



# Safety Data Sheet

Preparation Date 15-Dec-2020

Revision date 15-Dec-2020

Revision Number: 1

## 1. Identification of the Substance/Preparation and of the Company/Undertaking

### Identification of the product

**Product Description** Vigilant 4 SC

### Other means of identification

**Product code** 12MC-0001

**Registration number(s)** 400-514

### Recommended use of the chemical and restrictions on use

**Recommended use** Acaricide. Plant protection agent.

**Uses advised against** Activities contrary to label recommendation

### Details of the Supplier of the Safety Data Sheet

#### Supplier Address

MacDermid Agricultural Solutions, Inc.  
c/o UPLNA Inc.  
630 Freedom Business Center, Suite 402  
King of Prussia, PA 19406

### Emergency telephone number

**Company Phone Number** 1-800-438-6071

**Emergency telephone number** Chemtrec: (800) 424-9300 (24hrs) or (703) 527-3887  
Medical: Rocky Mountain Poison and Drug Safety (866) 673-6671 (24hrs)

## 2. Hazards Identification

### Classification

#### OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Oral	Category 4
Skin sensitization	Category 1

### Label elements

#### EMERGENCY OVERVIEW

#### WARNING

#### Hazard Statements

HARMFUL IF SWALLOWED

May cause an allergic skin reaction

Toxic to aquatic life



<b>Appearance</b> Opaque Viscous	<b>Physical state</b> Liquid	<b>Odor</b> sweet
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**Precautionary Statements - Prevention**

Wash face, hands and any exposed skin thoroughly after handling  
Do not eat, drink or smoke when using this product  
Do not get in eyes, on skin, or on clothing  
Contaminated work clothing should not be allowed out of the workplace  
Wear protective gloves

IF ON SKIN: Wash with plenty of soap and water

If skin irritation or rash occurs: Get medical advice/attention

Wash contaminated clothing before reuse

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell

Rinse mouth

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards Not Otherwise Classified (HNOC)****OTHER INFORMATION**

- May be harmful in contact with skin
- Toxic to aquatic life with long lasting effects

**3. Composition/information on Ingredients**

Chemical name	CAS No	Weight-%
Bifenazate	149877-41-8	43.48

If CAS number is "proprietary", the specific chemical identity and percentage of composition has been withheld as a trade secret.

**4. First aid measures****FIRST AID MEASURES**

<b>Eye contact</b>	Hold eye open and rinse slowly and gently with water for 15 - 20 minutes. Remove contact lenses, if present, after 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.
<b>Skin contact</b>	Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. Call a poison control center or doctor for treatment advice.
<b>Inhalation</b>	Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible.
<b>Ingestion</b>	Call a physician or poison control center immediately. Clean mouth with water. Never give anything by mouth to an unconscious person.

**Most Important Symptoms and Effects, Both Acute and Delayed**

**Most Important Symptoms and Effects** no data available.

**Indication of Any Immediate Medical Attention and Special Treatment Needed**

**Notes to physician** Treat symptomatically.

**5. Fire-fighting measures****Suitable extinguishing media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable extinguishing media** Decomposition by contact with water may generate vapours which can be ignited by heat or open flame.

**Specific hazards arising from the chemical**

No information available.

**Hazardous combustion products** Carbon oxides.

**Explosion data**

**Protective equipment and precautions for firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## 6. Accidental release measures

**Personal precautions, protective equipment and emergency procedures**

**Personal Precautions** Use personal protective equipment. Avoid contact with skin and eyes. Wash thoroughly after handling.

**Environmental Precautions**

**Environmental precautions** Consult a regulatory specialist to determine appropriate state or local reporting requirements, for assistance in waste characterization and/or hazardous waste disposal and other requirements listed in pertinent environmental permits.

**Methods and material for containment and cleaning up**

**Methods for Clean-Up** Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Sweep up and shovel into suitable containers for disposal.

## 7. Handling and Storage

**Precautions for safe handling**

**Handling** Avoid contact with skin and eyes. Wear personal protective equipment. Do not eat, drink or smoke when using this product. Ensure that eyewash stations and safety showers are close to the workstation location. Wash thoroughly after handling.

