



Safety Data Sheet (GHS)

1. IDENTIFICATION

Product identifier

PRODUCT NAME: Intuity® Fungicide

PCPA REGISTRATION NUMBER: 32288

VC NUMBER(S): 1930

Synonyms None

PRODUCT DESCRIPTION: Fungicide

Intuity ® is a registered trademark of Sumitomo Chemical Company, Limited

Recommended use of the chemical and restrictions on use

Recommended Use No information available

Restrictions on use No information available

Details of the supplier of the safety data sheet

MANUFACTURER/DISTRIBUTOR

VALENT CANADA, INC.
Unit 201 230 Hanlon Creek Blvd.
Guelph, Ontario N1C 0A1
(519) 767-9262
www.valent.ca

EMERGENCY TELEPHONE NUMBERS

HEALTH EMERGENCY OR SPILL (24 hr):
(800) 682-5368
TRANSPORTATION (24 hr.): CHEMTREC
(800) 424-9300 or (202) 483-7616

24 Hour Emergency Phone Number: 800-682-5368

Restrictions on emergency number None

2. HAZARDS IDENTIFICATION

Classification: Per WHMIS 2015

This product has been classified under the Guidelines of 2015 Health Canada requirements and the implementation of the GHS (Revision 5) under HPR and the HPA.

Acute toxicity - Inhalation (Dusts/Mists)

Category 4

Label elements

WARNING

Hazard statements

Harmful if inhaled

Emergency Telephone: (800) 682-5368
REVISION NUMBER: 1

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REVISION DATE: 08/29/2019

**Precautionary Statements - Prevention**

Avoid breathing dust/fume/gas/mist/vapors/spray

Use only outdoors or in a well-ventilated area

Inhalation

IF INHALED: Remove person to fresh air and keep comfortable for breathing

Call a POISON CENTRE or doctor/physician if you feel unwell

OTHER INFORMATION**3. COMPOSITION/INFORMATION ON INGREDIENTS****Substance**

Chemical name	CAS No.	Weight-%	Hazardous Material Information Review Act registry number (HMIRA registry #)	Date HMIRA filed and date exemption granted (if applicable)
Mandestrobin	173662-97-0	43.4	-	-
Propylene glycol	57-55-6	5 - 9	-	-
Starch	9005-25-8	1	-	-
Potassium hydroxide, 45%	1310-58-3	<0.6	-	-
Other ingredients	Various CAS#s	46 - 50	-	-

4. FIRST AID MEASURES**General advice**

Have the product container or label with you when calling a poison control centre or doctor, or going for treatment. You may also contact 1-800-682-5368 for emergency medical treatment information.

Inhalation

Move the person to fresh air. If the person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control centre or doctor for further treatment advice.

Eye contact

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

Ingestion

Clean mouth with water and drink afterwards plenty of water.

Most important symptoms and effects, both acute and delayed

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Symptoms No information available.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Small Fire	Dry chemical or CO2. Water spray.
Large Fire	Do NOT use water jet or straight streams.
Unsuitable extinguishing media	Do not scatter spilled material with high pressure water streams.
Specific hazards arising from the chemical	No information available.
Hazardous combustion products:	Normal combustion forms carbon dioxide, water vapor and may produce. hydrogen cyanide (HCN),. oxides of nitrogen,. carbon monoxide,.
Explosion data	
Sensitivity to mechanical impact	None.
Sensitivity to static discharge	None.
Special protective equipment for fire-fighters	Products of combustion from fires involving this material may be toxic. Avoid breathing smoke and mists. Avoid personnel and equipment contact with fallout and runoff. Minimize the amount of water used for fire fighting. Do not enter any enclosed area without full protective equipment, including self-contained breathing equipment. Contain and isolate runoff and debris for proper disposal. Decontaminate personal protective equipment and fire fighting equipment before reuse.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Ensure adequate ventilation.

Methods and material for containment and cleaning up

Methods for containment	On Land: Avoid runoff into storm sewers and ditches which lead to waterways, or other bodies of water. Contain spilled liquids with dry sorbents. In Water: This material will disperse or dissolve in water. Stop the source of the release. Contain and isolate to prevent further release into surface or groundwater.
Methods for cleaning up	For Spills on Land: Clean up spill immediately. Absorb spill with inert material (such as dry sand or earth), then place in a chemical waste container. Wash area with soap and water. Pick up wash liquid with additional absorbent. Vacuum or sweep up sorbent material and place into chemical waste container. For Spills in Water: Clean up spill immediately. Absorb spill with inert material. Remove contaminated material for treatment or disposal.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling

Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove contaminated clothing and shoes immediately. Then wash thoroughly and put on clean clothing. Wear personal protective equipment when handling this product.

