SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name: VITAVAX® - 34 SEED TREATMENT FUNGICIDE
Product Use Description: Seed Treatment

Company: Chemtura Corporation
199 Benson Road
Middlebury, CT 06749
United States of America
Telephone: 866-430-2775

Emergency telephone: CHEMTREC: (24 hours) 800-424-9300
CHEMTURA : 800-292-5898
For additional emergency telephone numbers see section 16 of the Safety Data Sheet.

Prepared by: Product Safety Department
(US) +1 866-430-2775
+011-886-2-2712-5668    MSDSRequest@chemtura.com

SECTION 2. HAZARDS IDENTIFICATION

Emergency Overview

CAUTION!

Form: liquid       Colour: tan        Odour: slight

Hazard Summary: Harmful by inhalation.
Toxic to aquatic organisms.

OSHA Hazards: THIS MATERIAL IS HAZARDOUS UNDER THE CRITERIA OF
THE FEDERAL OSHA HAZARD COMMUNICATION STANDARD
Potential Health Effects

Primary Routes of Entry:
- Skin contact
- Eye contact
- Inhalation

Aggravated Medical Condition:
- Inhalation: Harmful by inhalation.

Skin:
- This product is not expected to cause skin irritation.

Eyes:
- May cause mild irritation of the eyes.

Ingestion:
- May cause:
  - Nausea
  - Gastrointestinal irritation

Environmental Effects

Environmental Effects:
- Toxic to aquatic organisms.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous components

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS-No.</th>
<th>Weight percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carboxin</td>
<td>5234-68-4</td>
<td>34 %</td>
</tr>
<tr>
<td>Ethylene glycol</td>
<td>107-21-1</td>
<td>20 - 25 %</td>
</tr>
</tbody>
</table>

Ingredients not precisely identified are non-hazardous and/or proprietary.

SECTION 4. FIRST AID MEASURES

First aid procedures

Inhalation:
- If breathed in, move person into fresh air.
- Give oxygen or artificial respiration if needed.
- Consult a physician after significant exposure.

Skin contact:
- Wash off with warm water and soap.
- If symptoms persist, call a physician.
- Wash contaminated clothing before re-use.
Eye contact : Rinse thoroughly with plenty of water, also under the eyelids. If eye irritation persists, consult a specialist.

Ingestion : Do NOT induce vomiting. Prevent vomiting if possible. Risk of serious damage to the lungs (by aspiration). Clean mouth with water and drink afterwards plenty of water. Obtain medical attention. Never give anything by mouth to an unconscious person.

Notes to physician
Risks : Risk of product entering the lungs on vomiting after ingestion.
Treatment : Do not induce vomiting: contains petroleum distillates and/or aromatic solvents.

SECTION 5. FIRE-FIGHTING MEASURES

Flammable properties
Flash point : 221 °F (105 °C)
Method: Tag closed cup

Ignition temperature : 640 °F (338 °C)

Fire fighting
Suitable extinguishing media : Extinguishing media - large fires
Alcohol-resistant foam
(on small fires)
Dry chemical
Carbon dioxide (CO2)

Unsuitable extinguishing media : High volume water jet

Further information : Fight fires from a safe distance. Move containers from fire area if possible. Use water spray to cool unopened containers. Prevent fire extinguishing water from contaminating surface water or the ground water system.

Protective equipment and precautions for firefighters
Special protective equipment : In the event of fire, wear self-contained breathing apparatus.
for fire-fighters : Full protective flameproof clothing
SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions : Wear suitable protective clothing, gloves and eye/face protection. Ensure adequate ventilation.

Environmental precautions : Toxic to aquatic life. Do not let product enter drains. Do not flush into surface water or sanitary sewer system.

Methods for containment / Methods for cleaning up : Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13). Large spills should be collected mechanically (remove by pumping) for disposal. Keep in suitable, closed containers for disposal. Ventilate the area.

Additional advice : Keep in properly labelled containers. Dispose of rinse water as waste water.

