NEOGEN CORPORATION

MATERIAL SAFETY DATA SHEET

Section 1. Company Identification and Product Information			
Product Name or Identity:	**Veratox® for Zearalenone**		
Manufacturer's Name:	**Neogen Corporation**	**Emergency Phone No.:**	517/372-9200
	620 Lesher Place	**Fax No.:**	517/372-0108
	Lansing, MI 48912	**e-mail:**	foodsafety@neogen.com
Date Prepared or Revised: April 2014		**Chemtrec: (800) 424-9300** **Outside US and Canada: (703) 527-3887**	

Section 2. Composition / Information on Hazardous Ingredients			
This product is a mixture of the substances listed below with the addition of nonhazardous materials.			
Hazardous Components Specific Chemical Identity:	**CAS-No.**	**%**	**Hazard Symbol**
Methanol (Control)	67-56-1	14%	T (Toxic), F (Flammable)
Enhance K-Blue (Substrate)	N/A	N/A	Xi (Irritant)

Section 3. Health Hazard Identification	
Health Hazards: *(Acute and Chronic)*	**Information pertaining to particular dangers for man and environment.** **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.

Section 4. First Aid Measures	
Emergency / First Aid Procedures:	**Ingestion:** If swallowed, seek medical attention immediately. Wash out mouth with water, provided person is conscious. Show physician product label. Never give anything by mouth to an unconscious person.
	Inhalation: If inhaled, supply fresh air or oxygen. Seek medical attention immediately. If not breathing, apply artificial respiration. If breathing is difficult, give oxygen.
	Eye Contact: Rinse opened eye for at least 15 minutes under running water, lifting lower and upper eyelids occasionally. Seek medical attention immediately.
	Skin Contact: Remove contaminated clothing. 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	
Flash Point (Method Used): Closed Cup 50°C (Methanol), 93°C (Enhanced K-Blue)	**Flammable Limits**: LEL – 6.0% (Methanol), 1.3% (Enhanced K-Blue) UEL – 36% (Methanol), 9.5% (Enhanced K-Blue)
Extinguishing Media: Use alcohol foam, dry chemical, or carbon dioxide. Water may be ineffective.	
Protective Equipment: 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.	
Unusual Fire and Explosion Hazards: 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.	

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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. Wipe up with damp sponge or mop.

Clean-up Methods: Contact safety officer if questions arise and ventilate area.

Refer to Section 7 for Handling Information.

Refer to Section 8 for Person Protection Equipment.

Refer to Section 13 for Disposal Information.

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.

Other Precautions: Keep respiratory protective device available.

Section 8. Exposure Controls / Personal Protection

Components with limit values that require monitoring:
Methanol (67-56-1)

OSHA–PEL: 200 ppm TWA; 260 mg/m3 TWA (Methanol)	**TLV:** 200 ppm (Methanol)

Additional Information: Personal Protection listed below are general requirements for laboratory personnel. Follow the usual precautionary measures for handling chemicals / powder. Avoid contact with eyes, skin, and clothing. 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.

Personal Protective Equipment:
Keep away from food, beverages, and feed.
Wash hands before and after entering laboratory.

Breathing Equipment: If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn.

Hand Protection: Use chemical resistant gloves.

Eye Protection: Wear safety glasses.

Body Protection: Wear lab coat or other protective work clothing.

Section 9. Physical and Chemical Properties

Appearance and Odor: N/A

Boiling Point: Not determined

Melting Point: Not determined

Density: Not determined

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Section 10. Stability and Reactivity			
Stability:	Unstable		
	Stable	X	Conditions to Avoid: Avoid heat, sources of ignition, moisture, shock, and friction. May degrade on exposure to light.
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_2), Carbon monoxide (CO), and Nitrogen oxides (NOx).			
Hazardous Polymerization:	May Occur		Conditions to Avoid: Incompatible materials.
	Will Not Occur	X	

Section 11. Toxicological Information

LD/LC50 values that are relevant:
LD_{50}: ORL-RAT, 5628 mg/kg (Methanol)

Carcinogenicity Classification:
IARC (International Agency for Research on Cancer) - Not Listed
NTP (National Toxicology Program) - Not Listed

Eye: Produces irritation, characterized by a burning sensation, redness, tearing, inflammation, and possible corneal injury.
Ingestion: May cause gastrointestinal irritation with nausea, vomiting and diarrhea. May cause systemic toxicity with acidosis. May cause central nervous system depression, characterized by excitement, followed by headache, dizziness, drowsiness, and nausea.
Inhalation: Harmful if inhaled. May cause adverse central nervous system effects including headache and convulsions.
Chronic: Prolonged or repeated skin contact may cause dermatitis. Chronic inhalation and ingestion may cause effects similar to those of acute inhalation and ingestion. Chronic exposure may cause reproductive disorders and teratogenic effects. Laboratory experiments have resulted in mutagenic effects. Prolonged exposure may cause liver, kidney, and heart damage.
Additional toxicological information: Any toxin(s) present in this kit are at concentration levels below the regulatory threshold limits which require registration under the Select Agent Program in as detailed in 42 CFR Part 73, 9 CFR Part 121, and 7 CFR Part 331.

Section 12. Ecological Information

Ecotoxicity Tests: LC_{50}: Fish, 96 hours, 19,000 mg/L (Methanol)

Section 13. Disposal Considerations

Waste Disposal Method: Dispose in accordance with all applicable federal (40 CFR 261.3), state, and local environmental regulations.
RCRA P-Series: None listed.
RCRA U-Series: CAS# 67-56-1: Waste Number U154; (Ignitable waste)
Contact a licensed professional waste disposal service to dispose of this material if questions arise.

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

Section 14. Transport Information

DOT Regulations:
Hazard Class: 9
Identification Number: UN 3316
Packing Group: III
Proper Shipping Name: Chemical Kit, (contains Methanol)
Remarks: Excepted/Limited quantity.

Land Transport ADR/RID (cross-border):
Hazard Class: 9
Identification Number: UN 3316
Packing Group: III
Proper Shipping Name: Chemical Kit, (contains Methanol)
Remarks: Excepted/Limited quantity.

Maritime Transport IMDG:
Hazard Class: 9
Identification Number: UN 3316
Packing Group: III
Proper Shipping Name: Chemical Kit, (contains Methanol)
Remarks: Excepted/Limited quantity.

Air Transport ICAO-TI and IATA-DGR:
Hazard Class: 9
Identification Number: UN 3316
Packing Group: III
Proper Shipping Name: Chemical Kit, (contains Methanol)
Remarks: Excepted/Limited quantity.

Section 15. Regulatory Information

EU Regulations, Hazard Symbol(s):

Methanol: T (Toxic), F (Flammable)

Enhanced K-Blue: Xi (Irritant)

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.

SARA 313 Components

The following components are subject to reporting levels established by SARA Title III, Section 313:

Methanol CAS No. 67-56-1

SARA 311/312 Hazards

Acute Health Hazard	Yes
Chronic Health Hazard	Yes
Fire Hazard	Yes
Sudden Release of Pressure Hazard	No
Reactivity Hazard	No

State Right-to-Know

Massachusetts

Methanol CAS No. 67-56-1

Pennsylvania

Methanol CAS No. 67-56-1

New Jersey

Methanol CAS No. 67-56-1

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.