ACTI-BRITE
Material Safety Data Sheet

SECTION I - COMPANY IDENTIFICATION

PRODUCT: ACTI-BRITE
CAT. NO.: AB-1, AB-5, AB-55
MANUFACTURED BY: Virginia KMP Corporation
4100 Platinum Way
Dallas, Texas 75237

TELEPHONE NUMBERS:
Office: 1-(214) 330-7731
Emergency Only: 1-(800) 424-9300

SECTION II - HAZARDOUS INGREDIENTS

OSHA Hazardous Components (29 CFR 1910.1200) EXPOSURE LIMITS: 8 HR. TWA

<table>
<thead>
<tr>
<th>Compound</th>
<th>OSHA PEL</th>
<th>ACGIH TLV</th>
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<tbody>
<tr>
<td>Phosphoric acid</td>
<td>1 mg/m³</td>
<td>1 mg/m³</td>
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<tr>
<td>Hydrofluoric acid</td>
<td>STEL 3 mg/m³</td>
<td>STEL 3 mg/m³</td>
</tr>
<tr>
<td></td>
<td>3 ppm (F)</td>
<td>CL 3 ppm (F)</td>
</tr>
<tr>
<td></td>
<td>STEL 6 ppm (F)</td>
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SECTION III - HAZARDS IDENTIFICATIONS

EMERGENCY OVERVIEW: DANGER! Corrosive to all body tissues. Avoid contact with skin or eyes. Harmful if inhaled or swallowed.

POTENTIAL HEALTH EFFECTS:

INHALATION: Inhalation of vapor or mist is corrosive to respiratory tract. Symptoms include coughing, wheezing, laryngitis, shortness of breath, headache, nausea, and vomiting.

EYE CONTACT: Liquid or vapors are corrosive to eyes. Immediate irritation followed by destruction of tissue.

SKIN CONTACT: This material is corrosive to all body tissues. Full extent of damage may not be apparent for 12 - 24 hours after exposure. Severe burns are slow healing. Gangrene may follow damage.

INGESTION: Corrosive, moderately toxic, causes nausea, vomiting, loss of consciousness.

CHRONIC Effects: Damage to kidneys and liver (phosphoric acid). Changes in bones or joints (hydrofluoric acid).

NOTE: CARCINOGENICITY: LISTED IN NTP? No IARC? No OSHA Regulated? No

SECTION IV - FIRST AID MEASURES

INHALATION: Remove victim to fresh air and, if needed, immediately begin artificial respiration. Give oxygen if breathing is labored. Get emergency medical help. Contact a physician immediately.

EYE CONTACT: Flush eyes with water for 15 minutes. Get medical attention.

SKIN CONTACT: Flush with water or soap and water for 15 minutes or until all traces have been removed. Seek medical attention if symptoms develop and persist.

INGESTION: Do not induce vomiting. Rinse mouth out with water. Get immediate medical attention.

SECTION V - FIRE FIGHTING MEASURES

FLASHPOINT (TEST METHOD): None
FLAMMABLE LIMITS: LOWER: NA UPPER: NA
AUTOIGNITION TEMPERATURE: NA

GENERAL HAZARD: Toxic fumes produced in fire.

FIRE FIGHTING INSTRUCTIONS: Approach fire from upwind side. Avoid breathing smoke, fumes, mist, or vapors on the downwind side. Firefighters wear protective clothing and self contained breathing apparatus.

EXTINGUISHING MEDIA: Dry powder, carbon dioxide (CO₂), water fog or spray.

HAZARDOUS COMBUSTION PRODUCTS: Smoke, irritating vapors, toxic fumes of PO₄, and corrosive F fumes, CO, CO₂.

SECTION VI - ACCIDENTAL RELEASE MEASURES

LAND SPILL: Emergency response coordinator must have mandated training. Eliminate all ignition sources. SMALL SPILLS: Pick up with absorbent materials and place in non-leaking containers; seal tightly for proper disposal or reuse. LARGE SPILLS: Evacuate the hazard area of unprotected personnel. Wear appropriate respirator and protective clothing. Shut off source of leak if safe to do so. Dike and contain. Remove with vacuum trucks or pump to storage/salvage vessels.

