

## MATERIAL SAFETY DATA SHEET

### SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**COMPANY ADDRESS:**

ALSTEM, LLC  
2600 Hilltop Drive  
BLDG B, STE C328  
Richmond, CA 94806

**EMERGENCY TELEPHONE NUMBERS:**

(800) 424-9300 (CHEMTREC, transportation and spills)

**PRODUCT NAME :** ViralBoost Reagent

For research use only. Not intended for human or animal diagnostic or therapeutic uses.

### SECTION 2 - COMPOSITION. INFORMATION OF INGREDIENTS

| COMPONENT      | PERCENTAGE | CAS NUMBER | OSHA PEL | ACIGH TLV |
|----------------|------------|------------|----------|-----------|
| Trichostatin A | <0.1%      | 58880-19-6 | None     | none      |
| retinoic acid  | <0.1%      | 302-79-4   | None     | none      |

### SECTION 3 - HAZARDS IDENTIFICATION SUMMARY

(As defined by OSHA Hazard Communication Standard, 29 CFR 1910.1200)

**HEALTH HAZARDS:** not hazardous  
**PHYSICAL HAZARDS:** not hazardous  
**ENVIRONMENTAL HAZARDS:** not hazardous

### SECTION 4 - FIRST AID MEASURES

**IF IN EYES:** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If symptoms persist, call a physician.

**IF SWALLOWED:** Never give anything by mouth to an unconscious person. If symptoms persist, call a physician. Do not induce vomiting without medical advice.

**IF ON SKIN OR CLOTHING:.** Rinse with plenty of water. If symptoms arise, call a physician

**IF INHALED:** Move to fresh air. If symptoms persist, call a physician. If not breathing, give artificial respiration. May be harmful by inhalation

**NOTE TO PHYSICIAN:** Treat symptomatically

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

### SECTION 5 - FIRE FIGHTING MEASURES

**EXTINGUISHING MEDIA:** Use foam, dry chemical, carbon dioxide, or water spray when fighting fires involving this material.

**FIRE FIGHTING INSTRUCTIONS:** Evacuate area and fight fire upwind from a safe distance to avoid possible hazardous fumes and decomposition products. Dike and collect water used to fight fire to prevent environmental damage due to run off. Foam or dry chemical fire extinguishing systems are preferred to prevent environmental damage from excessive water run off.

**FIRE FIGHTING EQUIPMENT:** Self-contained breathing apparatus with full facepiece and protective clothing.

### **SECTION 6 - ACCIDENTAL RELEASE MEASURES**

Clean up spills immediately, observing precautions in Section 8 of this document. Isolate hazard area. Keep unnecessary and unprotected personnel from entering.

**SMALL SPILL:** Soak up with inert absorbent material.  
**LARGE SPILL:** Soak up with inert absorbent material.

Wear appropriate personal protection equipment. (See Section 8 Exposure Controls, Personal Protection.)

### **SECTION 7 - HANDLING AND STORAGE**

KEEP OUT OF REACH OF CHILDREN!

**HANDLING:** Always wear recommended Personal Protective Equipment. No special handling advice required.  
**STORAGE:** Keep in 4 °C refrigerator

### **SECTION 8 - EXPOSURE CONTROLS. PERSONAL PROTECTION**

**EXPOSURE LIMITS (8 hour TWA, ppm):** Refer to Section 3.

**ENGINEERING CONTROLS:** Proper ventilation is required when handling or using this product to keep exposure to airborne contaminants below the exposure limit. Local mechanical exhaust ventilation may be required. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

**PERSONAL PROTECTIVE EQUIPMENT:**

**EYE PROTECTION -** Safety goggles or glasses with side shields  
**CLOTHING -** Long-sleeved shirt and long pants, Shoes plus socks.  
**GLOVES –** Chemical resistant gloves such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, polyvinyl chloride (PVC) or viton.

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

**USER SAFETY RECOMMENDATIONS:** Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Remove PPE immediately after handling this product. Wash outside of gloves before removing. As soon as possible wash thoroughly and change into clean clothing.

### **SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES**

**PHYSICAL DESCRIPTION:** Liquid  
**ODOR:** None  
**SPECIFIC GRAVITY:** No information available  
**pH:** No information available  
**VAPOR PRESSURE:** No information available  
**VAPOR DENSITY:** No information available  
**WATER SOLUBILITY:** Soluble

**SECTION 10 - STABILITY AND REACTIVITY**

**CHEMICAL STABILITY:** Stable under normal conditions  
**CONDITIONS TO AVOID:** No dangerous reaction known under conditions of normal use  
**INCOMPATIBILITY WITH OTHER MATERIALS:** None under normal use  
**HAZARDOUS DECOMPOSITION PRODUCTS:** None under normal use  
**HAZARDOUS POLYMERIZATION:** Hazardous polymerization does not occur

**SECTION 11 - TOXICOLOGICAL INFORMATION****ACUTE TOXICITY:**

|                                   |                   |
|-----------------------------------|-------------------|
| Oral LD <sub>50</sub> (rat)       | No data available |
| Dermal LD <sub>50</sub> (rat)     | No data available |
| Inhalation LC <sub>50</sub> (rat) | No data available |
| Eye Irritation (rabbit)           | No data available |
| Skin Irritation (rabbit)          | No data available |
| Sensitization (guinea pig)        | No data available |

**MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:** None known.

**CARCINOGEN STATUS:**

OSHA - Not listed  
NTP - Not listed  
IARC - Not listed

**MUTAGENIC DATA:** None  
**ADDITIONAL DATA:** None

**SECTION 12 - ECOLOGICAL INFORMATION****ENVIRONMENTAL SUMMARY:**

**FISH TOXICITY:** No information available  
**AVIAN TOXICITY:** No information available  
**BEE TOXICITY:** No information available

**SECTION 13 - DISPOSAL CONSIDERATIONS**

Do not contaminate water, food, or feed by storage or disposal.

**WASTE:** Dispose of in accordance with local regulations  
**CONTAINER:** Dispose of in accordance with local regulations

Plastic Container Disposal: Do not reuse container. Triple rinse (or equivalent). Then offer for recycling, reconditioning, or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

#### **SECTION 14 - TRANSPORT INFORMATION**

**DOT SHIPPING DESCRIPTION:** Not classified as dangerous in the meaning of transport regulations

**DOT HAZARD CLASS:** none

**UN NUMBER:** none

**DOT PACKING GROUP:** none

**DOT PRIMARY/SECONDARY LABEL:** none

**DOT PRIMARY/SECONDARY PLACARD:** none

**DOT EMERGENCY RESPONSE GUIDE #:** none

#### **SECTION 15 - REGULATORY INFORMATION**

**CERCLA REPORTABLE QUANTITY:** None

**SARA TITLE III STATUS:**

311/312 Hazard Categories – Immediate & Delayed Health Hazard

313 Toxic Chemicals – None known

#### **SECTION 16 - OTHER INFORMATION**

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**REVISED DATE:** July 2013

**REFERENCE:**