



## Safety Data Sheet - GHS

### 1. IDENTIFICATION: CHEMICAL PRODUCT AND COMPANY

**PRODUCT NAME:** Adorn® Fungicide  
**EPA REGISTRATION NUMBER:** 59639-141  
**VC NUMBER(S):** 1635  
**SYNONYM(S):** V-10161 4 SC Fungicide  
**PRODUCT DESCRIPTION:** Fungicide

#### 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](http://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 Certain sections of this SDS are superseded by federal law under EPA FIFRA for a registered pesticide.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
Serious eye damage/eye irritation	Category 2B

#### Label elements

#### EMERGENCY OVERVIEW

## WARNING



#### Hazard statements

Emergency Telephone: (800) 892-0099  
 REVISION NUMBER: 3

SDS NO.: 0380  
 REVISION DATE: 08/26/2020

Harmful if inhaled  
Causes eye irritation.

### Precautionary statements

#### **Prevention**

Use personal protective equipment as required.  
Avoid breathing dust/fume/gas/mist/vapors/spray  
Use only outdoors or in a well-ventilated area

#### **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** None.

**Inhalation** IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

**Ingestion** None.

**FIRE** None.

**Spill** None.

#### **Storage**

Store locked up

#### **Disposal**

Dispose of contents/container to an approved waste disposal plant

### Hazards not otherwise classified (HNOC)

#### Other Information

- Very toxic to aquatic life with long lasting effects.

For information on Transportation requirements, see Section 14.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS No.	Weight-%	TRADE SECRET
Fluopicolide	239110-15-7	39.5	
Propylene glycol	57-55-6	4 - 6	*
Others	Various CAS#s	59 - 62	*

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.

## 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:**

Emergency Telephone: (800) 892-0099  
REVISION NUMBER: 3

SDS NO.: 0380  
REVISION DATE: 08/26/2020

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.

## 5. FIRE FIGHTING MEASURES

Flash point °C	100 °C	
Flash point °F	212 °F	
<b>AUTOIGNITION:</b>	> 470° C (This product is not self-ignitable.)	
<b>EXTINGUISHING MEDIA:</b>	Water fog, carbon dioxide, foam, sand	
<b>FLAMMABLE LIMITS IN AIR - LOWER (%):</b>		Not applicable
<b>FLAMMABLE LIMITS IN AIR - UPPER (%):</b>		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.

## 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:** Avoid runoff into storm sewers and ditches which lead to waterways. Contain spilled liquids with dry sorbents.

**CLEANUP:** 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 and place in a chemical waste container.

**FOR SPILLS IN WATER:**

**CONTAINMENT:** This material will disperse or dissolve in water. Stop the source of the release. Contain and isolate to prevent further release on to soil or into surface 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:**

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. Keep container closed when not in use.

Use only in well ventilated area. Avoid contact with skin and eyes. Applicators and other handlers must wear long-sleeved shirt and long pants, chemical-resistant gloves, shoes plus socks. Users should wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.

**STORAGE:**

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, away from heat, flame and strong acids. Do not store at temperatures below 32°F. If the product is exposed to temperatures below 32°F, thaw at room temperature to 50°F 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.**

**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 ventilation is not adequate to keep airborne concentrations below recommended exposure standards, approved respiratory protection should be worn.

**SKIN & HAND PROTECTION:** Avoid contact with skin or clothing. Skin contact can be minimized by wearing protective clothing including gloves. Remove soiled clothing immediately and wash before re-use. Avoid contact with the skin and the eyes. Wash hands before breaks and at the end of the day. Garments that cannot be cleaned must be destroyed (burned).

**EXPOSURE LIMITS**

Emergency Telephone: (800) 892-0099  
REVISION NUMBER: 3

SDS NO.: 0380  
REVISION DATE: 08/26/2020

Chemical name	ACGIH Exposure Limits	OSHA Exposure Limits	Manufacturer's Exposure Limits
Fluopicolide	None	None	None
Propylene glycol	None	None	None
Others	None	None	None

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical state</b>	Liquid	<b>Odor</b>	Odorless
<b>Appearance</b>	Aqueous Flowable	<b>Odor threshold</b>	No information available
<b>Color</b>	Beige		

<u>PROPERTIES</u>	<u>Values</u>	<u>Remarks • Method</u>
<b>pH</b>	8.5	1% suspension
<b>Melting point/freezing point</b>	No information available	
<b>Boiling point/boiling range</b>	No information available	
<b>Flash point</b>	100 °C / 212 °F	
<b>Evaporation rate</b>	No information available	
<b>Flammability (solid, gas)</b>	No information available	
<b>Flammability Limits in Air</b>		
<b>Upper flammability limits</b>	Not applicable	
<b>Lower flammability limit</b>	Not applicable	
<b>Vapor pressure</b>	No information available	
<b>Vapor density</b>	No information available	
<b>Specific Gravity</b>	No information available	
<b>Water solubility</b>	Dispersible in water	
<b>Solubility in other solvents</b>	No information available	
<b>Partition coefficient</b>	No information available	
<b>Autoignition temperature</b>	No information available	
<b>Decomposition temperature</b>	No information available	
<b>Viscosity</b>	No information available	
<b>Explosive properties</b>	No information available	
<b>Oxidizing properties</b>	No information available	
<b>Liquid Density</b>	10.1 lb/gal	
<b>Bulk density</b>	No information available	

## 10. STABILITY AND REACTIVITY

### Reactivity

No data 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

None known based on information supplied.

