous combustion products: Under fire conditions some components of this product may decompose. The smoke may contain unidentified toxic and/or irritating compounds. Combustion products may include and are not limited to: Nitrogen oxides. Hydrogen chloride. Chlorine. Carbon monoxide. Carbon dioxide.

Unusual Fire and Explosion Hazards: In a fire situation, residue can burn.

Advice for firefighters

Fire Fighting Procedures: Keep people away. Isolate fire and deny unnecessary entry. Consider feasibility of a controlled burn to minimize environment damage. Foam fire extinguishing system is preferred because uncontrolled water can spread possible contamination. This material does not burn. Fight fire for other material that is burning. Contain fire water run-off if possible. Fire water run-off, if not contained, may cause environmental damage. Review the "Accidental Release Measures" and the "Ecological Information" sections of this (M)SDS.

Special protective equipment for firefighters: Wear positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots, and gloves). Avoid contact with this material during fire fighting operations. If contact is likely, change to full chemical resistant fire fighting clothing with self-contained breathing apparatus. If this is not available, wear full chemical resistant clothing with self-contained breathing apparatus and fight fire from a remote location. For protective equipment in post-fire or non-fire clean-up situations, refer to the relevant sections.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures: Evacuate area. Refer to section 7, Handling, for additional precautionary measures. Only trained and properly protected personnel must be involved in clean-up operations. Keep upwind of spill. Ventilate area of leak or spill. Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection.

Environmental precautions: Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological Information.

Methods and materials for containment and cleaning up: Contain spilled material if possible. Small spills: Absorb with materials such as: Clay. Dirt. Sand. Sweep up. Collect in suitable and properly labeled containers. Large spills: Contact the company for clean-up assistance. See Section 13, Disposal Considerations, for additional information.

7. HANDLING AND STORAGE

Precautions for safe handling: Keep out of reach of children. Do not get in eyes. Avoid contact with skin and clothing. Avoid breathing vapor or mist. Do not swallow. Wash thoroughly after handling. Keep container closed. Use with adequate ventilation. See Section 8, EXPOSURE CONTROLS AND PERSONAL PROTECTION.

Conditions for safe storage: Store in a dry place. Store in original container. Keep container tightly closed when not in use. Do not store near food, foodstuffs, drugs or potable water supplies.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

If exposure limits exist, they are listed below. If no exposure limits are displayed, then no values are applicable.

Consult local authorities for recommended exposure limits.

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.

Exposure controls

Engineering controls: Use engineering controls to maintain airborne level below exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, use only with adequate ventilation. Local exhaust ventilation may be necessary for some operations.

Individual protection measures

Eye/face protection: Use chemical goggles.

Skin protection

Hand protection: Use gloves chemically resistant to this material. Examples of preferred glove barrier materials include: Butyl rubber. Natural rubber ("latex"). Neoprene. Nitrile/butadiene rubber ("nitrile" or "NBR"). Polyethylene. Ethyl vinyl alcohol laminate ("EVAL"). Polyvinyl chloride ("PVC" or "vinyl"). NOTICE: The selection of a specific glove for a particular application and duration of use in a workplace should also take into account all relevant workplace factors such as, but not limited to: Other chemicals which may be handled, physical requirements (cut/puncture protection, dexterity, thermal protection), potential body reactions to glove materials, as well as the instructions/specifications provided by the glove supplier.

Other protection: Use protective clothing chemically resistant to this material. Selection of specific items such as face shield, boots, apron, or full body suit will depend on the task.

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, use an approved respirator. Selection of air-purifying or positive-pressure supplied-air will depend on the specific operation and the potential airborne concentration of the material. For emergency conditions, use an approved positive-pressure self-contained breathing apparatus. The following should be effective types of air-purifying respirators: Organic vapor cartridge with a particulate pre-filter.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Physical state	Liquid
Color	amber
Odor	Amine
Odor Threshold	No data available
pH	7 - 8 <i>Vendor</i>
Melting point/range	Not applicable
Freezing point	No data available
Boiling point (760 mmHg)	100 °C <i>Vendor</i>
Flash point	closed cup <i>Vendor</i> does not flash
Evaporation Rate (Butyl Acetate = 1)	No data available
Flammability (solid, gas)	No data available
Lower explosion limit	<i>Vendor</i> Not applicable
Upper explosion limit	<i>Vendor</i> Not applicable
Vapor Pressure	18 mmHg at 20 °C <i>Vendor</i>
Relative Vapor Density (air = 1)	No data available
Relative Density (water = 1)	No data available
Water solubility	<i>Vendor</i> completely soluble in water
Partition coefficient: n-octanol/water	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Dynamic Viscosity	No data available
Kinematic Viscosity	No data available
Explosive properties	No data available
Oxidizing properties	No data available
Liquid Density	1.16 g/cm ³ <i>Vendor</i>
Molecular weight	No data available

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

10. STABILITY AND REACTIVITY

Reactivity: No data available

Chemical stability: Thermally stable at recommended temperatures and pressures.

Possibility of hazardous reactions: Polymerization will not occur.

Conditions to avoid: Exposure to elevated temperatures can cause product to decompose.

Incompatible materials: None known.

Hazardous decomposition products: Decomposition products depend upon temperature, air supply and the presence of other materials. Decomposition products can include and are not limited to: Chlorine. Carbon monoxide. Carbon dioxide. Hydrogen chloride. Nitrogen oxides.

11. TOXICOLOGICAL INFORMATION

Toxicological information appears in this section when such data is available.