**Conditions for safe storage, including any incompatibilities**

**Storage** Keep container tightly closed in a dry and well-ventilated place.

**incompatible materials** Acids. Strong oxidizing agents. Strong bases.

## 8. Exposure Controls/Personal Protection

**Exposure guidelines** This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

**Engineering controls** Investigate engineering techniques to reduce exposures. Local mechanical exhaust ventilation is preferred. Consult ACGIH ventilation manual or NFPA Standard 91 for design of exhaust systems.

**Personal protective equipment**

**Eye/Face Protection**

Where there is potential for eye contact have eye flushing equipment available. Use eye protection to avoid eye contact.

**Skin protection**

Wear protective gloves/clothing.

**Respiratory protection**

Where airborne exposure is likely, use NIOSH approved respiratory protection equipment appropriate to the material and/or its components. Full facepiece equipment is recommended and, if used, replaces need for face shield and/or chemical goggles. If

exposures cannot be kept at a minimum with engineering controls, consult respirator manufacturer to determine appropriate type equipment for given application. Observe respirator use limitations specified by NIOSH or the manufacturer. For emergency and other conditions where there may be a potential for significant exposure, use an approved full face positive-pressure, self-contained breathing apparatus. Respiratory protection programs must comply with 29 CFR 1910.134.

#### General hygiene considerations

Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing before re-use. Avoid contact with skin, eyes and clothing. Wear suitable gloves and eye/face protection. Wash hands before breaks and immediately after handling the product.

## 9. Physical and Chemical Properties

### 9.1 Information on basic physical and chemical properties

<b>Appearance</b>	Opaque Viscous		
<b>Physical state</b>	Liquid		
<b>Odor</b>	sweet		
<b>color</b>	Off-white to Tan		
<u>Property</u>	<u>VALUES</u>	<u>Remarks/ Method</u>	
<b>pH</b>	6.5	Approximately	
<b>Melting point/freezing point</b>		None known	
<b>Boiling Point/Range</b>	>100 °C	None known	
<b>Flash Point</b>	No information available	None known	
<b>Flammability (solid, gas)</b>		None known	
None known		<b>Specific gravity</b>	1.1 (20C)
None known		<b>Solubility in Other</b>	Dispersible in water
		<b>Solvents</b>	
None known		<b>Partition coefficient:</b>	
		<b>n-octanol/water</b>	
None known		<b>Autoignition</b>	>400 °C
		<b>temperature</b>	
None known		<b>Decomposition</b>	
		<b>temperature</b>	
None known		<b>Viscosity</b>	
None known			

### 9.2 OTHER INFORMATION

## 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

Acids. Strong oxidizing agents. Strong bases.

#### Hazardous decomposition products

Carbon oxides. Nitrogen oxides (NOx).

## 11. Toxicological Information

### Information on Likely Routes of Exposure

<b>Product information</b>	Viligant 4 SC Acute oral LD50 = >2000 mg/kg Acute dermal LD50 = >5000 mg/kg Acute inhalation LC50 = >1.94 mg/l/4hr
<b>Inhalation</b>	May cause irritation of respiratory tract.
<b>Eye contact</b>	May cause irritation.
<b>Skin contact</b>	Repeated or prolonged skin contact may cause allergic reactions with susceptible persons.
<b>Ingestion</b>	MAY BE HARMFUL IF SWALLOWED.

### Information on Toxicological Effects

<b>Symptoms</b>	No information available.
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### Delayed and immediate effects as well as chronic effects from short and long-term exposure

<b>Sensitization</b>	Repeated or prolonged contact may cause allergic reactions in very susceptible persons.
<b>Mutagenic effects</b>	no data available.
<b>Carcinogenicity</b>	There are no known carcinogenic chemicals in this product.
<b>Reproductive effects</b>	Not Available.
<b>STOT - Single Exposure</b>	no data available.
<b>STOT - Repeated Exposure</b>	no data available.
<b>Aspiration hazard</b>	No information available.

