

# SUMAGIC® Plant Growth Regulator



## Safety Data Sheet (GHS)

### 1. IDENTIFICATION

#### Product identifier

**PRODUCT NAME:** SUMAGIC® Plant Growth Regulator

**PCPA REGISTRATION NUMBER:** 25781

**VC NUMBER(S):** 1556  
**Synonyms** None

**PRODUCT DESCRIPTION:** Plant Growth Regulator

SUMAGIC® is a registered trademark of Sumitomo Chemical Co., Ltd.

#### 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.

**Not a hazardous substance or mixture according to the Globally Harmonized System (GHS)**

#### Label elements

#### **Hazard statements**

**Not a hazardous substance or mixture according to the Globally Harmonized System (GHS)**

**Emergency Telephone:** (800) 682-5368  
**REVISION NUMBER:** 2

**SDS NO.:** CAN-0042  
**REVISION DATE:** 08/15/2019

**OTHER INFORMATION**

Toxic to aquatic life

**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)
Uniconazole-P	83657-17-4	0.055	-	-
Cyclohexanone	108-94-1	3	-	-
Others	No CAS#	96.945	-	-

Other ingredients, which are maintained as trade secrets, are any substances other than an active ingredient contained in this product. Some of these may be hazardous, but their identity is withheld because they are considered trade secrets. The hazards associated with the other ingredients are addressed in this document. Specific information on other ingredients for the management of exposures, spills, or safety assessments can be obtained by a treating physician or nurse by calling **(800) 682-5368** at any time.

**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**

Call a poison control centre 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 centre or doctor. Do not give anything to an unconscious person.

**Most important symptoms and effects, both acute and delayed****Symptoms**

No information available.

**Indication of any immediate medical attention and special treatment needed****Note to physicians**

None.

## 5. FIRE-FIGHTING MEASURES

<b>Suitable Extinguishing Media</b>	Water fog, carbon dioxide, foam, dry chemical.
<b>Large Fire</b>	Do NOT use water jet or straight streams.
<b>Unsuitable extinguishing media</b>	Do not scatter spilled material with high pressure water streams.
<b>Specific hazards arising from the chemical</b>	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 firefighting. 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 firefighting equipment before reuse.
<b>Hazardous combustion products:</b>	Normal combustion forms carbon dioxide, water vapor and may produce oxides of nitrogen, toxic chlorine compounds. Incomplete combustion can produce carbon monoxide.
<b>Explosion data</b>	
<b>Sensitivity to mechanical impact</b>	None.
<b>Sensitivity to static discharge</b>	None.
<b>Special protective equipment for fire-fighters</b>	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

## 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions, protective equipment and emergency procedures

**Personal precautions** Ensure adequate ventilation.

### Methods and material for containment and cleaning up

<b>Methods for containment</b>	On Land: Avoid runoff into storm sewers and ditches which lead to waterways, or other bodies of water. Contain spilled liquids with dry sorbents.  On Water: This material forms an emulsion with water. Stop or reduce contamination of any water. Isolate contaminated water.
<b>Methods for cleaning up</b>	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** Applicators and other handlers must wear long-sleeved shirt and long pants, waterproof gloves, shoes plus socks. Users should wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash

thoroughly and change into clean clothing.

### Conditions for safe storage, including any incompatibilities

#### Storage Conditions

Keep pesticide in original container only. Store in a cool, dry, secure place. Do not put concentrate into food or drink containers. Do not dilute concentrate in food or drink containers. Store product in cool, dry, well-ventilated place away from seed, feed, fertilizers or other pesticides.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

#### Exposure Limits

Chemical name	Alberta	British Columbia	Ontario	Quebec
Cyclohexanone	TWA: 20 ppm TWA: 80 mg/m <sup>3</sup> STEL: 50 ppm STEL: 200 mg/m <sup>3</sup> Skin	TWA: 20 ppm STEL: 50 ppm Skin	TWA: 20 ppm STEL: 50 ppm Skin	TWA: 25 ppm TWA: 100 mg/m <sup>3</sup> Skin

### Appropriate engineering controls

#### Engineering controls

Showers, eyewash stations, and 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 should be minimized by wearing protective clothing including long pants, long-sleeved shirt and shoes plus socks and chemical-resistant gloves. Remove contaminated clothing.

#### Respiratory protection

Use in a well ventilated area.

