**SAFETY DATA SHEET**

**CERTI-VEX NO. CS121AIM**

**CERTI-VEX AC 309**

**SECTION I - GENERAL INFORMATION**

**PRODUCT IDENTIFICATION:**
- **CERTI-VEX AC309**
- **VOC CONTENT:** <350 GRAMS/LITER OR <2.92 #/GAL
- **COMMON NAME:** CONCRETE CURING COMPOUND
- **MANUFACTURER:** VEXCON CHEMICALS, INC
- **ADDRESS:** 7240 STATE RD, PHILADELPHIA, PA 19135
- **EMERGENCY NO:** 800.856.2828 (PolySat Inc)
- **TELEPHONE NO:** 215-332-7709 (Vexcon)
- **PREPARED:** AUGUST 1997
- **UPDATED:** SEPTEMBER 2017
- **PREPARED BY:** DARRY F. MANUEL, PRESIDENT

**CLASSIFICATION OF MIXTURE:**
- FLAMMABLE LIQUID – CATEGORY 2
- SERIOUS EYE DAMAGE/EYE IRRITATION – CATEGORY 2A
- SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - CATEGORY 3

**SINGLE WORD:** DANGER

**HAZARD STATEMENTS:** HIGHLY FLAMMABLE LIQUID AND VAPOR. CAUSES SERIOUS EYE IRRITATION, MAY CAUSE DROWSINESS OR DIZZINESS

**PRECAUTIONARY STATEMENTS:** FLAMMABLE OR COMBUSTIBLE LIQUID: USE ONLY WITH ADEQUATE VENTILATION. IF SWALLOWED, DO NOT INDUCE VOMITING. USE OF SOLVENT RESISTANT GLOVES, GOGGLES AND OTHER PROTECTIVE EQUIPMENT IS ADVISED WHEN HANDLING THIS PRODUCT. ASPIRATION OF MATERIAL INTO THE LUNGS CAN CAUSE CHEMICAL PNEUMONITIS WHICH CAN BE FATAL. USE OF RESPIRATORS IS ADVISED ASPIRATION OF MATERIAL INTO THE LUNGS CAN CAUSE CHEMICAL VOMITING: USE OF SOLVENT RESISTANT GLOVES, GOGGLES AND OTHER

**HAZARD RATING**
- **HEALTH:** 1
- **FLAMMABILITY:** 3
- **REACTIVITY:** 0

**SECTION II - HAZARD IDENTIFICATION**

**COMPONENTS CAS NO. % HAZARD DATA UN#**

<table>
<thead>
<tr>
<th>MATERIAL OR COMPONENTS</th>
<th>CAS NO.</th>
<th>%</th>
<th>HAZARD DATA</th>
<th>UN#</th>
</tr>
</thead>
<tbody>
<tr>
<td>STYRENE ACRYLIC POLYMER</td>
<td>25036-16-2</td>
<td>15-30%</td>
<td>ND</td>
<td>1993</td>
</tr>
<tr>
<td>ACETONE</td>
<td>67-64-1</td>
<td>40-60%</td>
<td>OSHA HAZARD / DOT LABEL: FLAMMABLE LIQUID</td>
<td>1090</td>
</tr>
<tr>
<td>TERTIARY BUTYL ACETATE</td>
<td>540-88-5</td>
<td>15-30%</td>
<td>OSHA HAZARD: FLAMMABLE LIQUID</td>
<td>1123</td>
</tr>
</tbody>
</table>

**HAZARD STATEMENTS**

**OVEREXPOSURE:**
- **INHALATION:** TLV 50 ppm ACETONE, AROMATIC SOLVENT, AND TERT BUTYL ACETATE COMPONENT
- **INGESTION / INHALATION:** CAN CAUSE GASTROINTESTINAL IRRITATION, NAUSEA, VOMITING. SMALL AMOUNTS OF LIQUID ASPERATED INTO THE RESPIRATORY SYSTEM DURING INGESTION, OR FROM VOMITING, MAY CAUSE BRONCHOPNEUMONIA OR PULMONARY EDEMA. DO NOT INDUCE VOMITING. SEEK IMMEDIATE MEDICAL ATTENTION

