

## MATERIAL SAFETY DATA SHEET

| Section 1. Company Identification and Product Information |   |                             |                       |
|---|---|-----------------------------|-----------------------|
| <b>Product Name or Identity:</b>                          | <b>Agri-Screen® for Aflatoxin, Veratox® for Aflatoxin</b><br><b>Veratox® for Aflatoxin HS (High Sensitivity)</b><br><b>Veratox® for Aflatoxin AST (Aflatoxin Single Test)</b> |                             |                       |
| <b>Manufacturer's Name:</b>                               | Neogen Corporation  | <b>Emergency Phone No.:</b> | 517/372-9200          |
|   | 620 Leshler Place   | <b>Fax No.:</b>             | 517/372-0108          |
|   | Lansing, MI 48912   | <b>e-mail:</b>              | foodsafety@neogen.com |
| <b>Date Prepared or Revised:</b> June 06, 2007            |   |                             |                       |

| Section 2. Composition / Information on Ingredients |         |     |           |               |
|---|---------|-----|-----------|---------------|
| Hazardous Components<br>Specific Chemical Identity: | CAS-No. | %   | EG-Number | Hazard Symbol |
| Methanol (Control)                                  | 67-56-1 | 70% | 200-659-6 | T, F          |
| Enhance K-Blue (Substrate)                          | N/A     | N/A | N/A       | Xi            |

| Section 3. Health Hazard Identification   |   |                    |                |
|---|---|--------------------|----------------|
| <b>Route(s) of Entry:</b>   | Inhalation? Yes   | Skin? Yes          | Ingestion? Yes |
| <b>Health Hazards:</b><br><i>(Acute and Chronic)</i>  | Toxic by inhalation, contact with skin, and if swallowed. Irritating to eyes, respiratory system, and skin. Affects central nervous system and liver. Methanol is a flammable liquid and vapor. |                    |                |
| <b>Carcinogenicity:</b>   | IARC Monographs? No   | OSHA Regulated? No |                |
| <b>Signs and Symptoms of Exposure:</b> Methanol is toxic if ingested and can cause blindness. Toxic effects exerted upon nervous system, particularly the optic nerve. Symptoms of overexposure to Methanol may include headache, drowsiness, nausea, vomiting, blurred vision, blindness, coma, and death. Can cause skin to become dry and cracked.   |   |                    |                |
| <b>Medical Conditions Generally Aggravated by Exposure:</b> Methanol is a defatting agent and may cause skin to become dry and cracked. Continued exposure may cause eye lesions. Persons with pre-existing skin disorders, eye problems, impaired liver or kidney function may be more susceptible to effects of Methanol. Based on laboratory animal data, chronic exposure may cause reproductive disorders. |   |                    |                |

| Section 4. First Aid Measures            |  |
|--|--|
| <b>Emergency / First Aid Procedures:</b> | Ingestion: If swallowed, seek medical attention immediately. Wash out mouth with water, provided person is conscious. Induce vomiting as directed by medical personnel. Show physician product label. Never give anything by mouth to an unconscious person.<br>Inhalation: If inhaled, supply fresh air or oxygen. Seek medical attention immediately. If not breathing, apply artificial respiration. If breathing is difficult, give oxygen.<br>Eye Contact: Rinse opened eye for at least 15 minutes under running water, lifting lower and upper eyelids occasionally. Seek medical attention immediately.<br>Skin Contact: Remove contaminated clothing immediately. Immediately wash with plenty of soap and water for at least 15 minutes. Seek medical attention. Wash clothing before reuse. |

| Section 5. Fire and Explosion Hazard Data   |   |
|---|---|
| <b>Flash Point (Method Used):</b> Closed Cup<br>12°C (Methanol)<br>93°C (Enhanced K-Blue)   | <b>Flammable Limits:</b><br>LEL – 6.0% (Methanol), 1.3% (Enhanced K-Blue)<br>UEL – 36% (Methanol), 9.5% (Enhanced K-Blue) |
| <b>Extinguishing Media:</b> Use alcohol foam, dry chemical, or carbon dioxide. Water may be ineffective.  |   |
| <b>Special Fire Fighting Procedures:</b> Above flash point, vapor-air mixtures are explosive within flammable limits noted above. Moderate explosion hazard and dangerous fire hazard when exposed to heat, sparks, or flames. Sensitive to static discharge. Firefighters should wear protective equipment and self-contained breathing apparatus. |   |
| <b>Unusual Fire and Explosion Hazards:</b> During heating or in case of fire, poisonous gases are produced. Fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source, is a potential dust explosion hazard.   |   |