### Numerical Measures of Toxicity - Product information

<b>LD50 Oral</b>	> 2000 mg/kg (rat)
<b>LD50 Dermal</b>	> 5000 mg/kg (rat)

## 12. Ecological Information

### ecotoxicity

Bifenazate  
FISH =  
Bluegill sunfish: LC50 96 hr 0.58 mg/L  
Rainbow trout: LC50 96 hr 0.76 mg/L  
ALGAE=  
Green algae 96 hr EC50 >2.02 mg/L  
Gibbous duckweed IC50 7 day >3.82 mg/L  
DAPHNIA =  
Daphnia magna EC50 48 hr 0.5 mg/L

### Persistence/Degradability

no data available.

### Bioaccumulation/ Accumulation

No information available.

### Other Adverse Effects

no data available

### 13. Disposal Considerations

#### Waste Treatment Methods

**Waste Disposal Method** Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide or rinsate is a violation of Federal law. If the wastes cannot be disposed of by use or according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

**Contaminated packaging** Refer to product label.

### 14. Transport Information

**DOT** When shipped in bulk or internationally the marine pollutant marking must also be added to the package.  
When shipped in bulk, by vessel, or internationally use the IMDG shipping description:

#### IATA

<b>UN/ID no</b>	UN3082
<b>Proper shipping name</b>	Environmentally hazardous substances, liquid, n.o.s (Bifenazate)
<b>Hazard class</b>	9
<b>Packing group</b>	PG III
<b>Description</b>	IMDG - Marine Pollutant

#### IMDG

<b>UN/ID no</b>	UN3082
<b>Proper shipping name</b>	Environmentally hazardous substances, liquid, n.o.s (Bifenazate)
<b>Hazard class</b>	9
<b>Packing group</b>	PG III
<b>Environmental hazards</b>	IMDG - Marine Pollutant

### 15. Regulatory Information

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

**signal word** CAUTION

**Ventilation Control** PESTICIDE APPLICATORS & WORKERS THESE WORKERS MUST REFER TO PRODUCT LABELING AND DIRECTIONS FOR USE IN ACCORDANCE WITH EPA WORKER PROTECTION STANDARD 40 CFR PART 170.

**Keep out of Reach of Children. Harmful if swallowed. Prolonged or frequent repeated skin contact may cause allergic reaction in some individuals. Toxic to birds, estuarine /marine invertebrates and fish. Toxic to bees on direct exposure.**

#### International Inventories

<b>USINV</b>	Not present
<b>DSL/NDSL</b>	Not present
<b>EINECS/</b>	Not Present
<b>ELINCS</b>	

ENCS	Not Present
China	Not Present
KECL	Not Present
PICCS	Not Present
AICS	Not Present
TSCA	Not Present

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory  
**DSL/NDL** - Canadian Domestic Substances List/Non-Domestic Substances List  
**EINECS/ELINCS** - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances  
**ENCS** - Japan Existing and New Chemical Substances  
**IECSC** - China Inventory of Existing Chemical Substances  
**KECL** - Korean Existing and Evaluated Chemical Substances  
**PICCS** - Philippines Inventory of Chemicals and Chemical Substances  
**AICS** - Australian Inventory of Chemical Substances

### Federal Regulations

#### SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

#### CERCLA

Not applicable

#### CERCLA

#### RCRA

#### Pesticide Information

Component	FIFRA - Restricted Use	FIFRA - Pesticide Product Other Ingredients	FIFRA - Listing of Pesticide Chemicals	California Pesticides - Restricted Materials
Bifenazate 149877-41-8 ( 43.48 )			X	

#### State Regulations

#### State Right-to-Know

#### International regulations

#### U.S. EPA Label information

EPA Pesticide registration number 400-514

### 16. Other Information

**NFPA**                      **HEALTH** 1                      **flammability** 0                      **Instability** 0                      **Physical hazard** -

**Preparation Date**                      15-Dec-2020

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**Revision Summary**

Add to system

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