

Quash® Fungicide



Safety Data Sheet (GHS)

1. IDENTIFICATION

Product identifier

PRODUCT NAME: Quash® Fungicide

PCPA REGISTRATION NUMBER: 30402

VC NUMBER(S): 1585

Synonyms None

PRODUCT DESCRIPTION: Fungicide

Quash® is a registered trademark of Valent U.S.A. LLC

Recommended use of the chemical and restrictions on use

Recommended Use Use in accordance with label directions

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 - Oral	Category 4
Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Reproductive toxicity	Category 2

Label elements

WARNING

Hazard statements

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Harmful if swallowed
 Harmful if inhaled
 Suspected of damaging fertility or the unborn child



Precautionary Statements - Prevention

Obtain special instructions before use
 Do not handle until all safety precautions have been read and understood
 Use personal protective equipment as required
 Wash face, hands and any exposed skin thoroughly after handling
 Do not eat, drink or smoke when using this product
 Avoid breathing dust/fume/gas/mist/vapors/spray
 Use only outdoors or in a well-ventilated area

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention

Inhalation

IF INHALED: Remove person to fresh air and keep comfortable for breathing
 Call a POISON CENTRE or doctor/physician if you feel unwell

Ingestion

IF SWALLOWED: Rinse mouth
 Call a POISON CENTRE or doctor/physician if you feel unwell

Precautionary Statements - Storage

Store locked up

Precautionary Statements - Disposal

Dispose of contents/container in accordance with local regulations

OTHER INFORMATION

Toxic to aquatic life with long lasting effects

Unknown acute toxicity

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)
Metconazole	125116-23-6	51	-	-
Others	Various CAS#s	49	-	-

Other ingredients, which are maintained as trade secrets, are any substances other than an active ingredient contained in this

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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** Rinse mouth thoroughly with water. 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 Treat symptomatically.

5. FIRE-FIGHTING MEASURES

- Suitable Extinguishing Media** Water fog, carbon dioxide, foam, dry chemical.
- 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** 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.
- 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. Possible generation of hydrochloric acid, hydrogen cyanide, carbon monoxide and oxides of nitrogen.
- Explosion data**
 - Sensitivity to mechanical impact** None.
 - Sensitivity to static discharge** None.

Special protective equipment for fire-fighters 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 Avoid generation of dust. 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. Vacuum or sweep up material and place into a chemical waste container. Wash area with soap and water. Pick up wash liquid with additional absorbent and place in a chemical waste container.

For Spills in Water: Clean up spill immediately. Absorb spill with inert material. Remove contaminated water 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. Goggles or protective eyewear, chemical resistant gloves, long-sleeved shirt, long pants, socks and shoes are appropriate.

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 container tightly closed. Do not put concentrate into food or drink containers. Do not dilute concentrate in food or drink containers. Do not store or transport near food or feed. Do not use or store in or around the home. Keep pesticide in original container only. Store in a cool, dry secure place. Store in a well ventilated area.

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.

Appropriate engineering controls

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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 Use this material only in well-ventilated areas. If operating conditions result in airborne concentrations of this material, the use of an approved respirator is recommended.

General hygiene considerations END USER MUST READ AND OBSERVE ALL PRECAUTIONS ON PRODUCT LABEL. Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state Solid
Appearance Granules
Colour Dark brown
Odour No information available
Odor threshold: No information available

<u>PROPERTIES</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	8 - 9 @ 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	No Data Available Not applicable	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	Not applicable	
Lower Flammability Limit:	Not applicable	
Vapour pressure	No Data Available	None known
Vapour density	No Data Available	None known
Relative density	No Data Available	None known
Water solubility	Dispersible in water	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	No Data Available	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 No information available
Bulk density 32 - 33 lb/ft³

10. STABILITY AND REACTIVITY

Reactivity	No information available.
Chemical stability	Stable under recommended storage conditions.
Possibility of Hazardous Reactions	None under normal processing.
Conditions to avoid	Extremes of temperature and direct sunlight.
Incompatible materials	Oxidizing agents. Acids.
Hazardous Decomposition Products:	May emit toxic and corrosive fumes under fire conditions: hydrogen chloride (HCl), hydrogen cyanide (HCN), carbon monoxide (CO) and nitrous gases (NOx).

11. TOXICOLOGICAL INFORMATION

Acute toxicity:

Oral Toxicity LD ₅₀ (rats)	1,750 mg/kg	EPA Tox Category	III
Dermal Toxicity LD ₅₀ (rabbits)	> 5,000 mg/kg	EPA Tox Category	IV
Inhalation Toxicity LC ₅₀ (rats)	> 2.27 mg/L	EPA Tox Category	IV
Eye Irritation (rabbits)	Moderately irritating	EPA Tox Category	III
Skin Irritation (rabbits)	Brief and/or minor irritation	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
Metconazole	Not listed	Not listed	Not listed
Others	Not listed	Not listed	Not listed

TOXICITY OF METCONAZOLE TECHNICAL

Subchronic: Subchronic (28 to 90 days) studies of Metconazole Fungicide Technical in rodents and dogs reported decreased body weights, fatty vacuolation and hypertrophy of the liver, reduced RBC parameters, increased serum liver enzyme levels, and increased spleen and liver weights. There is no evidence for neurotoxicity or immunotoxicity following treatment with Metconazole Fungicide Technical. The lowest no-observable-effect level (NOEL) was 2.5 mg/kg/day.