SECTION 7. HANDLING AND STORAGE

Handling
Handling procedures : Handle and open container with care. Use only in well-ventilated areas. In case of insufficient ventilation, wear suitable respiratory equipment. Wear suitable protective clothing, gloves and eye/face protection. Avoid inhalation, ingestion and contact with skin and eyes. Wash thoroughly after handling. Keep container closed when not in use.

Storage
Requirements for storage areas and containers : Keep containers tightly closed in a dry, cool and well-ventilated place. Keep only in the original container.

Other data : Stable at normal ambient temperature and pressure.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Components with workplace control parameters

<table>
<thead>
<tr>
<th>Components / CAS-No.</th>
<th>Value / Basis / Update</th>
<th>Control parameters</th>
<th>Further information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethylene glycol 107-21-1</td>
<td>C 50 ppm 125 mg/l/m3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

SAP 6.0 4 / 11 SDS Number: 000000003702
Engineering measures

Engineering measures : Use mechanical ventilation for general area control.
Ensure that extracted air cannot be returned to the workplace through the ventilation system.
Ensure that eyewash stations and safety showers are close to the workstation location.

Personal protective equipment

Eye protection : Safety glasses with side-shields
Hand protection : Chemical resistant protective gloves
Skin and body protection : Long sleeved clothing
Remove and wash contaminated clothing before re-use.
To protect against splashes from pouring:
Rubber or plastic boots
Rubber or plastic apron
Respiratory protection : Use respirator when performing operations involving potential exposure to vapour of the product.
Respirator with combination filter for vapour/particulate (EN 141).
Hygiene measures : Handle in accordance with good industrial hygiene and safety practice.
Ensure adequate ventilation, especially in confined areas.
Wear suitable gloves and eye/face protection.
Do not inhale aerosol.
Avoid contact with skin, eyes and clothing.
Do not eat, drink or smoke when using this product.
Wash thoroughly after handling.
Keep working clothes separately.
Wash contaminated clothing before reuse.
Material Safety Data Sheet

VITAVAX® - 34 SEED TREATMENT FUNGICIDE

Version: 1.3  Revision Date: 07/28/2010  Print Date: 09/06/2011

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form</td>
<td>liquid</td>
</tr>
<tr>
<td>Colour</td>
<td>tan</td>
</tr>
<tr>
<td>Odour</td>
<td>slight</td>
</tr>
</tbody>
</table>

### Safety data

<table>
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<tr>
<th>Property</th>
<th>Value</th>
</tr>
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<tbody>
<tr>
<td>Flash point</td>
<td>221 °F (105 °C)</td>
</tr>
<tr>
<td>Method</td>
<td>Tag closed cup</td>
</tr>
<tr>
<td>Ignition temperature</td>
<td>640 °F (338 °C)</td>
</tr>
<tr>
<td>pH</td>
<td>7 - 9</td>
</tr>
<tr>
<td>Boiling point/boiling range</td>
<td>216 °F (102 °C)</td>
</tr>
<tr>
<td>Density</td>
<td>1.16 g/cm³ at 68 °F (20 °C)</td>
</tr>
<tr>
<td>Water solubility</td>
<td>Note: dispersible</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>0.11 Note: (Butyl acetate = 1)</td>
</tr>
</tbody>
</table>

### SECTION 10. STABILITY AND REACTIVITY

- **Conditions to avoid**: Remarks: Heat.
- **Materials to avoid**: Remarks: Strong acids and strong bases
- **Hazardous decomposition products**: Note: Carbon monoxide, Carbon dioxide (CO2), nitrogen oxides (NOx), Sulphur oxides
- **Hazardous reactions**: Hazardous polymerisation does not occur.