WATER SPILL: Notify proper authorities. Clean up leaks/spills immediately to prevent soil or water contamination.

SECTION VII - HANDLING AND STORAGE
ACTI-BRITE

HANDLING: Avoid contact with skin, eyes, and clothing. After handling this product, wash hands before eating, drinking or smoking. If contact occurs, remove contaminated clothing. If needed, take first aid action shown in section IV. Launder contaminated clothing before reuse.

STORAGE: Store away from food stuffs, alkaline materials.

SECTION VIII - EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: Local exhaust ventilation recommended.
PERSONAL PROTECTION: If TLV is exceeded wear NIOSH approved respirator. Use heavy rubber type gloves, full face shield and boots, aprons, drench showers, eye wash as needed for protection against spills and/or splashes.

SECTION IX - PHYSICAL AND CHEMICAL PROPERTIES

VAPOR PRESSURE: ND
SPECIFIC GRAVITY (H2O = 1): 1.15
SOLUBILITY IN WATER: Complete
pH: <2.0
BOILING POINT: 212 F
APPEARANCE & ODOR: Pink liquid, pungent odor.

SECTION X - STABILITY AND REACTIVITY

STABILITY: Stable.
CONDITIONS TO AVOID: High temperatures.
MATERIALS TO AVOID: Alkaline materials, may react with metals to produce hydrogen gas.
HAZARDOUS DECOMPOSITION PRODUCTS: Corrosive F fumes, toxic POx fumes, from combustion - smoke, CO, CO2.
HAZARDOUS POLYMERIZATION: Will not occur.

SECTION XI - TOXICOLOGICAL INFORMATION

Phosphoric Acid
LDLo: 220 mg/kg (unr - man)
LD50: 1530 mg/kg (oral - rat)
LD50: 2740 mg/kg (skin - rat)

Hydrofluoric Acid
LCLo: 50 ppm / 30 M (inh - human)
LC50: 966 ppm / 1 hr (inh - rat)
TCLo: 100 mg/m³ (inh - human) NOSE,EYE,PUL

SECTION XII - ECOLOGICAL INFORMATION

Harmful to aquatic life in very low concentrations.
Phosphoric Acid 138 ppm / 24 hr / mosquito fish / TLm / fresh water
Hydrofluoric Acid 60 ppm / fish / lethal / fresh water

SECTION XIII - DISPOSAL CONSIDERATIONS

Dispose as hazardous waste. Classification and documentation is required before disposal. Follow all local, state and federal regulations.

SECTION XIV - TRANSPORTATION INFORMATION

PROPER SHIPPING NAME: Corrosive liquid, Acidic, Inorganic, n.o.s. (contains phosphoric acid, hydrofluoric acid), 8, UN3264, PG II
HAZARD CLASS: 8
IDENTIFICATION NUMBER: UN3264
DOT Emergency Guide #: 154
Reportable Quantity (RQ): 65 gallons (hydrofluoric acid)

SECTION XV - REGULATORY INFORMATION

TSCA (Toxic Substance Control Act): Components of this product are listed on the TSCA Inventory.
CERCLA (Comprehensive Environmental Response, Compensation and Liability Act): Reportable quantity is 65 gallons (hydrofluoric acid). Contact local authorities for other reporting requirements.

SARA TITLE III (Superfund Amendments and Reauthorization Act):
Section 302 Threshold Planning Quantity is 65 gallons (hydrofluoric acid)
Section 313 Hydrogen Floride (CAS# 7664-39-9) 8 - 15%
Phosphoric Acid (CAS# 7664-38-2) 5 - 10%

CALIFORNIA PROPOSITION 65: Not listed.

Prepared by: Virginia KMP Corporation
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State Right-to-Know Programs: MA, NJ, PA

NFPA Ratings
- Health: 4
- Flammability: 0
- Reactivity: 1

HMIS Protective Equipment: X See your supervisor