**ACUTE OVEREXPOSURE:** ANESTHESIA, HEADACHE, NAUSEA, DIZZINESS. LIQUIDS MODERATELY IRRITATING ON SKIN AND EYES

**HEALTH HAZARD DATA**

**HAZARD CLASSIFICATION**

**BASIS FOR CLASSIFICATION SOURCE**

**ROUTE OF EXPOSURE:**
- **INHALATION:** INHALATION OF HIGH VAPOR CONCENTRATION MAY HAVE RESULTS RANGING FROM DIZZINESS AND HEADACHES TO UNCONSCIOUSNESS. THIS PRODUCT MAY CREATE BREATHING DIFFICULTIES. DIZZINESS, LIGHTHEADEDNESS WHEN WORKING IN AREAS WITH HIGH VAPOR CONCENTRATION.
- **SKIN CONTACT:** THIS PRODUCT MAY CAUSE SKIN IRRITATION UPON PROLONGED OR REPEATED CONTACT.
- **SKIN ABSORPTION:** THIS PRODUCT MAY CAUSE SKIN IRRITATION UPON PROLONGED OR REPEATED CONTACT.
- **EYE CONTACT:** THIS PRODUCT MAY BE AN EYE IRRITANT.

**SECTION III HAZARDOUS INGREDIENTS**

**THE AROMATIC SOLVENT PORTION CONTAINS THE FOLLOWING SECTION 313 REPORTABLE INGREDIENTS:**

<table>
<thead>
<tr>
<th>COMPONENT</th>
<th>CAS NO.</th>
<th>MAX %</th>
<th>HAZARD DATA</th>
<th>UN#</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,2,4-TRIMETHYL BENZENE (PSEUDOCUMENE)</td>
<td>95-63-6</td>
<td>&lt;32.0%</td>
<td>DOT LABEL: FLAMMABLE LIQUID</td>
<td>1993</td>
</tr>
<tr>
<td>XYLENES</td>
<td>1330-20-7</td>
<td>&lt;2.2%</td>
<td>DOT LABEL: FLAMMABLE LIQUID</td>
<td>1307</td>
</tr>
<tr>
<td>CUMENE</td>
<td>98-82-8</td>
<td>&lt;1.1%</td>
<td>OSHA Z1 50ppm (TWA)</td>
<td>1918</td>
</tr>
</tbody>
</table>

**SECTION IV FIRST AID MEASURES**

- **HAZARD RATING**
- **SAFETY DATA SHEET**
- **VEXCON NO. CS121AIM**
- **CERTI-VEX AC 309**
- **800.856.2828 (PolySat Inc)**
EMERGENCY AND FIRST AID PROCEDURES:

**EYES:**
Flush with plenty of water for at least 15 minutes. Seek immediate medical attention. Consult a physician.

**SKIN:**
Wash with soap and large quantities of water. Seek medical attention if skin irritation develops and persists.

**INGESTION:**
Do not induce vomiting; seek immediate medical attention.

**INHALATION:**
Move person to fresh air. If breathing is difficult, give oxygen. If breathing stops, begin artificial respiration and seek immediate medical attention.

(Use an explosion proof or hand pump) or with a suitable absorbent. Consult an expert on disposal of recovered material and ensure conformity to EPA, Federal, State, and local disposal regulations.

**WATER SPILL:**
Remove from surface by skimming or with a suitable absorbent. If allowed by local authorities and environmental agencies, burning or incineration of by-products may be used in non-confined waters. Consult an expert on disposal of recovered material and ensure conformity to EPA, Federal, State, and local disposal regulations.

**SECTION VI ACCIDENTAL RELEASE MEASURES**

**AQUATIC TOXICITY (E.G. 96 HR. TLM):** Do not discharge this product into public waters or waterways unless authorized by a National Pollution Discharge Elimination System (NPDES) permit issued by the Environmental Protection Agency (EPA).

**STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:**
Land spill: Eliminate sources of ignition. Prevent additional discharge of material. If possible to do so without hazard, for small spills, implement cleanup procedures. For large spills, implement clean up procedures and, if in public area, keep public away and advise authorities. Also, if this product is subject to CERCLA reporting notify the national response center. Prevent liquid from entering sewers, watercourses, or low areas. Contain spilled liquid with sand or earth. Do not use combustible materials such as sawdust. Recover by pumping.

**SECTION V FIREFIGHTING MEASURES**

**EXTINGUISHING MEDIA:**
Exclude air. Fires involving this product may be controlled by regular foam, carbon dioxide, dry chemicals or water spray. Water may be used to reduce the rate of burning and for cooling purposes. Avoid spraying water directly into storage containers due to danger of boil over.