Acute toxicity

Acute oral toxicity

Low toxicity if swallowed. Small amounts swallowed incidentally as a result of normal handling operations are not likely to cause injury; however, swallowing larger amounts may cause injury.

LD50, Rat, 2,629 mg/kg

Acute dermal toxicity

Prolonged skin contact is unlikely to result in absorption of harmful amounts.

LD50, Rabbit, > 2,000 mg/kg

Acute inhalation toxicity

Prolonged excessive exposure to mist may cause adverse effects. Excessive exposure may cause irritation to upper respiratory tract (nose and throat).

LC50, Rat, 4 Hour, dust/mist, > 5.4 mg/l

Skin corrosion/irritation

Brief contact may cause skin irritation with local redness.

Serious eye damage/eye irritation

May cause severe irritation with corneal injury which may result in permanent impairment of vision, even blindness. Chemical burns may occur.

Sensitization

Skin contact may cause an allergic skin reaction in a small proportion of individuals.

For respiratory sensitization:

No relevant data found.

Specific Target Organ Systemic Toxicity (Single Exposure)

Evaluation of available data suggests that this material is not an STOT-SE toxicant.

Specific Target Organ Systemic Toxicity (Repeated Exposure)

For similar active ingredient(s).

Based on available data, repeated exposures are not anticipated to cause significant adverse effects.

Carcinogenicity

For similar active ingredient(s). Did not cause cancer in laboratory animals.

Teratogenicity

For similar active ingredient(s). Did not cause birth defects in laboratory animals.

Reproductive toxicity

For similar active ingredient(s). In animal studies, did not interfere with reproduction.

Mutagenicity

For similar active ingredient(s). In vitro genetic toxicity studies were negative in some cases and positive in other cases. Animal genetic toxicity studies were negative.

Aspiration Hazard

Based on available information, aspiration hazard could not be determined.

12. ECOLOGICAL INFORMATION

Ecotoxicological information appears in this section when such data is available.

Toxicity**3,6-Dichloro-o-anisic acid, compound with dimethylamine (1:1)****Acute toxicity to fish**

Material is slightly toxic to aquatic organisms on an acute basis (LC50/EC50 between 10 and 100 mg/L in the most sensitive species tested).

Balance**Acute toxicity to fish**

No relevant data found.

Persistence and degradability**3,6-Dichloro-o-anisic acid, compound with dimethylamine (1:1)**

Biodegradability: No relevant data found.

Balance

Biodegradability: No relevant data found.

Bioaccumulative potential**3,6-Dichloro-o-anisic acid, compound with dimethylamine (1:1)**

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

Balance

Bioaccumulation: No relevant data found.

Mobility in soil**3,6-Dichloro-o-anisic acid, compound with dimethylamine (1:1)**

For similar active ingredient(s).

Potential for mobility in soil is medium (Koc between 150 and 500).

Balance

No relevant data found.

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.

14. TRANSPORT INFORMATION

TDG

Not regulated for transport

Classification for SEA transport (IMO-IMDG):

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

Not regulated for transport
Consult IMO regulations before transporting ocean bulk

Classification for AIR transport (IATA/ICAO):

Not regulated for transport

This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. Transportation classifications may vary by container volume and may be influenced by regional or country variations in regulations. Additional transportation system information can be obtained through an authorized sales or customer service representative. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.

15. REGULATORY INFORMATION

National Fire Code of Canada

Not applicable

Canadian Domestic Substances List (DSL)

This product contains chemical substance(s) exempt from CEPA DSL Inventory requirements. It is regulated as a pesticide subject to Pest Control Products Act (PCPA) requirements.

Pest Control Products Act

Pest Control Products Act (PCPA) Registration Number: 31205

Read the PCPA label, authorized under the Pest Control Products Act, prior to using or handling this pest control product.

This chemical is a pest control product registered by Health Canada Pest Management Regulatory Agency and is subject to certain labelling requirements under the Pest Control Products Act (PCPA). There are Canada-specific environmental requirements for handling, use, and disposal of this pest control product that are indicated on the label. These requirements differ from the classification criteria and hazard information required for GHS-consistent safety data sheets. Following is the hazard information required on the pest control products label:

PCPA Label Hazard Communications:

Read the label and booklet before using. Keep out of reach of children.

CAUTION POISON

WARNING EYE IRRITANT

This product is toxic to:

Aquatic organisms

Non-target terrestrial plants

16. OTHER INFORMATION

Hazard Rating System

NFPA

Health	Flammability	Instability
3	0	0

Revision

Identification Number: 11095507 / Issue Date: 12/15/2020 / Version: 2.0

Most recent revision(s) are noted by the bold, double bars in left-hand margin throughout this document.

Full text of other abbreviations

AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; 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; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; 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; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

Information Source and References

This SDS is prepared by Product Regulatory Services and Hazard Communications Groups from information supplied by internal references within our company.

CORTEVA AGRISCIENCE CANADA COMPANY urges each customer or recipient of this (M)SDS to study it carefully and consult appropriate expertise, as necessary or appropriate, to become aware of and understand the data contained in this (M)SDS and any hazards associated with the product. The information herein is provided in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied, is given. Regulatory requirements are subject to change and may differ between various locations. It is the buyer's/user's responsibility to ensure that his activities comply with all federal, state, provincial or local laws. The information presented here pertains only to the product as shipped. Since conditions for use of the product are not under the control of the manufacturer, it is the buyer's/user's duty to determine the conditions necessary for the safe use of this product. Due to the

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