Conditions for safe storage, including any incompatibilities

Storage Conditions

Keep pesticide in original container. Do not store or transport near food or feed. Do not contaminate food or feed. Do not put concentrate into food or drink containers. Do not dilute concentrate in food or drink containers. Store in a cool, dry place, out of direct sunlight. Do not store at temperatures below 32 °F (0 °C). If the product is exposed to temperatures below 32 °F (0 °C), thaw at room temperature to 50 °F (10 °C) or warmer and shake gently to unify the product.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Limits

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Chemical name	Alberta	British Columbia	Ontario	Quebec
Propylene glycol			TWA: 10 mg/m ³ TWA: 50 ppm TWA: 155 mg/m ³	
Starch	TWA: 10 mg/m ³	TWA: 10 mg/m ³ TWA: 3 mg/m ³	TWA: 10 mg/m ³	TWA: 10 mg/m ³
Potassium hydroxide, 45%	Ceiling: 2 mg/m ³	Ceiling: 2 mg/m ³	CEV: 2 mg/m ³	Ceiling: 2 mg/m ³

Appropriate engineering controls

Engineering controls

Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection

Do not get this material in your eyes. Eye contact can be avoided by wearing protective eyewear.

Skin and body protection

Avoid contact with skin or clothing. Skin contact can be minimized by wearing protective clothing including gloves.

Respiratory protection

No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

General hygiene considerations

Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

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REVISION NUMBER: 1

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Physical state	Liquid
Appearance	Opaque
Colour	White
Odour	sweet
Odor threshold:	No information available

<u>PROPERTIES</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	6.8 @25°C (1% w/v suspension in water)	@ 25° C (1% w/v suspension in water)
Melting point/freezing point	No Data Available	None known
Boiling point/boiling range	No data available	None known
Flash point	>100 °C	None known
Evaporation rate	No Data Available	None known
Flammability (solid, gas)	No Data Available	None known
Flammability Limits in Air		None known
Upper flammability limits	No Data Available	
Lower Flammability Limit:	No Data Available	
Vapour pressure	No Data Available	None known
Vapour density	No Data Available	None known
Relative density	No Data Available	None known
Water solubility	No Data Available	None known
Solubility in other solvents	No Data Available	None known
Partition coefficient	No Data Available	None known
Autoignition temperature	No Data Available	None known
Decomposition temperature	No Data Available	None known
Kinematic viscosity	No Data Available	None known
Dynamic viscosity	168 cP @ 20° C	None known

OTHER INFORMATION

Explosive properties	No information available.
Oxidizing properties	No information available.
Softening point	No information available
Molecular weight	No information available
VOC (EPA METH.24) (G/L):	No information available
Liquid Density	1.1 g/mL @20° C
Bulk density	Not applicable

10. STABILITY AND REACTIVITY

Reactivity	No information available.
Chemical stability	Stable under normal conditions.
Possibility of Hazardous Reactions	None under normal processing.
Conditions to avoid	Avoid high temperature and direct sunlight.
Incompatible materials	Avoid strong oxidizing agents and alkaline materials.
Hazardous Decomposition Products:	May emit toxic gases and irritating fumes under fire conditions.

11. TOXICOLOGICAL INFORMATION**Acute toxicity:**

Oral Toxicity LD ₅₀ (rats)	3,129 mg/kg	EPA Tox Category	III
Dermal Toxicity LD ₅₀ (rats)	> 5,000 mg/kg	EPA Tox Category	IV
Inhalation Toxicity LC ₅₀ (rats)	> 2.04 mg/L	EPA Tox Category	IV
Eye Irritation (rabbits)	Minimally irritating	EPA Tox Category	IV
Skin Irritation (rabbits)	Minimally irritating	EPA Tox Category	IV
Mouse (LLNA method)	Non-sensitizer	EPA Tox Category	Not applicable

CARCINOGEN CLASSIFICATION

Chemical name	IARC	OSHA - Select Carcinogens	NTP Carcinogen List
Mandestrobin	Not listed	Not listed	Not listed
Propylene glycol	Not listed	Not listed	Not listed
Starch	Not listed	Not listed	Not listed
Other ingredients	Not listed	N'est pas classée	Not listed

TOXICITY OF MANDESTROBIN TECHNICAL

Chronic/Carcinogenicity: Rat and Mouse carcinogenicity studies (diet) with Mandestrobin Technical: Non-carcinogenic

Reproduction: A rat two-generation reproductive toxicity study (diet) with Mandestrobin Technical: No effect on reproduction. No effect on fertility, non-embryo/fetal lethal

Mutagenicity: Mandestrobin Technical was negative for the Ames test.

For a summary of the potential for adverse health effects from exposure to this product, refer to Section 2. For information regarding regulations pertaining to this product, refer to Section 15.