### SECTION 11. TOXICOLOGICAL INFORMATION

- **Acute oral toxicity**: LD50: > 5,000 mg/kg Species: rat
- **Acute inhalation toxicity**: LC50: > 0.74 mg/l Exposure time: 4 h Species: rat
Acute dermal toxicity: LD50: > 5,000 mg/kg
Species: rabbit

Skin irritation: Species: rabbit
Result: No skin irritation

Eye irritation: Species: rabbit
Result: No eye irritation

Sensitisation: Species: guinea pig
Result: Did not cause sensitization on laboratory animals.

Toxicology Assessment

CMR effects: Carcinogenicity: negative
Mutagenicity: negative
Reproductive toxicity: negative

12. ECOLOGICAL INFORMATION

Toxicity to fish carboxin: LC50: 2.3 mg/l
Exposure time: 96 h
Species: Oncorhynchus mykiss (rainbow trout)
flow-through test
LC50: 3.6 mg/l
Exposure time: 96 h
Species: Lepomis macrochirus (Bluegill sunfish)
flow-through test

Toxicity to daphnia and other aquatic invertebrates carboxin: EC50: > 57 mg/l
Exposure time: 48 h
Species: Daphnia magna (Water flea)
flow-through test

Toxicity to algae
Material Safety Data Sheet

VITAVAX® - 34 SEED TREATMENT FUNGICIDE

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carboxin : EC50: 1.9 mg/l
Exposure time: 96 h
Species: Chlorella vulgaris (Fresh water algae)
Growth inhibition
EC50: 0.48 mg/l
Exposure time: 120 h

Toxicity to fish (Chronic toxicity)
carboxin : NOEC: 0.32 mg/l
Exposure time: 21 d
Species: Cyprinus carpio (Carp)

Toxicity to daphnia and other aquatic invertebrates. (Chronic toxicity)
carboxin : NOEC: 0.32 mg/l
Exposure time: 17 d
Species: Daphnia magna (Water flea)

Biodegradability
carboxin : Remarks:
Not readily biodegradable.

Further information on ecology

SECTION 13. DISPOSAL CONSIDERATIONS

Further information : Dispose of waste material in compliance with all federal, state, and local regulations.
Waste must be classified and labelled prior to recycling or disposal.
Pesticide wastes are toxic.
Do not contaminate ponds, waterways or ditches with chemical or used container.

SECTION 14. TRANSPORT INFORMATION

DOT
UN-Number : 3082
Description of the goods : Environmentally hazardous substances, liquid, n.o.s.
(Carboxin)
Class : 9
Packing group : III
ERG Code : 171
IATA
UN-Number : 3082
Description of the goods : Environmentally hazardous substance, liquid, n.o.s. (Carboxin)
Class : 9
Packing group : III

IMDG
UN-Number : 3082
Description of the goods : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Carboxin)
Class : 9
Packing group : III
EmS Letter 1 : F-A
EmS Letter 2 : S-F
Marine pollutant : yes
Carboxin

SECTION 15. REGULATORY INFORMATION

OSHA Hazards : This material is hazardous under the criteria of the Federal OSHA Hazard Communication Standard 29CFR 1910.1200.

The components of this product are reported in the following inventories:
REACH

TSCA : All substances in this product are exempt from TSCA as this product is registered under FIFRA (Federal Insecticide Fungicide Rodenticide Act).
Note: This product is registered under the Pest Control Products Act and is therefore exempt from WHMIS supplier labeling and MSDS requirements. Please read entire MSDS and product label for safety precautions.

SECTION 16. OTHER INFORMATION

Further information

HMIS Classification
- Health hazard: 2
- Flammability: 0
- Reactivity: 0

NFPA Classification
- Health hazard: 1
- Fire hazard: 0
- Reactivity hazard: 0

Other Emergency Phone Number

<table>
<thead>
<tr>
<th>Latin America</th>
<th>Brazil</th>
<th>+52 113 711 91 44</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>All other countries</td>
<td>+44 (0)208 762 8322</td>
</tr>
<tr>
<td>Mexico</td>
<td></td>
<td>+52 555 004 87 63</td>
</tr>
</tbody>
</table>

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