

# SAFETY DATA SHEET

# **CORTEVA AGRISCIENCE CANADA COMPANY**

Product name: NOVA™ Fungicide Issue Date: 12/15/2020

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: NOVA™ Fungicide

Recommended use of the chemical and restrictions on use

Identified uses: End use fungicide product

**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** 

#### 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).

Combustible dust - Category 1

Reproductive toxicity - Category 2

Specific target organ toxicity - repeated exposure - Category 2 - Oral

# Label elements Hazard pictograms



Signal Word: WARNING!

#### **Hazards**

May form combustible dust concentrations in air.

Suspected of damaging fertility or the unborn child.

May cause damage to organs (Liver) through prolonged or repeated exposure if swallowed.

# **Precautionary statements**

#### Prevention

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Do not breathe dust/ fume/ gas/ mist/ vapors/ spray.

Wear protective gloves/ protective clothing/ eye protection/ face protection.

# Response

IF exposed or concerned: Get medical advice/ attention.

#### Storage

Store locked up.

#### **Disposal**

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

#### Other hazards

No data available

#### **Further information**

The values listed below represent the percentages of ingredients of unknown toxicity.

The following percentage of the mixture consists of ingredient(s) with unknown hazards to the aquatic environment: 2 %

# 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Chemical nature:** Fungicide This product is a mixture.

Component	CASRN	Concentration
Myclobutanil	88671-89-0	40.0%
Kaolin	1332-58-7	39.8%
Calcium polysilicate	1344-95-2	4.0%
Quartz	14808-60-7	0.4%
Titanium dioxide	13463-67-7	1.1%
Balance	Not available	<= 14.7 %

# 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 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. Suitable emergency safety shower facility should be available in work area.

**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 immediately available.

**Ingestion:** Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Never give anything by mouth to an unconscious person.

# 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:** Repeated excessive exposure may aggravate preexisting lung disease. May cause asthma-like (reactive airways) symptoms. Bronchodilators, expectorants, antitussives and corticosteroids may be of help. Maintain adequate ventilation and oxygenation of the patient. 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 fog or fine spray. Dry chemical fire extinguishers. Carbon dioxide fire extinguishers. Foam. General purpose synthetic foams (including AFFF type) or protein foams are preferred if available. Alcohol resistant foams (ATC type) may function.

Unsuitable extinguishing media: Do not use direct water stream. May spread fire.

#### Special hazards arising from the substance or mixture

**Hazardous combustion products:** During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and/or irritating. Combustion products may include and are not limited to: Nitrogen oxides. Hydrogen cyanide. Hydrogen chloride. Carbon monoxide. Carbon dioxide.

**Unusual Fire and Explosion Hazards:** Violent steam generation or eruption may occur upon application of direct water stream to hot liquids. Do not permit dust to accumulate. When suspended in air dust can pose an explosion hazard. Minimize ignition sources. If dust layers are exposed to elevated temperatures, spontaneous combustion may occur.

# Advice for firefighters

Fire Fighting Procedures: Keep people away. Isolate fire and deny unnecessary entry. Soak thoroughly with water to cool and prevent re-ignition. Use water spray to cool fire exposed containers and fire affected zone until fire is out and danger of reignition has passed. Do not use direct water stream. May spread fire. Hand held dry chemical or carbon dioxide extinguishers may be used for small fires. Dust explosion hazard may result from forceful application of fire extinguishing agents. Burning liquids may be moved by flushing with water to protect personnel and minimize property damage. 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:** Isolate area. Keep unnecessary and unprotected personnel from entering the area. Refer to section 7, Handling, for additional precautionary measures. Keep upwind of spill. Spilled material may cause a slipping hazard. 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. Spills or discharge to natural waterways is likely to kill aquatic organisms.

**Methods and materials for containment and cleaning up:** Contain spilled material if possible. Small spills: 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. Keep away from heat, sparks and flame. Do not swallow. Avoid contact with eyes, skin, and clothing. Avoid breathing dust or mist. Wash thoroughly after handling. Keep container closed. Use with adequate ventilation. Good housekeeping and controlling of dusts are necessary for safe handling of product. See Section 8, EXPOSURE CONTROLS AND PERSONAL PROTECTION.

**Conditions for safe storage:** Avoid moisture. Store in a dry place. Store in original container. 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.