#### 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

Physical state	Liquid
Appearance	Clear to slightly hazy
Colour	Colorless
Odour	Solvent
Odor threshold:	No information available

### PROPERTIES

<u>PROPERTIES</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	6 - 8	None known
Melting point/freezing point	No Data Available	None known
Boiling point/boiling range	No data available	None known
Flash point	No Data Available Not applicable	None known
Evaporation rate	No Data Available	None known
Flammability (solid, gas)	No Data Available	None known

<b>Flammability Limits in Air</b>		None known
Upper flammability limits	Not applicable	
Lower Flammability Limit:	Not applicable	
<b>Vapour pressure</b>	No Data Available	None known
<b>Vapour density</b>	No Data Available	None known
<b>Relative density</b>	1.006	@ 20 °C (68 °F)
<b>Water solubility</b>	Emulsifiable	None known
<b>Solubility in other solvents</b>	No Data Available	None known
<b>Partition coefficient</b>	No Data Available	None known
<b>Autoignition temperature</b>	No Data Available	None known
<b>Decomposition temperature</b>	No Data Available	None known
<b>Kinematic viscosity</b>	No Data Available	None known
<b>Dynamic viscosity</b>	No Data Available	None known

**OTHER INFORMATION**

<b>Explosive properties</b>	No information available.
<b>Oxidizing properties</b>	No information available.
<b>Softening point</b>	No information available
<b>Molecular weight</b>	No information available
<b>VOC (EPA METH.24) (G/L):</b>	No information available
<b>Liquid Density</b>	8.39 lb/gal
<b>Bulk density</b>	No information available

**10. STABILITY AND REACTIVITY**

<b>Reactivity</b>	No information available.
<b>Chemical stability</b>	Stable under normal conditions.
<b>Possibility of Hazardous Reactions</b>	None under normal processing.
<b>Conditions to avoid</b>	Freezing conditions.
<b>Incompatible materials</b>	None known based on information supplied.
<b>Hazardous Decomposition Products:</b>	Normal combustion forms carbon dioxide, water vapor and may produce: oxides of nitrogen and toxic chlorine compounds. Incomplete combustion may produce carbon monoxide.

**11. TOXICOLOGICAL INFORMATION****Acute toxicity:**

Oral Toxicity LD <sub>50</sub> (rats)	> 5000 mg/kg	EPA Tox Category	IV
Dermal Toxicity LD <sub>50</sub> (rabbits)	> 5000 mg/kg	EPA Tox Category	IV
Inhalation Toxicity LC <sub>50</sub> (rats)	> 5.9 mg/L	EPA Tox Category	IV
Eye Irritation (rabbits)	Slightly irritating	EPA Tox Category	III
Skin Irritation (rabbits)	Non-irritating	EPA Tox Category	IV
Skin Sensitization (guinea pigs)	Non-sensitizer	EPA Tox Category	Not applicable

**CARCINOGEN CLASSIFICATION**

Chemical name	IARC	OSHA - Select Carcinogens	NTP Carcinogen List
Cyclohexanone	Group 3	Not listed	Not listed
Uniconazole-P	Not listed	Not listed	Not listed

Others	Not Listed	Not listed	Not listed
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### TOXICITY OF UNICONAZOLE-P TECHNICAL

**Subchronic:** Anemia, liver effects, thyroid changes and altered lipid metabolism were observed in rats treated with 1000 ppm or greater Uniconazole-P Technical in the diet for 3 months. The No-Observable-Effect-Level (NOEL) was 100 ppm (10 mg/kg/day). Anemia, liver effects, and clinical chemistry changes were observed in mice treated with 1000 ppm or greater Uniconazole-P Technical in the diet for 5 weeks. The No-Observable-Effect-Level (NOEL) was 300 ppm.

Liver effects, and clinical chemistry changes were observed in dogs treated with 20 mg/kg/day or greater Uniconazole-P Technical for 3 months. The No-Observable-Effect-Level (NOEL) was 5 mg/kg/day.

Skin irritation, and liver changes were observed at 25 mg/kg/day or higher in a 28-day dermal study in rats. The NOEL was 5 mg/kg/day.

**Chronic/Carcinogenicity:** A cancer bioassay in mice revealed an increased incidence of liver tumors among males exposed to 210 mg/kg/day Uniconazole-P via the diet. There was no increase in tumors of any type in males exposed to 1-25 mg/kg/day or in any of the treated female groups (1.5-240 mg/kg/day). The biological significance of this finding is unclear because the tumors arose late in the study and fewer untreated animals were still alive at that time. Uniconazole-P was not carcinogenic in rats exposed to 0.4-40 mg/kg/day in the diet for a lifetime. The only toxic effects observed in rats were decreased body weight gains and changes in the blood chemistry and liver cell.

Repeated oral or dermal exposure to Uniconazole-P resulted in non-specific depression of the central nervous system and changes in the liver, kidney, and blood systems in rats, mice, and dogs at dose levels greater than 15, 140, and 20 mg/kg/day for the three species, respectively. The most prominent effects were produced in the liver. A chronic toxicity study in dogs revealed blood chemistry changes, increased liver, kidney, and adrenal weights, and decreased thymus weights at levels of 20-200 mg/kg/day. The only cellular effect observed was liver cell enlargement.

**Developmental Toxicity:** In teratology studies, minor skeletal variations were observed in the offspring of rats exposed to 25 mg/kg/day Uniconazole-P, a dose that was also toxic to the dam. The NOEL for this study was 5 mg/kg/day. No evidence of developmental toxicity or teratogenicity was seen in rabbits.

**Reproduction:** Uniconazole-P did not produce malformations or adverse reproductive effects in a two-generation rat reproduction study.