12. ECOLOGICAL INFORMATION

AVIAN TOXICITY: Test results for mandestrobin technical on avian species include:

Acute Oral LD₅₀ canary: greater than 2000 mg/kg bw
 Acute Oral LD₅₀ bobwhite quail: greater than 2250 mg/kg bw
 Acute Dietary LC₅₀ mallard duck: greater than 5620 ppm
 Acute Dietary LC₅₀ bobwhite quail: greater than 5620 ppm
 Reproduction bobwhite quail: NOEC = 1000 ppm
 Reproduction mallard duck: NOEC = 1000 ppm

AQUATIC ORGANISM TOXICITY: Test results for mandestrobin technical on aquatic species include:

Acute LC₅₀ (96 hr) Bluegill Sunfish: 2.3 mg/L
 Acute LC₅₀ (96 hr) Rainbow Trout: 0.94 mg/L
 Acute LC₅₀ (96 hr) Sheepshead Minnow: greater than 2.2 mg/L
 Acute EC₅₀ (48 hr) Daphnia magna: 1.2 mg/L
 Acute LC₅₀ (96 hr) Mysid Shrimp: 0.43 mg/L
 Acute EC₅₀ (96 hr) Green algae: = 0.33 mg/L
 Acute EC₅₀ (7 d) Duckweed: greater than 2.3 mg/L

OTHER NON-TARGET ORGANISM TOXICITY: Test results for mandestrobin technical on non-target species include:

Honeybee Acute Oral LD₅₀: greater than 111 ug (microgram)/bee
 Honeybee Acute Contact LD₅₀: greater than 100 ug (microgram)/bee

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste from residues/unused products For information on disposal of unused, unwanted product, contact the provincial regulatory agency or manufacturer. Contact the manufacturer and the provincial regulatory agency in case of a spill, and for clean-up of spills.

Contaminated packaging Refer to pesticide label for proper container disposal instructions based on container type and size.

14. TRANSPORTATION INFORMATION

DOT (ground) shipping name: Not regulated for domestic ground transport by US DOT or Canada TDG.

ICAO/IATA proper shipping name: UN 3082, Environmentally hazardous substance, liquid, n.o.s., (mandestrobin), 9, III, marine pollutant
Remarks: •Single or inner packaging less than 5 L (liquids) or 5 kg net (solids) excepted from Dangerous Goods regulations -- see IATA Special Provision A197.
 •For U.S. shipping, Emergency Response Guidebook No. 171.

IMDG proper shipping name: UN 3082, Environmentally hazardous substance, liquid, n.o.s., (mandestrobin), 9, III, marine pollutant
Remarks: •Single or inner packaging less than 5 L (liquid) or 5 Kg net (solids) excepted from Dangerous Goods regulations – see IMDG 2.10.2.7
 •For US shipping, Emergency Response Guidebook No. 171

EMS No.: F-A, S-F

15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture

PMRA LABEL INFORMATION THAT DIFFERS FROM WHMIS-GHS REQUIREMENTS:

Pesticide products in Canada are registered by PMRA and are subject to certain labeling requirements under federal pesticide law. The label, as specified in the Pest Control Products Act, is the main document to be followed for safety, use, and handling. These label requirements may differ from the classification criteria and hazard information required under WHMIS GHS for the data sheets and for workplace labels of non-pesticide chemicals. The following hazard information is required on the product label:

PMRA SIGNAL WORD: • No Signal Word Required

PMRA pesticide label hazard information: Keep out of reach of children.

Chemical name	Canada DSL Inventory List -	Canada NDSL Inventory List -	EINECS Inventory List -
Propylene glycol	Present		Present
Starch	Present		Present
Potassium hydroxide, 45%	Present		Present

For information regarding potential adverse health effects from exposure to this product, refer to Sections 2 and 11.

PESTICIDE REGULATIONS: All pesticides are governed under PCPA (Pest Control Products Act). Therefore, the regulations presented below are pertinent only when handled outside of the normal use and applications of pesticides. This includes waste streams resulting from manufacturing/formulation facilities, spills or misuse of products, and storage of large quantities of products containing hazardous or extremely hazardous substances.

PROVINCIAL REGULATIONS: This product did not trigger any provincial regulations.

International Regulations

The Montreal Protocol on Substances that Deplete the Ozone Layer Not applicable

The Stockholm Convention on Persistent Organic Pollutants Not applicable

The Rotterdam Convention Not applicable

16. OTHER INFORMATION

REASON FOR ISSUE: Updated information to meet WHMIS 2015 (GHS) regulations.
SDS NO.: CAN-0417
PCPA REGISTRATION NUMBER: 32288
REVISION NUMBER: 1
REVISION DATE: 08/29/2019
SUPERCEDES DATE: August 12, 2013
RESPONSIBLE PERSON(S): Valent U.S.A. LLC, Corporate EH&S, (925) 256-2803

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The Safety Data Sheet (SDS) serves different purposes than and DOES NOT REPLACE OR MODIFY THE PMRA-APPROVED PRODUCT LABEL (attached to and accompanying the product container). This SDS provides important health, safety, and environmental information for employers, employees, emergency responders and others handling large quantities of the product in activities generally other than product use.

The product label provides information specifically for product use in the ordinary course. Use, storage and disposal of pesticide products is regulated by the PMRA under the authority of the *Pest Control Products Act* through the product label. All necessary hazard classification and appropriate precautionary use, storage, and disposal information is set forth on that label or labeling accompanying the pesticide or to which reference is made on the label. It is a violation of federal law to use a PMRA-registered pesticide product in any manner inconsistent with its labeling.

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