Chronic/Carcinogenicity: In a one-year dog study, Metconazole Fungicide Technical produced effects on liver histopathology, increase serum liver enzymes and bleeding/irritation in the gastrointestinal tract. The NOEL was 11.1 mg/kg/day. In a 2-year study in rats, Metconazole Fungicide Technical produced histological changes in the liver, kidney and adrenal and possibly leukemia. The NOEL for this study was 4.8 mg/kg/day. In an 18-month mouse study, increased white blood cell count, increased serum liver enzymes increased liver weights, histopathological changes in the liver, spleen and adrenal and increased liver adenomas and adenocarcinomas were observed at doses of 300 ppm or higher. The NOEL in mice was 4.8 mg/kg/day. The mechanism of liver tumor formation in mice is believed to be not relevant to humans.

Developmental Toxicity: Maternal and fetal effects were observed in rats and rabbits treated with Metconazole Fungicide Technical during gestation. The NOELs in rats and rabbits are 16 and 20 mg/kg/day, respectively.

Reproduction: Metconazole Fungicide Technical was tested in a 2-generation rat reproduction study. At maternally toxic doses effects were noted on estrus cycling, litter size, gestation length and pup body weight. The NOEL was 10.6 mg/kg/day.

Mutagenicity: Not considered a genotoxic hazard. Negative in gene mutation assays *in vitro*, in *in-vivo/in-vitro* UDS assays, and in *in-vivo* micronucleus assays in mice. Positive in an *in-vitro* chromosome aberration assay in the presence of S-9, but not observed in the *in-vivo* assay.

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: Based upon EPA designation, Metconazole Fungicide Technical is practically non-toxic to mallard ducks and slightly toxic to bobwhite quail. Test results include:

Oral LD₅₀ bobwhite quail: 875 mg/kg
 Dietary LC₅₀ bobwhite quail: 1,057 mg/kg
 Dietary LC₅₀ mallard duck: > 5,200 mg/kg

AQUATIC ORGANISM TOXICITY: Based upon EPA designation, Metconazole Fungicide Technical is moderately toxic to fish and freshwater invertebrates and highly toxic to marine invertebrates. Test results include:

LC₅₀ (96 hr) Sheepshead Minnow: 6.3 mg/L
 LC₅₀ (96 hr) Rainbow Trout: 2.2 mg/L
 LC₅₀ (96 hr) Fathead Minnow: 3.9 mg/L
 LC₅₀ (48 hr) Daphnia magna: 4.2 mg/L
 LC₅₀ (96 hr) Mysid Shrimp: 0.75 mg/L
 EC₅₀ (96 hr) Oyster Shell Deposition: 2.3 mg/L
 EbC₅₀ (72 hr) Green Algae: 1.7 mg/L
 ErC₅₀ (96 hr) Blue-green Algae: > 13 mg/L
 EC₅₀ (96 hr) Fresh Water Diatom: 0.0098 mg/L
 EC₅₀ (96 hr) Marine Diatom: 1.7 mg/L
 EbC₅₀ (7 day) Duckweed: 0.051 mg/L

OTHER NON-TARGET ORGANISM TOXICITY: The contact LD₅₀ (96 hr) of Metconazole Fungicide Technical to the honeybee is >90 µg/bee.

OTHER ENVIRONMENTAL INFORMATION:

This product is toxic to aquatic organisms. 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. Drift and runoff from treated areas may be hazardous to aquatic organisms in water adjacent to treated areas.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste from residues/unused products Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated packaging Do not reuse empty containers. Empty containers should be taken to an approved waste handling site for recycling or disposal. Empty containers must be triple rinsed 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 US DOT or Canada TDG
Emergency Response Guidebook No.:	Not applicable
ICAO/IATA proper shipping name:	UN 3077 Environmentally Hazardous Substance, Solid, N.O.S. (Metconazole), 9, III, Marine Pollutant
Remarks:	<ul style="list-style-type: none"> •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 3077 Environmentally Hazardous Substance, Solid, N.O.S. (Metconazole), 9, III, Marine Pollutant
Remarks:	<ul style="list-style-type: none"> •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: • Caution

PMRA pesticide label hazard information: Harmful if swallowed. Causes moderate eye irritation. Avoid contact with eyes, skin and clothing. Keep out of reach of children. WARNING CONTAINS THE ALLERGENS SULFITES AND MILK .

Chemical name	Canada - WHMIS - Ingredient Disclosure List
Others	Non-controlled

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 FIFRA (Federal Insecticide, Fungicide, and Rodenticide 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

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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. Expanded information in Section 7, Storage & Handling. Updated the Emergency Telephone Number.

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EPA REGISTRATION NUMBER: 59639-147

PCPA REGISTRATION NUMBER: 30402

REVISION NUMBER: 3

REVISION DATE: 08/15/2019

SUPERCEDES DATE: November 3, 2009

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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