

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.
3-728 Victoria Road South
Guelph, Ontario N1L 1C6
(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
Skin corrosion/irritation	Category 3
Serious eye damage/eye irritation	Category 2B
Reproductive toxicity	Category 2

Label elements

WARNING

Emergency Telephone: (800) 892-0099
REVISION NUMBER: 1

SDS NO.: CAN-0377
REVISION DATE: 02/01/2019

Hazard statements

Harmful if swallowed
Harmful if inhaled
Suspected of damaging fertility or the unborn child
Causes eye irritation
Causes mild skin irritation

**Precautionary Statements - Prevention**

Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Wear protective gloves/protective clothing/eye protection/face protection
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

Eyes

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

Skin

IF ON SKIN: Wash with plenty of water and soap

Inhalation

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

Ingestion

IF SWALLOWED: Call NHS DIRECT or doctor if you feel unwell
Rinse mouth

Precautionary Statements - Storage

Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

OTHER INFORMATION

Toxic to aquatic life with long lasting effects

Unknown acute toxicity**3. COMPOSITION/INFORMATION ON INGREDIENTS****Substance**

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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	-	-

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 1-800-682-5386 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

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 CAUTION: Use of water spray when fighting fire may be inefficient.

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: Normal combustion forms carbon dioxide, water vapor and may produce. HCl gas,. Oxides of sodium,. Oxides of phosphorus,. Oxides of sulfur.

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 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 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.
 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, gloves, long-sleeved shirt, long pants, socks and shoes are appropriate.

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

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	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

PROPERTIES

<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:	Oxides of sodium, sulfur and phosphorus.

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) Fathead Minnow: 6.3 mg/L
 LC₅₀ (96 hr) Rainbow Trout: 2.2 mg/L
 LC₅₀ (96 hr) Sheepshead 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
 EC₅₀ (72 hr) Green Algae: 1.7 mg/L
 EC₅₀ (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
 EC₅₀ (7 day) Duckweed: > 0.17 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 pesticide is toxic to shrimp. 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:	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 3077 Environmentally Hazardous Substance, Solid, N.O.S. (Metconazole), 9, III, Marine Pollutant
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. These 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 as 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

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

Emergency Telephone: (800) 892-0099
REVISION NUMBER: 1

SDS NO.: CAN-0377
REVISION DATE: 02/01/2019

REASON FOR ISSUE:	Updated information to meet WHMIS 2015 (GHS) regulations.
SDS NO.:	CAN-0377
EPA REGISTRATION NUMBER:	59639-147
PCPA REGISTRATION NUMBER:	30402
REVISION NUMBER:	1
REVISION DATE:	02/01/2019
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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