Component	Regulation	Type of listing	Value/Notation
Myclobutanil	Dow IHG	TWA	0.5 mg/m3
Kaolin	ACGIH	TWA Respirable	2 mg/m3
		particulate matter	
	CA AB OEL	TWA Respirable	2 mg/m3
	CA BC OEL	TWA Respirable	2 mg/m3
	CA QC OEL	TWAEV respirable	5 mg/m3
		dust	
Calcium polysilicate	CA QC OEL	TWAEV total dust	10 mg/m3
	CA AB OEL	TWA	10 mg/m3
Quartz	ACGIH	TWA Respirable	0.025 mg/m3,Silica
		particulate matter	
	CA AB OEL	TWA Respirable	0.025 mg/m3
		particulates	
	CA ON OEL	TWA Respirable	0.1 mg/m3
		fraction	
	CA QC OEL	TWAEV respirable	0.1 mg/m3
		dust	
	CA BC OEL	TWA Respirable	0.025 mg/m3,Silica
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	3 mg/m3
		fraction	

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 when prolonged or frequently repeated contact could occur. Examples of preferred glove barrier materials include: Polyvinyl chloride ("PVC" or "vinyl"). Neoprene. Nitrile/butadiene rubber ("nitrile" or "NBR"). 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: Wear clean, body-covering clothing.

**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. In dusty or misty 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 Powder
Color Tan
Odor Mild

Odor Threshold No test data available

**pH** 7.5 - 8.5 *Calculated.* (aqueous suspension)

Melting point/rangeNo data availableFreezing pointNo data availableBoiling point (760 mmHg)Not applicable

Flash point closed cup Not applicable

Evaporation Rate (Butyl Acetate Not applicable

= 1)

Flammability (solid, gas) May form combustible dust concentrations in air.

Lower explosion limitNot applicableUpper explosion limitNot applicable

Vapor Pressure > 266.6 hPa at 25 °C Solvent

Relative Vapor Density (air = 1) Not applicable
Relative Density (water = 1) No data available

Water solubility Dispersible

Partition coefficient: n- No data available

octanol/water

Auto-ignition temperature Not applicable

**Decomposition temperature**No test data available

Dynamic ViscosityNot applicableKinematic ViscosityNot applicable

Explosive properties No

Oxidizing properties No significant increase (>5C) in temperature.

Bulk density0.255 g/cm3Molecular weightNo data available

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

Issue Date: 12/15/2020

# 10. STABILITY AND REACTIVITY

Reactivity: No dangerous reaction known under conditions of normal use.

Chemical stability: Stable under recommended storage conditions. See Storage, Section 7.

Possibility of hazardous reactions: Polymerization will not occur.

**Conditions to avoid:** Active ingredient decomposes at elevated temperatures. Generation of gas during decomposition can cause pressure in closed systems. Avoid moisture. Avoid direct sunlight.

Incompatible materials: Avoid contact with: Strong oxidizers.

**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: Hydrogen chloride. Hydrogen cyanide.

# 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.

As product:

LD50, Rat, > 2,500 mg/kg OECD Test Guideline 423

# **Acute dermal toxicity**

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

As product:

LD50, Rat, > 5,000 mg/kg OECD Test Guideline 402 No deaths occurred at this concentration.

# Acute inhalation toxicity

No adverse effects are anticipated from single exposure to dust. Dust may cause irritation of the upper respiratory tract (nose and throat) and lungs.

As product:

LC50, Rat, 4 Hour, dust/mist, 5.45 mg/l OECD Test Guideline 436 No deaths occurred at this concentration.

#### Skin corrosion/irritation

Brief contact is essentially nonirritating to skin.

#### Serious eye damage/eye irritation

May cause slight eye irritation.

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

#### Sensitization

For skin sensitization:

As product:

Did not demonstrate the potential for contact allergy in mice.

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:

Liver.

Testes.

Adrenal gland.

Kidney.

Thyroid.

Repeated excessive exposure to crystalline silica may cause silicosis, a progressive and disabling disease of the lungs.

# 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): Has been toxic to the fetus in lab animals at doses nontoxic to the mother. Did not cause birth defects in laboratory animals.

#### Reproductive toxicity

For the active ingredient(s): In laboratory animal studies, effects on reproduction have been seen only at doses that produced significant toxicity to the parent animals.

#### Mutagenicity

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

#### **Aspiration Hazard**

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

Carcinogenicity

Component List Classification

Quartz IARC Group 1: Carcinogenic to humans US NTP Known to be human carcinogen

OSHA CARC OSHA specifically regulated carcinogen ACGIH A2: Suspected human carcinogen

Titanium dioxide IARC Group 2B: Possibly carcinogenic to

humans

# 12. ECOLOGICAL INFORMATION

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

# **Toxicity**

#### Acute toxicity to fish

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).