### Hazardous Decomposition Products

None known based on information supplied.

## 11. TOXICOLOGICAL INFORMATION

### ACUTE TOXICITY:

The following information is from this formulation

Oral Toxicity LD <sub>50</sub> (rats)	> 2,000 mg/kg	EPA Tox Category	III
Dermal Toxicity LD <sub>50</sub> (rats)	> 4,000 mg/kg	EPA Tox Category	III
Inhalation Toxicity LC <sub>50</sub> (rats)	> 1.789 mg/L	EPA Tox Category	III
Eye Irritation (rabbits)	Moderately irritating	EPA Tox Category	III
Skin Irritation (rabbits)	Non-irritating	EPA Tox Category	IV
Skin Sensitization (guinea pigs)	Non-sensitizer (Buehler)	EPA Tox Category	Not applicable

### CARCINOGEN CLASSIFICATION

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

**CHRONIC/CARCINOGENICITY:** Fluopicolide caused at high dose levels an increased incidence of tumors in mice in the following organ(s): Liver. The mechanism that triggers tumors in rodents and the type of tumors observed are not relevant to humans.

**DEVELOPMENTAL TOXICITY:** Fluopicolide did not cause developmental toxicity in rats and rabbits.

**REPRODUCTION:** No indications of reprotoxic effects were observed in reproduction studies in animals.

**MUTAGENICITY:** Fluopicolide was not mutagenic or genotoxic based on the overall weight of evidence in a battery of in vitro and in vivo tests.

**STOT - single exposure** Fluopicolide did not cause specific target organ toxicity in experimental animal studies.

**STOT - repeated exposure** Fluopicolide did not cause specific target organ toxicity in experimental 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:

Based upon EPA designation, fluopicolide technical is practically non-toxic to avian species. The following results were obtained from studies with fluopicolide technical:

Oral LD<sub>50</sub> mallard duck: greater than 2250 mg/kg  
 Dietary LC<sub>50</sub> bobwhite quail: greater than 5620 ppm  
 Dietary LC<sub>50</sub> mallard duck: greater than 5620 ppm

**AQUATIC ORGANISM TOXICITY:** Based upon EPA designation, fluopicolide technical may be highly toxic to aquatic organisms. The following are results of tests with fluopicolide technical:

Rainbow trout 96-hr LC<sub>50</sub>: = 0.36 mg/L  
 Sheepshead minnow 96-hr LC<sub>50</sub>: = 0.41 mg/L  
 Daphnia 48-hr LC<sub>50</sub>: > 1.8 mg/L  
 Fathead minnow Chronic NOEC = 0.155 mg/L

Daphnia Chronic NOEC = 0.37 mg/L  
 Algae (Pseudokirchneriella) 72-hr LC<sub>50</sub>: > 4.3 mg/L  
 Bioaccumulation, Bluegill sunfish: BCF 117

**OTHER NON-TARGET ORGANISM TOXICITY:**

Fluopicolide technical is practically non-toxic to bees. The acute contact LC<sub>50</sub> in bees was greater than 100 µg/bee.

### 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:** Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure 2 more times. Offer for recycling if available or reconditioning if appropriate, or puncture and dispose of in a sanitary landfill or by other procedures approved by state and local authorities. If allowed by state and local authorities, container may be incinerated. If burned, stay out of smoke.

**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**

**GUIDEBOOK NO.:** Not applicable

**ICAO/IATA SHIPPING NAME:** UN 3077 Environmentally Hazardous Substance, Liquid, N.O.S. (Fluopicolide), 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 UN Special Provision 375.

•For US shipping, Emergency Response Guidebook No. 171

**IMDG SHIPPING NAME:** UN 3077 Environmentally Hazardous Substance, Liquid, N.O.S. (Fluopicolide), 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 swallowed, inhaled or absorbed through skin.*
- *Causes moderate eye irritation*
- *Avoid contact with eyes or clothing*
- *Avoid breathing vapors or spray.*
- *Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.*
- *When handling the product wear waterproof gloves, long-sleeved shirt, long pants, socks and shoes.*
- *Remove contaminated clothing and wash before re-use.*
- *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:	No
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.:** 0380

**Emergency Telephone:** (800) 892-0099  
**REVISION NUMBER:** 3

**SDS NO.:** 0380  
**REVISION DATE:** 08/26/2020



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**EPA REGISTRATION NUMBER:** 59639-141  
**REVISION NUMBER:** 3  
**REVISION DATE:** 08/26/2020  
**SUPERCEDES DATE:** 08/20/2020  
**RESPONSIBLE PERSON(S):** Valent U.S.A. LLC, Corporate EH&S, (925) 256-2803

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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 U.S.A. LLC 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 U.S.A. LLC 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 U.S.A. LLC to confirm that you have the most current product label and SDS.

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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