



Safety Data Sheet - GHS

1. IDENTIFICATION: CHEMICAL PRODUCT AND COMPANY

PRODUCT NAME: Rizolex™ Flowable Fungicide
EPA REGISTRATION NUMBER: 59639-178
VC NUMBER(S): 1797
SYNONYM(S): Rizolex™ Flowable Fungicide
PRODUCT DESCRIPTION: Fungicide

Rizolex is a trademark of Sumitomo Chemical Company, Ltd.

MANUFACTURER/DISTRIBUTOR

VALENT U.S.A. LLC
 P.O. Box 5075
 4600 Norris Canyon Road
 San Ramon, CA 94583

EMERGENCY TELEPHONE NUMBERS

HEALTH EMERGENCY OR SPILL (24 hr):
 (800) 892-0099
 TRANSPORTATION (24 hr.): CHEMTREC
 (800) 424-9300 or (202) 483-7616

PRODUCT INFORMATION

AGRICULTURAL PRODUCTS: (800) 682-5368
 PROFESSIONAL PRODUCTS: (800) 898-2536

The current SDS is available through our website (www.valent.com), or by calling the product information numbers listed above.

2. HAZARDS IDENTIFICATION

This product is an EPA FIFRA registered pesticide. Some classifications on this SDS are not the same as the FIFRA-required classifications on the product label. Certain sections of this SDS are superseded by federal law under EPA FIFRA for a registered pesticide. Please see Section 15, REGULATORY INFORMATION for an explanation.

Classification - (per U.S. OSHA 29 CFR 1910.1200 (Hazcom 2012))

Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Skin Sensitization	Category 1
Specific target organ toxicity (repeated exposure)	Category 2 (Nervous System)

Label elements

EMERGENCY OVERVIEW

WARNING**Hazard statements**

May be harmful in contact with skin
 Harmful if inhaled
 May cause an allergic skin reaction

Precautionary statements**Prevention**

None

Response

Eyes None.

Skin None.

Inhalation None.

Ingestion None.

FIRE None.

Spill None.

Storage

None

Disposal

None

Hazards not otherwise classified (HNOC)**Other Information**

49.81 % of the mixture consists of ingredient(s) of unknown toxicity

For information on Transportation requirements, see Section 14.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS No.	Weight-%	TRADE SECRET
Tolclofos-methyl	57018-04-9	42	
Propylene glycol	57-55-6	3-7	*
Others	Various	45-55	*

* The chemical name, CAS number and/or exact percentage have been withheld as a trade secret

Other ingredients, which may be maintained as trade secrets, are any substances other than an active ingredient contained in this product. Some of these may be hazardous, but their identities are 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) 892-0099** at any time.

Emergency Telephone: (800) 892-0099
 REVISION NUMBER: 2

SDS NO.: 0412
 REVISION DATE: 09/08/2020

4. FIRST AID MEASURES

EMERGENCY NUMBER (800) 892-0099

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact **1-800-892-0099** for emergency medical treatment information.

EYE CONTACT:

Hold eye 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 eye. 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.

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. Do not give anything to an unconscious person.

INHALATION:

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

NOTES TO PHYSICIAN:

Treatment is supportive and symptomatic. This material contains an atypical weak cholinesterase inhibitor. If signs of cholinesterase inhibition appear, atropine sulfate is antidotal. 2-PAM (PROTOPAM) is also antidotal and may be used in conjunction with atropine but should not be used alone. Other non-cholinergic signs and symptoms should be treated symptomatically.

5. FIRE FIGHTING MEASURES

Flash point °C

FLASH POINT: Not applicable

Flash point °F

EXTINGUISHING MEDIA: Water fog, carbon dioxide, foam, dry chemical

FLAMMABLE LIMITS IN AIR - LOWER (%): Not applicable

FLAMMABLE LIMITS IN AIR - UPPER (%): Not applicable

NFPA RATING:

Health:	1
Flammability:	0
Reactivity:	0
Special:	None

(Least-0, Slight-1, Moderate-2, High-3, Extreme-4). These values are obtained using professional judgement. Values were not available in the guidelines or published evaluations prepared by the National Fire Protection Association, NFPA.

FIRE FIGHTING INSTRUCTIONS: 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. Wear suitable protective clothing and eye/face protection.

HAZARDOUS DECOMPOSITION PRODUCTS: May form toxic materials such as: carbon monoxide (CO), hydrogen chloride (HCl), hydrogen sulfide, oxides of phosphorous, oxides of sulfur, etc.

6. ACCIDENTAL RELEASE MEASURES

VALENT EMERGENCY PHONE NUMBER: (800) 892-0099

CHEMTREC EMERGENCY PHONE NUMBER: (800) 424-9300

OBSERVE PRECAUTIONS IN SECTION 8: PERSONAL PROTECTION

Stop the source of the spill if safe to do so. Contain the spill to prevent further contamination of the soil, surface water, or ground water. For additional spill response information refer to the North American Emergency Response Guidebook.