**GENERAL HAZARD:**
Flammable liquid - can form combustible mixtures at temperatures at or above the flash point. Static discharge - material can accumulate static charges which can cause an incendiary electrical discharge. "Empty" containers retain product residue (liquid and/or vapor) and can be dangerous. Do not permit objects or liquid, burnt or unburnt, solid, dry, to come into contact with heat, flame, sparks, static electricity, or other sources of ignition; they may explode and cause injury or death. Empty drums should be completely drained, properly bunged and promptly returned to a drum reconditioner, or properly disposed of.

**UNUSUAL FIRE AND EXPLOSION HAZARD:**
This product is extremely flammable and explosive under normal conditions in the presence of flame or spark source. If storage containers are exposed to excessive heat, over pressurization of the containers can result. Vapor is heavier than air and may travel along the ground or through ventilation system considerable distance to a source of ignition and may result in flash back. Keep work areas free of hot metal surfaces and other sources of ignition.

**SPECIAL FIRE FIGHTING PROCEDURES**
The use of self-contained breathing apparatus with self-pressurized demand or other positive pressure mode should be provided for fire fighters in buildings or confined areas where this product is stored. Storage containers exposed to fire should be kept cool with water spray in order to prevent pressure build up. Use water spray to cool fire exposed surfaces and to protect personnel. Isolate "fuel" supply from fire. Avoid spreading burning liquid with water used for cooling purposes.

**USE PROPER GROUNDING**

**SECTION VII HANDLING AND STORAGE**

**PRECAUTIONARY STATEMENTS:**
Personnel should avoid inhalation of vapors. Personal contact with the product should be avoided. Should contact be made, remove saturated apparel and flush affected body area with water. Clothing must be washed and dried before reuse. Containers of this material may be hazardous when emptied since emptied containers retain material. If possible to do so, and if conforming to all local regulations, removed to a water treatment facility or, if allowed by local authorities, incinerated.

**Other handling and storage requirements:**
Store and use in well ventilated area, equivalent to fresh air. Keep containers cool, dry, and away from sources of ignition. Keep container tightly closed. Do not store with incompatible materials. Store in an area free with federal, state, and local regulations. Do not store or consume food, drink, or tobacco in areas where they may become contaminated with this material. Keep away from high temperatures, open flames, sparks, sources of ignition, etc. Use with explosion proof equipment is highly advisable.

**SECTION VIII EXPOSURE CONTROLS / PERSONAL PROTECTION**

**VENTILATION REQUIREMENTS:** Local mechanical ventilation may be sufficient to keep product vapor concentrations within specified time-weighted TLV ranges. If local ventilation proves inadequate to maintain safe vapor concentrations, supplemental local exhaust may be required. Other special precautions such as respiratory masks or environmental containment devices may be required in extreme cases.

**RESPIRATORY (SPECIFY IN DETAIL):**
The use of respiratory protection depends on vapor concentration above the time weighted TLV. Use of OSHA approved cartridge respirator or gas mask or air-pack. Chemical cartridge respirator: Half mask organic vapor cartridge. Full face organic vapor cartridge if eye protection is needed. Eye protection: Chemical goggles and/or face shield are recommended to safeguard against potential eye contact, irritation or injury.

**GLOVES:**
The use of impermeable gloves is advised to prevent skin irritation in sensitive individuals. Impermeable gloves, (chemical resistant) such as neoprene, latex or pva.

**OTHER CLOTHING AND EQUIPMENT:**
To prevent body contact, impermeable clothing and boots are recommended. Impermeable aprons and helmets (head cover) are recommended when working with this product. The availability of eye washes and safety showers in work areas is recommended.