**Mutagenicity:** Genetic toxicity tests in cultured mammalian cells and in mice indicate that Uniconazole-P may damage genetic material, but only at dose levels that are severely toxic to the test organisms. Uniconazole-P was not mutagenic in bacteria.

### TOXICITY OF OTHER INGREDIENTS:

Overexposure to cyclohexanone may cause cataracts, liver and kidney damage; and it is reported to effect the fetus in animal studies.

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:

Uniconazole-P Technical is toxic to avian species. The following results were obtained from studies with Uniconazole-P Technical:

Oral LD<sub>50</sub> bobwhite quail: 1461 mg/kg

Oral LD<sub>50</sub> mallard duck: >2315 mg/kg  
 Dietary LC<sub>50</sub> bobwhite quail: >5782 ppm  
 Dietary LC<sub>50</sub> mallard duck: 3345 ppm  
 One generation reproduction, bobwhite quail: NOEC = 320 ppm  
 One generation reproduction, mallard duck: NOEC = 80 ppm, treatment related effects observed at 320 ppm

**AQUATIC ORGANISM TOXICITY:** Uniconazole-P Technical is toxic to freshwater fish, to freshwater invertebrates, to estuarine/marine fish, and to estuarine/marine invertebrates based on the following tests:

96-hour LC<sub>50</sub> rainbow trout: 14.8 mg/L  
 96-hour LC<sub>50</sub> bluegill sunfish: 8.2 mg/L  
 96-hour LC<sub>50</sub> carp: 7.5 mg/L  
 48-hour LC<sub>50</sub> Daphnia magna: >10 mg/L

**OTHER NON-TARGET ORGANISM TOXICITY:**

Uniconazole-P Technical is not toxic to bees. No mortality was produced in an acute contact LC<sub>50</sub> in bees at 20 µg/bee.

**OTHER ENVIRONMENTAL INFORMATION:**

Do not apply directly to water, to areas where surface water is present, or to intertidal areas below mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment wash-waters. See Directions for Use on product label for additional precautions and restrictions.

### 13. DISPOSAL CONSIDERATIONS

**Waste treatment methods**

**Waste from residues/unused products**

Wastes resulting from the use of this product may be disposed of on-site or at an approved waste disposal facility.

**Contaminated packaging**

Non-refillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Follow provincial instruction for any required additional cleaning of the container prior to disposal. Make the empty container unsuitable for further use. If there is no container collection site in your area, dispose of the container in accordance with provincial requirements.

### 14. TRANSPORTATION INFORMATION

**DOT (ground) shipping name:** Not regulated for domestic ground transport by U.S. DOT

**Emergency Response**

**Guidebook No.:**

Not applicable

**ICAO/IATA proper shipping name:**

UN 3082 Environmentally Hazardous Substance, Liquid, N.O.S. (Uniconazole-P), 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 IATA Special Provision A197
- For US shipping, Emergency Response Guidebook No. 171

**IMDG proper shipping name:**

UN 3082 Environmentally Hazardous Substance, Liquid, N.O.S. (Uniconazole-P), 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  
 F-A, S-F

EMS No.:

## 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:** • Caution

**PMRA pesticide label hazard information:** Causes eye irritation Avoid contact with eyes, skin and clothing. Avoid breathing vapors or spray. Keep out of reach of children.

Chemical name	Canada - WHMIS - Ingredient Disclosure List
Cyclohexanone	B3, D2B

Chemical name	Canada DSL Inventory List -	Canada NDSL Inventory List -	EINECS Inventory List -
Cyclohexanone	Present		Present
Others		Not listed	Not listed

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:** Corrected the regulatory section and put in a slightly new format. Updated the Emergency Telephone Number.

**SDS NO.:** CAN-0042

**EPA REGISTRATION NUMBER:** 59639-37

**PCPA REGISTRATION NUMBER:**

25781

**REVISION NUMBER:**

2

**REVISION DATE:** 08/15/2019

**SUPERCEDES DATE:** May 18, 2010

**RESPONSIBLE PERSON(S):** Valent U.S.A. LLC, Corporate EH&S, (925) 256-2803

Emergency Telephone: (800) 682-5368  
 REVISION NUMBER: 2

SDS NO.: CAN-0042  
 REVISION DATE: 08/15/2019



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The information provided in this Safety Data Sheet (SDS) is provided in good faith and believed to be accurate at the time of preparation of the SDS. However, to the extent consistent with applicable law, Valent Canada, Inc. and its subsidiaries or affiliates extend no warranties, make no representations, and assume no responsibility as to the accuracy, suitability, or completeness of such information. Additionally, to the extent consistent with applicable law, neither Valent Canada, Inc. nor any of its subsidiaries or affiliates represents or guarantees that this information or product may be used without infringing the intellectual property rights of others. Except to the extent a particular use and particular information are expressly stated on the product label, it is the users' own responsibility to determine the suitability of this information for their own particular use of this product. If necessary, contact Valent Canada, Inc. to confirm that you have the most current product label and SDS.

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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