UN/NA NUMBER: Not applicable

EMERGENCY RESPONSE GUIDEBOOK NO.: Not applicable

FOR SPILLS ON LAND:

CONTAINMENT: If container is punctured or leaking, absorb liquid with an inert absorbent material such as sand, sawdust earth, fuller's earth, etc, and dispose of the absorbent material in accordance with local ordinances. Avoid runoff into storm sewers or other bodies of water.

CLEANUP: Clean up spill immediately. Vacuum or sweep up material and place in 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:

CONTAINMENT: This material is miscible/dispersible in water. Stop or reduce contamination of any water. Isolate contaminated water.

CLEANUP: Clean up spill immediately. Absorb spill with inert material. Remove contaminated water for treatment or disposal.

7. HANDLING AND STORAGE

END USER MUST READ AND OBSERVE ALL PRECAUTIONS ON PRODUCT LABEL.

HANDLING:

Do not put into food or drink containers. Do not dilute in food or drink containers.

Avoid contact with eyes, skin or clothing. Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. The usual precautions for handling chemicals should be observed. Provide good ventilation of working area (local exhaust ventilation if necessary). Wash hands and face after handling this product. Keep gloves on until all potentially contaminated personal protective equipment is removed.

STORAGE:

Keep pesticide in original container only. To close package, replace and tighten cap to form an airtight seal. Do not store near food or feed. Store in a cool, dry place, away from heat, flame and incompatible materials. Do not contaminate water, food or feed by storage or disposal.

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

END USER MUST READ AND OBSERVE ALL PRECAUTIONS ON PRODUCT LABEL.

Mixers, loaders, applicators and other handlers should refer to the product label before use for detailed information on personal protective equipment (PPE).

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

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.

SKIN & HAND 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 such as barrier laminate or Viton \geq 14 mils.

ENGINEERING CONTROLS: Use in a well ventilated area.

EXPOSURE LIMITS

Chemical name	ACGIH Exposure Limits	OSHA Exposure Limits	Manufacturer's Exposure Limits
Tolclofos-methyl	None	None	None
Propylene glycol	None	None	None
Others	None	None	None

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	Liquid	Odor	Faint characteristic odor
Appearance	Viscous	Odor threshold	No information available
Color	White		

PROPERTIES

	<u>Values</u>	<u>Remarks • Method</u>
pH	7.76 @ 22° C	1% suspension
Melting point/freezing point	No information available	
Boiling point/boiling range	No information available	
Flash point	No information available	
Evaporation rate	No information available	
Flammability (solid, gas)	No information available	
Flammability Limits in Air		
Upper flammability limits	No information available	
Lower flammability limit	No information available	
Vapor pressure	No information available	
Vapor density	No information available	
Specific Gravity	No information available	
Water solubility	No information available	
Solubility in other solvents	No information available	
Partition coefficient	Log Pow = 4.56 @ 25 ± 1°C	Octanol/Water Coefficient
Autoignition temperature	No information available	
Decomposition temperature	No information available	
Viscosity	No information available	
Explosive properties	No information available	
Oxidizing properties	No information available	

Liquid Density 1.1963 g/cc @ 20°C
Bulk density No information available

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical stability

Stable for 3 years under recommended storage and handling conditions.

Possibility of Hazardous Reactions

Not expected to be explosive.

Hazardous polymerization

Will not occur.

Conditions to avoid

Extremes of temperature and direct sunlight.

Incompatible materials

Avoid strong oxidizing agents and alkaline materials.

Hazardous Decomposition Products

May form toxic materials such as: Carbon monoxide (CO), Hydrogen chloride, hydrogen sulfide, oxides of sodium, sulfur and phosphorus, etc.

11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY:

Oral Toxicity LD ₅₀ (rats)	>5,000 mg/kg	EPA Tox Category	IV
Dermal Toxicity LD ₅₀ (rabbits)	>2,000 mg/kg	EPA Tox Category	III
Inhalation Toxicity LC ₅₀ (rats)	> 2.09 mg/L	EPA Tox Category	IV
Eye Irritation (rabbits)	Not an irritant	EPA Tox Category	IV
Skin Irritation (rabbits)	Not an irritant	EPA Tox Category	IV
Skin Sensitization (guinea pigs)	Non-sensitizer	EPA Tox Category	Not applicable

CARCINOGEN CLASSIFICATION

Chemical name	IARC Group 1 or 2	OSHA - Select Carcinogens	NTP Carcinogen List
Tolclofos-methyl	Not listed	Not listed	Not listed
Propylene glycol	Not listed	Not listed	Not listed
Others	Not listed	Not listed	Not known

TOXOCITY OF TOLCLOFOS-METHYL TECHNICAL

CHRONIC/CARCINOGENICITY: No oncogenic effects were observed in rat or mouse feeding studies.