**SECTION IX PHYSICAL / CHEMICAL CHARACTERISTICS**

**BOILING POINT:** (760mmHg) 56°C / 134°F (acetone) 95°C / -139°F (aceton)

**VAPOR PRESSURE:**
184 mmHg/68°F/20°C (acetone) 2.0 (acetone)

**SOLUBILITY IN H2O % BY WT:**% VOLATILES BY VOL: 70-90% 7.7 Fast (acetone) 1.84 (acetone)

**EVAPORATION RATE (BuAc1):**
7.7 Fast (acetone) 1.84 (acetone)

**pH (AS IS):**
N/A 1.76 (acetone) 7.2 (acetone)

**APPEARANCE AND ODOR:**
Clear liquid with acetone odor

**FLASH POINT:**
Test method: -17°C / 1.4°F (TCC) (acetone)

**AUTOIGNITION TEMP:**
465°C / 869°F (acetone)

**FLAMMABLE LIMITS IN AIR, % BY VOL:**
Lower: 0.5% Upper: 19.5% (acetone)

**SPECIFIC GRAVITY (H2O=1):**
1.18 (acetone) 1.18 (acetone)

**MELTING/FREEZING POINT:**
-17°C / 1.4°F (acetone)

**VAPOR DENSITY (AIR=1):**
1.0 (acetone) 1.0 (acetone)

**PH (1% SOLN):**
N/A 7.2 (acetone) 1.76 (acetone)

**SECTION XI REGULATIONS**

**IN THE ENVIRONMENT:**
Organic chemical. Do not discharge into waterways, surface waters, or sewer system.

**IN THE WORKPLACE:**
Controlled by 1910.1200 - PEL for Flammable Liquids.

**IN COUNTRY OF MANUFACTURE:**
Follow all local regulations.

**IN OTHER COUNTRIES:**
Follow all regulations for flammable materials.

**IN THE UNITED STATES:**
Follow all regulations for flammable materials.

**IN THE ENVIRONMENT:**
Organic chemical. Do not discharge into waterways, surface waters, or sewer system.

**IN THE WORKPLACE:**
Controlled by 1910.1200 - PEL for Flammable Liquids.

**IN COUNTRY OF MANUFACTURE:**
Follow all local regulations.

**IN OTHER COUNTRIES:**
Follow all regulations for flammable materials.

**IN THE UNITED STATES:**
Follow all regulations for flammable materials.
SECTION X STABILITY AND REACTIVITY

CONDITIONS CONTRIBUTING TO INSTABILITY: THIS PRODUCT IS STABLE.

INCOMPATIBILITY: THIS PRODUCT IS INCOMPATIBLE WITH STRONG OXIDIZING AGENTS, STRONG ACIDS OR BASES, AND SELECTED AMINES.

HAZARDOUS DECOMPOSITION PRODUCTS: THERMAL DECOMPOSITION IN THE PRESENCE OF AIR MAY YIELD CARBON MONOXIDE AND/OR CARBON DIOXIDE, AND UNIDENTIFIED ORGANICS.

CONDITIONS CONTRIBUTING TO HAZARDOUS POLYMERIZATION: N/A WILL NOT OCCUR.

SECTION XI TOXICOLOGICAL INFORMATION

ORAL RAT LD50 5800 MG/KG
INHALATION RAT LC50 1000 MG/KG
IRRITATION EYE RABBIT STANDARD DRAIZE; 20 MG, SEVERE

INVESTIGATED AS A RUMORIGEN, MUTAGEN, REPRODUCTIVE EFFECTOR

SECTION XII ECOLOGICAL INFORMATION

SOIL WHEN RELEASED INTO THE SOIL, THIS MATERIAL IS EXPECTED TO READILY BIODEGRADE. WHEN RELEASED INTO THE SOIL, THIS MATERIAL IS EXPECTED TO LEACH INTO GROUNDWATER. WHEN RELEASED INTO SOIL, THIS MATERIAL IS EXPECTED TO QUICKLY EVAPORATE.

WATER WHEN RELEASED INTO WATER THIS MATERIAL IS EXPECTED TO READILY BIODEGRADE. WHEN RELEASED INTO WATER THIS MATERIAL IS EXPECTED TO QUICKLY EVAPORATE. THIS MATERIAL HAS A LOG OCTANOL-WATER PARTITION COEFFICIENT OF LESS THAN 3.0. THIS MATERIAL IS EXPECTED TO BIOACCUMULATE.

AIR WHEN RELEASED INTO THE AIR, THIS MATERIAL MAY BE MODERATELY DEGRADED BY REACTION WITH PHOTOCHEMICALLY PRODUCE HYDROXYL RADICALS. WHEN RELEASED INTO THE AIR, THIS MATERIAL IS EXPECTED TO BE READILY REMOVED FROM THE ATMOSPHERE BY WET DEPOSITION.

ENVIRONMENTAL TOXICITY THIS MATERIAL IS NOT EXPECTED TO BE TOXIC TO AQUATIC LIFE. THE LC50/96 HR. VALUES FOR FISH ARE OVER 100 MG/L.

