

# Safety Data Sheet

Preparation Date 07-May-2020

Revision date 07-May-2020

Revision Number: 1

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

### Identification of the product

**Product Description** Vitavax-200FF (Pigmented)

### Other means of identification

**Product code** 12A-0040

**Registration number(s)** 400-112

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

**Recommended use** Plant protection agent. Fungicide.

**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)

Serious eye damage/eye irritation	Category 2B
Carcinogenicity	Category 1A
Specific target organ toxicity (repeated exposure)	Category 2

### Label elements

#### EMERGENCY OVERVIEW

**DANGER**

#### Hazard Statements

CAUSES EYE IRRITATION

May cause cancer

May cause damage to organs through prolonged or repeated exposure

Very toxic to aquatic life

Very toxic to aquatic life with long lasting effects



**Appearance** suspension

**Physical state** Liquid

**Odor** slightly characteristic

**Precautionary Statements - Prevention**

Do not breathe dust/fume/gas/mist/vapors/spray  
 Wash face, hands and any exposed skin thoroughly after handling  
 Avoid release to the environment  
 Do not handle until all safety precautions have been read and understood  
 Obtain special instructions before use  
 Wear protective gloves/protective clothing/eye protection/face protection

IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
 If eye irritation persists: Get medical advice/attention

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

- Very toxic to aquatic life with long lasting effects

### 3. Composition/information on Ingredients

Chemical name	CAS No	Weight-%
Carboxin	5234-68-4	17.63
Ethylene glycol	107-21-1	5-10
Thiram	137-26-8	17.86
Silicon dioxide (Cristobalite)	14808-60-7	0.01-0.2

\*The exact percentage (concentration) 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. Call a poison control center or doctor for further treatment advice.
<b>Ingestion</b>	Never give anything by mouth to an unconscious person. Call a physician or poison control center immediately. Do not induce vomiting without medical advice.

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

**Most Important Symptoms and Effects** May cause cancer by inhalation.

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

**Notes to physician** Treat symptomatically.

### 5. Fire-fighting measures

**Suitable extinguishing media**

Carbon dioxide (CO<sub>2</sub>). Dry chemical. Water spray.

**Unsuitable extinguishing media** Do not use a solid water stream as it may scatter and spread fire.

**Specific hazards arising from the chemical**

No information available.

**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**

Avoid contact with skin and eyes. Use personal protective equipment. Wash thoroughly after handling. Do not breathe vapours or spray mist.

**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. Do not flush into surface water or sanitary sewer system.

**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**

Wear personal protective equipment. Avoid contact with skin and eyes. Do not breathe vapours or spray mist. Provide adequate ventilation.

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

Keep only in original container. Keep tightly closed in a dry and cool place.

**incompatible materials**

Strong oxidizing agents. Strong acids. Strong bases.

**8. Exposure Controls/Personal Protection****Exposure guidelines**

Chemical name	ACGIH TLV	OSHA PEL
Ethylene glycol	STEL: 50 ppm vapor fraction STEL: 10 mg/m <sup>3</sup> inhalable particulate matter, aerosol only TWA: 25 ppm vapor fraction	(vacated) Ceiling: 50 ppm (vacated) Ceiling: 125 mg/m <sup>3</sup>
Thiram	TWA: 0.05 mg/m <sup>3</sup> inhalable fraction and vapor	TWA: 5 mg/m <sup>3</sup> (vacated) TWA: 5 mg/m <sup>3</sup>
Silicon dioxide (Cristobalite)	TWA: 0.025 mg/m <sup>3</sup> respirable particulate matter	TWA: 50 µg/m <sup>3</sup> Action Level: 25 µg/m <sup>3</sup> (vacated) TWA: 0.1 mg/m <sup>3</sup> respirable dust : (250)/( %SiO <sub>2</sub> + 5) mppcf TWA respirable fraction : (10)/( %SiO <sub>2</sub> + 2) mg/m <sup>3</sup> TWA respirable fraction

**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. Safety glasses with side-shields. If splashes are likely to occur, wear: Face-shield.

**Skin protection**

Long sleeved clothing. Chemical resistant apron. Rubber gloves. Neoprene gloves.

**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. Wear suitable gloves and eye/face protection. Wash hands before breaks and immediately after handling the product.

**9. Physical and Chemical Properties**

**Information on basic physical and chemical properties**

<b>Physical state</b>	Liquid	<b>Odor</b>	slightly characteristic
<b>Appearance</b>	suspension		
<b>color</b>	Red		
<b>pH value</b>	8	<b>Remarks</b>	Approximately
<b>Flash Point</b>	105 °C		Tag Closed Cup
<b>Water solubility</b>	dispersible	<b>Specific gravity</b>	1.117-1.157 @ 25C
		<b>Viscosity</b>	70 - 140 mPa.s

**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**

Strong oxidizing agents. Strong acids. Strong bases.

**Hazardous decomposition products**

Extreme temperatures may convert endothall product to endothall anhydride, a strong vesicant, causing blistering of eyes, mucous membranes and skin.