NEUROTOXICITY: In animal neurotoxicity studies, the active ingredient reduced motor activity and decreased cholinesterase levels. There were no other findings indicative of neurotoxicity

IMMUNOTOXICITY: The active ingredient is not immunotoxic.

DEVELOPMENTAL TOXICITY: No teratogenic effects on rats or rabbits were observed.

REPRODUCTION: No adverse effects on reproductive performance in rats were observed.

MUTAGENICITY: Tolclofos-methyl was not genotoxic.

STOT - repeated exposure Nervous System

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: The technical material is practically non-toxic to avian species. The following results were obtained from studies with the technical material:

Acute Oral LD ₅₀ :	Mallard duck:	>5,000 mg/kg
Acute Oral LD ₅₀ :	Bobwhite quail:	>5,000 mg/kg

AQUATIC ORGANISM TOXICITY: May be toxic to aquatic organisms. The following data are for the active ingredient:

Fish (Rainbow Trout) 96-hr LC ₅₀ :	0.69 mg/L;
Daphnia 48-hr EC ₅₀ :	48 mg/L;
Algae 96-hr IC ₅₀ :	> 5.6 mg/L

OTHER NON-TARGET ORGANISM TOXICITY: Rizolex is of low risk to bees.

OTHER ENVIRONMENTAL INFORMATION:

This product is very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. 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

END USERS MUST DISPOSE OF ANY UNUSED PRODUCT AS PER THE LABEL RECOMMENDATIONS.

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

CONTAINER DISPOSAL: Refer to pesticide label for proper container disposal instructions based on container type and size.

DISPOSAL METHODS: Check government regulations and local authorities for approved disposal of this material. Dispose of in accordance with applicable laws and regulations.

14. TRANSPORTATION INFORMATION

DOT (ground) SHIPPING NAME: Not regulated for domestic ground transport by U.S. DOT
EMERGENCY RESPONSE Not applicable
GUIDEBOOK NO.:

ICAO/IATA SHIPPING NAME:	UN 3082 Environmentally Hazardous Substance, Liquid, N.O.S. (tolclophos-methyl), 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 SHIPPING NAME:	UN 3082 Environmentally Hazardous Substance, Liquid, N.O.S. (tolclophos-methyl), 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

EPA-FIFRA LABEL INFORMATION THAT DIFFERS FROM OSHA-GHS REQUIREMENTS:

Pesticide products in the U.S. are registered by the EPA under FIFRA and are subject to certain labeling requirements under federal pesticide law. These requirements may differ from the classification criteria and hazard information required by OSHA GHS for safety data sheets, and for workplace labels of non-pesticide chemicals. The following is the hazard information as required on the FIFRA pesticide label:

EPA FIFRA SIGNAL WORD: CAUTION

- *Harmful if absorbed through skin*
- *Avoid contact with eyes or clothing*
- *Avoid breathing spray mist.*
- *Toxic to fish and aquatic invertebrates*
- *Keep out of reach of children.*

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.

U.S. FEDERAL REGULATIONS: Ingredients in this product are reviewed against an inclusive list of federal regulations. Therefore, the user should consult appropriate authorities. The federal regulations reviewed include: Clean Water Act, SARA, CERCLA, RCRA, DOT, TSCA and OSHA. If no components or information is listed in the space below this paragraph, then none of the regulations reviewed are applicable.

SARA (311, 312):

Immediate Health:	No
Chronic Health:	Yes
Fire:	No
Sudden Pressure:	No
Reactivity:	No

STATE REGULATIONS: Each state may promulgate standards more stringent than the federal government. This section cannot encompass an inclusive list of all state regulations. Therefore, the user should consult state or local authorities. The state regulations reviewed include: California Proposition 65, California Directors List of Hazardous Substances, Massachusetts Right to Know, Michigan Critical Materials List, New Jersey Right to Know, Pennsylvania Right to Know, Rhode Island Right to Know and the Minnesota Hazardous Substance list. For Washington State Right to Know, see Section 8 for Exposure Limit information. For Louisiana Right to Know refer to SARA information listed

under U.S. Regulations above. If no components or information is listed in the space below this paragraph, then none of the regulations reviewed are applicable.

Propylene glycol

NJ Right To Know	3595
PA Right To Know	Present
RI Right To Know	Listed
MN Hazardous Substance	Present

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

16. OTHER INFORMATION

REASON FOR ISSUE:	Updated Manufacturer/Distributor Address and General Review.
SDS NO.:	0412
EPA REGISTRATION NUMBER:	59639-178
REVISION NUMBER:	2
REVISION DATE:	09/08/2020
SUPERCEDES DATE:	05/13/2015
RESPONSIBLE PERSON(S):	Valent U.S.A. LLC, Corporate EH&S, (925) 256-2803

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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 as required by the Occupational Health and Safety Act (29 CFR 1910.1200, "Hazcom").

The product label provides information specifically for product use in the ordinary course. 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.

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