### Section 6. Accidental Release Measures

**Personal Precautions:** Shut off all sources of ignition, ventilate spill area. Consider need for evacuation. Wear suitable protective clothing, gloves, and eye protection. Wear self-containing breathing apparatus, rubber boots, and heavy rubber gloves. Place contaminated material in a chemical waste container.

**Environmental Precautions:** Prevent dispersion of material. Do not allow to enter drains or water courses.

**Clean-up Methods:** Contact safety officer and ventilate area. Absorb spill with inert material, including dry-lime, sand, or soda ash, then place into a chemical waste container using non-sparking tools. Wash spill site.

### Section 7. Handling and Storage

**Handling:** Protect against physical damage. Ensure good ventilation / exhaustion and do not breathe vapor. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure. Do not use if skin is cut or scratched.

**Storage:** Keep container tightly closed. Keep away from heat, sparks, flame and incompatible material. Storage area should be cool, dry, and away from incompatible materials. Containers of this material may be hazardous when empty since they retain product residues.

### Section 8. Exposure Controls / Personal Protection

|   |                                      |
|---|--------------------------------------|
| <b>OES:</b> Short-term value: 309 mg/m <sup>3</sup> , 75 ppm (Enhanced K-Blue)<br>Long-term value: 103 mg/m <sup>3</sup> , 25 ppm (Enhanced K-Blue) | <b>ACGIH TLV:</b> 200 PPM (Methonal) |
|---|--------------------------------------|

**Engineering Measures:** In the event of use above flash point, use in closed systems. Do not use compressed air by filling, discharging or handling the product. Proper ventilation required. Safety shower and eye bath. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

**Respiratory Protection (Specify Type):** With sufficient ventilation, breathing apparatus is not necessary. In the event of possible spill / exposure, use dust mask to EN 149 FFP2S.

|                     |                             |              |
|---------------------|-----------------------------|--------------|
| <b>Ventilation:</b> | Local Exhaust: 50 – 100 CFM | Special: N/A |
|                     | Mechanical (General): N/A   | Other: N/A   |

|   |   |
|---|---|
| <b>Protective Gloves:</b> Compatible chemical-resistant gloves. | <b>Eye Protection:</b> Safety glasses or chemical goggles to EN 166, 167, and 168 |
|---|---|

**Other Protective Clothing or Equipment:** Uniform, lab coat, or disposable lab wear.

**Work / Hygienic Practices:** Follow the usual precautionary measure for handling chemicals / powder. Keep away from food and beverages. Immediately remove all soiled and contaminated clothing. Avoid contact with eyes, skin, and clothing.

### Section 9. Physical and Chemical Properties

|   |   |
|---|---|
| <b>Boiling Point:</b> 65°C (Methanol),<br>204.3°C (Enhanced K-Blue) | <b>Specific Gravity:</b> 0.8 g/cm <sup>3</sup> (Methanol),<br>1.027 g/cm <sup>3</sup> (Enhanced K-Blue) |
|---|---|

|  |   |
|--|---|
| <b>Vapor Pressure:</b> 97 (Methanol), 0.29 (Enhanced K-Blue) | <b>Melting Point:</b> -98°C (Methanol), -24°C (Enhanced K-Blue) |
|--|---|

|   |  |
|---|--|
| <b>Vapor Density (AIR = 1):</b> 1.1 g/l (Methanol)<br>3.4 g/l (Enhanced K-Blue) | <b>Solubility in Water:</b> Miscible in water (Methanol)<br>Fully miscible (Enhanced K-Blue) |
|---|--|