SECTION XIII DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: IF POSSIBLE, PUMP TO CONTROLLED CONTAINMENT AREA. ABSORB ON CLAY OR SAND. DISPOSE OF IN COMPLIANCE WITH EPA, FEDERAL, STATE, AND LOCAL REGULATIONS. TREATMENT, TRANSPORTATION AND DISPOSAL MUST BE IN COMPLIANCE WITH EPA FEDERAL, STATE, AND LOCAL REGULATIONS UNDER THE RESOURCES CONSERVATION AND RECOVERY ACT (RCRA, 40 CFR 261). TYPICALLY CONTROLLED BURNING, INCINERATION OR APPROVED LAND FILL SITES ARE AVAILABLE.

SECTION XIV TRANSPORTATION INFORMATION

<table>
<thead>
<tr>
<th>Governing Body</th>
<th>Mode</th>
<th>UN Number</th>
<th>Proper Shipping Name</th>
<th>Hazard Class</th>
<th>Packing Group</th>
<th>Quantity Limitation</th>
</tr>
</thead>
<tbody>
<tr>
<td>DOT</td>
<td>GROUND</td>
<td>1866</td>
<td>RESIN SOLUTIO N</td>
<td>3, II</td>
<td>ORMID Max 50Kg gross wt (60lbs)</td>
<td></td>
</tr>
<tr>
<td>IATA</td>
<td>AIR</td>
<td>1866</td>
<td>RESIN SOLUTIO N</td>
<td>3, II</td>
<td>Passenger Aircraft - 5L, Cargo Aircraft - 60L</td>
<td></td>
</tr>
<tr>
<td>IMDG</td>
<td>OCEAN</td>
<td>1866</td>
<td>RESIN SOLUTIO N</td>
<td>3, II</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

MARINE POLLUTANT: THIS PRODUCT DOES CONTAIN A MATERIAL ON THE MARINE POLLUTANTS TABLE (HMT 172.101 APPENDIX B) AROMATIC 100.

SECTION XV REGULATORY INFORMATION

CERCLA: IF THE REPORTABLE QUANTITY OF THIS PRODUCT IS ACCIDENTALLY SPILLED, THE INCIDENT IS Subject to the PROVISIONS OF THE COMPREHENSIVE ENVIRONMENTAL RESPONSE COMPENSATION AND LIABILITY ACT (CERCLA) AND MUST BE REPORTED TO THE NATIONAL RESPONSE CENTER BY CALLING 1-800-424-8802 or 202-426-2675.

THE REPORTABLE SPILL QUANTITY (RQ) OF THIS PRODUCT IS 5,000 POUNDS (ACETONE, BUTYL ACETATES).

SARA TITLE III: UNDER THE PROVISIONS OF TITLE III, SECTIONS 311/312 OF THE SUPERFUND AMENDMENTS AND RE-AUTHORIZATION ACT, THIS PRODUCT IS CLASSIFIED INTO THE FOLLOWING HAZARD CATEGORIES: DELAYED HEALTH, FIRE.

ADDITIONAL REGULATORY CONCERNS: (FEDERAL, FDA, USDA, CPSC, STATE, OTHER)

FEDERAL / FDA / USDA:
MARINE POLLUTANTS: THIS PRODUCT DOES CONTAIN A MATERIAL ON THE MARINE POLLUTANTS TABLE (HMT 172.101 APPENDIX B). SEE SECTION XIV
CERCLA / RQ: 5000 POUNDS THIS PRODUCT CONTAINS MATERIALS ON THE RQ TABLE (HMT 172.101 Appendix A): ACETONE, BUTYL ACETATES.
TSCA: IS THIS PRODUCT, OR ALL ITS INGREDIENTS, BEING CERTIFIED FOR INCLUSION ON THE TOXIC SUBSTANCES CONTROL ACT INVENTORY OF CHEMICAL SUBSTANCES? YES

SECTION XVI OTHER INFORMATION

PREPARED BY DARRYL MANUEL / PRESIDENT
COMPANY: VEXCON CHEMICALS, INC.
ADDRESS: 7240 STATE RD., PHILA., PA 19135 USA

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HMIS HAZARD RATINGS:

<table>
<thead>
<tr>
<th>VEXCON CERTI-VEX AC 309</th>
<th>NPCA-HMIS</th>
<th>NFPA 704</th>
</tr>
</thead>
<tbody>
<tr>
<td>HEALTH</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>FLAMMABILITY</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>REACTIVITY</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

KEY
4 -- SEVERE
3 -- SERIOUS
2 -- MODERATE
1 -- SLIGHT
0 -- MINIMAL