For the active ingredient(s):

LC50, Oncorhynchus mykiss (rainbow trout), static test, 96 Hour, 2 mg/l, OECD Test Guideline 203 or Equivalent

# Acute toxicity to aquatic invertebrates

For the active ingredient(s):

EC50, Daphnia magna (Water flea), static test, 48 Hour, 17 mg/l, OECD Test Guideline 202 or Equivalent

For the active ingredient(s):

LC50, saltwater mysid Mysidopsis bahia, 96 Hour, 0.24 mg/l

For the active ingredient(s):

EC50, eastern oyster (Crassostrea virginica), flow-through test, 96 Hour, 0.72 mg/l

#### Acute toxicity to algae/aquatic plants

NOEC, Pseudokirchneriella subcapitata (green algae), 72 Hour, 1.3 mg/l, OPPTS 850.4500

ErC50, Lemna gibba (duckweed), 7 d, Growth rate, 0.445 mg/l, OECD Test Guideline 221

NOEC, Anabaena flos-aquae (cyanobacterium), 96 Hour, 3.7 mg/l, OPPTS 850.4500

NOEC, Skeletonema costatum (marine diatom), 96 Hour, 0.13 mg/l

# Persistence and degradability

#### Myclobutanil

**Biodegradability:** 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.

10-day Window: Fail **Biodegradation:** 22.4 % **Exposure time:** 28 d

Method: OECD Test Guideline 301D or Equivalent

**Stability in Water (1/2-life)** Hydrolysis, half-life, > 365 d

**Photodegradation** 

Atmospheric half-life: 7.6 Hour

Method: Measured

# **Kaolin**

Biodegradability: Biodegradation is not applicable.

# Calcium polysilicate

**Biodegradability:** Biodegradation is not applicable.

#### Quartz

Biodegradability: Biodegradation is not applicable.

#### Titanium dioxide

Biodegradability: Biodegradation is not applicable.

#### **Balance**

Biodegradability: No relevant data found.

# Bioaccumulative potential

# Myclobutanil

**Bioaccumulation:** Bioconcentration potential is low (BCF < 100 or Log Pow < 3).

Partition coefficient: n-octanol/water(log Pow): 3.17 Measured

Bioconcentration factor (BCF): 8.3 Oncorhynchus mykiss (rainbow trout)

# **Kaolin**

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

# Calcium polysilicate

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

#### Quartz

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

#### Titanium dioxide

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

# **Balance**

Bioaccumulation: No relevant data found.

# Mobility in soil

#### Myclobutanil

Potential for mobility in soil is low (Koc between 500 and 2000).

Given its very low Henry's constant, volatilization from natural bodies of water or moist soil is not expected to be an important fate process.

Partition coefficient (Koc): 517

#### Kaolin

No relevant data found.

# **Calcium polysilicate**

No relevant data found.

#### **Quartz**

No relevant data found.

# **Titanium dioxide**

No data available.

#### **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.(Myclobutanil)

UN number UN 3077

Class 9 Packing group III

Marine pollutant Myclobutanil

**Classification for SEA transport (IMO-IMDG):** 

Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,

N.O.S.(Myclobutanil)

UN number UN 3077

Class 9
Packing group III

Marine pollutant Myclobutanil

Transport in bulk Consult IMO regulations before transporting ocean bulk

according to Annex I or II of MARPOL 73/78 and the

**IBC or IGC Code** 

Classification for AIR transport (IATA/ICAO):

**Proper shipping name** Environmentally hazardous substance, solid,

n.o.s.(Myclobutanil)

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: 22399

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:
Birds
Small wild mammals
Aquatic organisms
Non-target terrestrial plants

# 16. OTHER INFORMATION

# **Hazard Rating System**

#### **NFPA**

Health	Flammability	Instability
2	0	0

# Revision

Identification Number: 173237 / Issue Date: 12/15/2020 / Version: 11.0

DAS Code: GF-1778

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)
CA AB OEL	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
CA BC OEL	Canada. British Columbia OEL
CA ON OEL	Ontario Table of Occupational Exposure Limits made under the Occupational
	Health and Safety Act.
CA QC OEL	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1:
	Permissible exposure values for airborne contaminants
Dow IHG	Dow Industrial Hygiene Guideline
TWA	Time Weighted Average (TWA):
TWAEV	Time-weighted average exposure value

#### Full text of other abbreviations

AllC - 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**

CA

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.