## 11. Toxicological Information

### Information on Likely Routes of Exposure

<b>Product information</b>	Vitavax 200FF Acute oral LD50 (rat) = 4500 mg/kg Acute dermal LD50 (rat) = >4000 mg/kg
<b>Inhalation</b>	May be harmful if inhaled.
<b>Eye contact</b>	CAUSES EYE IRRITATION.
<b>Skin contact</b>	Prolonged skin contact may cause skin irritation.
<b>Ingestion</b>	MAY BE HARMFUL IF SWALLOWED.

### Information on Toxicological Effects

**Symptoms** No information available.

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

**Sensitization** No information available.  
**Mutagenic effects** no data available.  
**Carcinogenicity** The information below indicates whether any agency has listed any ingredient as a carcinogen.

Chemical name	ACGIH	IARC	NTP	OSHA
Thiram 137-26-8	-	Group 3		-
Silicon dioxide (Cristobalite) 14808-60-7	A2	Group 1	Known	X

**Reproductive effects** Not Available.  
**STOT - Single Exposure** no data available.  
**STOT - Repeated Exposure** no data available.  
**Aspiration hazard** No information available.

### Numerical Measures of Toxicity - Product information

**LD50 Oral** 4500 mg/kg  
**LD50 Dermal** > 4000 mg/kg

## 12. Ecological Information

### ecotoxicity

Thiram:  
 FISH LC50 = 0.046 mg/l  
 DAPHNIA EC50 = 0.011 mg/L 48 hr  
 OTHER AQUATIC ORGANISMS EC50 = > 0.14mg/L Carboxin  
 FISH LC50 = 2.3 mg/L 96 hr  
 DAPHNIA EC50 = >57 mg/L 48 hr  
 OTHER AQUATIC ORGANISMS EC50 = 0.48 mg/L 120 hr

### Persistence/Degradability

no data available.

### Bioaccumulation/ Accumulation

Bioaccumulative potential.

Chemical name	Log Pow
Carboxin 5234-68-4	2.17 - 2.19
Ethylene glycol 107-21-1	-1.93
Thiram 137-26-8	1.73

**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 domestically by highway in non-bulk containers this product can be shipped as not regulated.  
When shipped in bulk, by vessel, or internationally use the IMDG shipping description:

**TDG** When shipped in Canada domestic highway non-bulk this product can be shipped as Not regulated as per TDG 1.45.1  
In bulk - use IMDG description

**IATA**

**UN/ID no** UN3082  
**Proper shipping name** Environmentally hazardous substances, liquid, n.o.s (Carboxin) (Thiram)  
**Hazard class** 9  
**Packing group** PG III  
**Description** Marine pollutant

**IMDG**

**UN/ID no** UN3082  
**Proper shipping name** Environmentally hazardous substances, liquid, n.o.s (Carboxin) (Thiram)  
**Subsidiary class** 9  
**Packing group** PG III  
**Environmental hazards** 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

Keep out of Reach of Children. Harmful if swallowed or absorbed through the skin. Harmful if inhaled. Causes moderate eye irritation. Toxic to fish and aquatic invertebrates. Toxic to oysters and shrimp.

**International Inventories**

<b>USINV</b>	Not present
<b>DSL/NDSL</b>	Not present
<b>EINECS/ ELINCS</b>	Not Present
<b>ENCS</b>	Not Present
<b>China</b>	Not Present
<b>KECL</b>	Not Present
<b>PICCS</b>	Not Present
<b>AICS</b>	Not Present
<b>TSCA</b>	Not Present

- **TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory
- DSL/NDSL** - 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 does not contain any 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

Chemical name	RQ	CERCLA EHS RQs	RQ
Ethylene glycol 107-21-1	5000 lb		RQ 5000 lb final RQ RQ 2270 kg final RQ
Thiram 137-26-8	10 lb		RQ 10 lb final RQ RQ 4.54 kg final RQ

**CERCLA**

Component	RQ
Ethylene glycol 107-21-1 ( 5-10 )	5000 lb
Thiram 137-26-8 ( 17.86 )	10 lb

**RCRA**

Component	RCRA - D Series Wastes	RCRA - P Series Wastes	RCRA - U Series Wastes
Thiram 137-26-8 ( 17.86 )			U244

**Pesticide Information**

Component	FIFRA - Restricted Use	FIFRA - Pesticide Product Other Ingredients	FIFRA - Listing of Pesticide Chemicals	California Pesticides - Restricted Materials
Carboxin 5234-68-4 ( 17.63 )			X	
Ethylene glycol 107-21-1 ( 5-10 )			X	
Thiram 137-26-8 ( 17.86 )			X	

**State Regulations**

Component	California Prop. 65
Ethylene glycol 107-21-1 ( 5-10 )	Developmental

**Prop 65 Pictogram**



**Prop 65 Warning Statement  
California Proposition 65**

**WARNING**  
This product can expose you to chemicals which is [are] known to the State of California to cause cancer, birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

**State Right-to-Know**

Chemical name	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Carboxin - 5234-68-4		X			
Ethylene glycol - 107-21-1	X	X	X	X	
Thiram - 137-26-8	X	X	X		
Silicon dioxide (Cristobalite) - 14808-60-7	X	X	X	X	

**International regulations**

**U.S. EPA Label information**

EPA Pesticide registration number 400-112

**16. Other Information**

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

**Preparation Date**                      07-May-2020  
**Revision date**                      07-May-2020

**Revision Summary**  
Add to system

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**End of SDS**