**Appearance and Odor:** Liquid, colorless (Methanol), Liquid, colorless, amine-like odor (Enhanced K-Blue).

### Section 10. Stability and Reactivity

|                   |          |   |  |
|-------------------|----------|---|--|
| <b>Stability:</b> | Unstable |   | Conditions to Avoid: Avoid heat, sources of ignition, moisture, shock, and friction. May degrade on exposure to light. |
|                   | Stable   | X |  |

**Incompatibility (Materials to Avoid):** Incompatible with strong oxidizing agents, reducing agents, acids, acid chlorides, acid anhydrides, and strong bases.

**Hazardous Decomposition or Byproducts:** Carbon dioxide (CO<sub>2</sub>), Carbon monoxide (CO), Nitrogen oxides, and formaldehyde when heated to decomposition.

|                                  |                |   |  |
|----------------------------------|----------------|---|--|
| <b>Hazardous Polymerization:</b> | May Occur      |   | Conditions to Avoid: Heat, flames, ignition sources, and incompatible materials. |
|                                  | Will Not Occur | X |  |

### Section 11. Toxicological Information

**LD<sub>50</sub>:** ORL-RAT, 5628 mg/kg (Methanol)  
**LD<sub>50</sub>:** ITP-RAT, 7529 mg/kg (Methanol)

**LD<sub>50</sub>:** ORL-RAT, 3600 mg/kg (Enhanced K-Blue)  
**LD<sub>50</sub>:** DER-RAB, 8000 mg/kg (Enhanced K-Blue)

### Section 12. Ecological Information

**Ecotoxicity Tests:** LC<sub>50</sub> Fish, 96 h, 19,000 mg/L (Methanol), EC<sub>50</sub> Daphnia, 48 h, 24,500 mg/L (Methanol)  
 EC<sub>50</sub> / 17h >9,000 mg/L (*Pseudomonas putida*) (Enhanced K-Blue), EC<sub>50</sub> / 24h >1000 mg/L (*Daphnia magna*) (Enhanced K-Blue)

### Section 13. Disposal Considerations

**Waste Disposal Method:** Dispose in accordance with all applicable federal, state, and local environmental regulations. Keep waste separate. Contact a licensed professional waste disposal service to dispose of this material if questions arise. Do not allow product to reach ground water, water bodies, or sewage system. Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable.

**Container Information:** Do not remove labels from containers until they have been cleaned.

### Section 14. Transport Information

**Methanol: \***  
 UN # 1230  
 Class: 3, Flammable Liquid  
 Packing Group: II  
 Hazard Class: 3

**Enhanced K-Blue: \***  
 UN # 1993  
 Class: Combustible Liquid  
 Packing Group: III  
 Hazard Class: 3

\*This product is classified under CFR 49, Part 173, Section 173.4, small quantity exceptions.

### Section 15. Regulatory Information

#### EU Regulations

#### Hazard Symbol(s):

Methanol: F (Highly Flammable) T (Toxic)  
 Enhanced K-Blue : Xi (Irritant)

#### Risk Phrases:

Methanol: R 11, 23 / 24 / 25 39 / 23 / 24 / 25 Highly flammable. Toxic by inhalation, in contact with skin and if swallowed. Toxic, danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.  
 Enhanced K-Blue: R 36 / 38, Irritating to eyes and skin.

#### Safety Phrases:

Methanol: S 7 16 36 / 37 45 Keep container tightly closed. Keep away from sources of ignition, no smoking. Wear suitable protective clothing and gloves. In case of accident or if you become ill, seek medical advice immediately (show product label).  
 Enhanced K-Blue: S 41 In case of fire and / or explosion do not breathe fumes.

### Section 16. Other Information

This document is believed to be correct, but does not purport to be all inclusive and shall be used only as a guide. Neogen Corporation shall not be held liable for any damage resulting from handling or from contact with the above product. These suggestions should not be confused with state, municipal or insurance requirements, and constitute NO WARRANTY.