SECTION I - GENERAL INFORMATION

PRODUCT IDENTIFICATION:
CERTI-VEX PEN SEAL 244 40% AIM

VOC CONTENT: <250 GR/LITER OR <2.09#/GAL
CATEGORY: WATERPROOFING CONCRETE/MASONRY SEALER
COMMON NAME: SILANE WATER PROOFER
MANUFACTURER: VEXCON CHEMICALS, INC
ADDRESS: 7240 STATE RD, PHILADELPHIA, PA 19135
EMERGENCY NO: 800.858.2828 (PolySat Inc)
TELEPHONE NO: 215.332.7709 (Vexcon)
CHEMTREC NO: 800.424.9300 (CCN# 23822)
PREPARED: AUGUST 1997
UPDATED: FEBRUARY 2017
PREPARED BY: DARRY F. MANUEL, PRESIDENT

SECTION II – HAZARD IDENTIFICATION

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 WHEN USING PRODUCT IN CONFINED AREA.

SECTION III HAZARDOUS INGREDIENTS

<table>
<thead>
<tr>
<th>MATERIAL OR COMPONENTS</th>
<th>CAS NO.</th>
<th>%</th>
<th>HAZARD DATA</th>
<th>UN#</th>
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</thead>
<tbody>
<tr>
<td>SILANE</td>
<td>2943-75-1</td>
<td>35-45%</td>
<td>CAN FORM ETHYL ALCOHOL UPON HYDROLYSIS, ETHYL ALCOHOL OSHA PEL AND ACGIH TLV: 1000ppm TWA</td>
<td>1993</td>
</tr>
<tr>
<td>ACETONE</td>
<td>67-64-1</td>
<td>35-45%</td>
<td>OSHA HAZARD: FLAMMABLE LIQUID OSHA PEL: 1000 ppm ACGIH TLV: 500 ppm</td>
<td>1090</td>
</tr>
<tr>
<td>STODDARD SOLVENT / MINERAL SPIRITS</td>
<td>8052-41-3</td>
<td>10-20%</td>
<td>ACGIH TLV: 100 ppm, 325 mg/m3 (TWA), OSHA PEL: 500, 2600 mg/m3 (TWA), NIOSH REL: 350 mg/m3 (TWA)</td>
<td>1268</td>
</tr>
</tbody>
</table>

SECTION IV FIRST AID MEASURES

HEALTH HAZARD DATA HAZARD CLASSIFICATION

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 WHEN USING PRODUCT IN CONFINED AREA.

EMERGENCY AND FIRST AID PROCEDURES:

EYES: FLUSH WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES. SEEK IMMEDIATE MEDICAL ATTENTION.

SKIN: WASH WITH SOAP AND LARGE QUANTITIES OF WATER. SEEK MEDICAL ATTENTION IF SKIN IRRITATION DEVELOPS AND PERSISTS.

INHALATION: MOVE TO LOCATION FREE FROM VAPORS. IF BREATHING STOPS, BEGIN ARTIFICIAL RESPIRATION AND SEEK IMMEDIATE MEDICAL ATTENTION.
NOTES: THIS MATERIAL RELEASES METHYL ALCOHOL UPON HYDROLYSIS. METHYL ALCOHOL CAUSES OPTIC NEUROPATHY, METABOLIC ACIDOSIS AND RESPIRATORY DEPRESSION. SIGNS AND SYMPTOMS OF OVEREXPOSURE INCLUDE HEADACHE, BLURRED VISION, CONSTRUCTED VISUAL FIELDS, SHORTNESS OF BREATH, DIZZINESS AND VERTIGO. INGESTION OF METHYL ALCOHOL MAY LEAD TO BLINDNESS OR DEATH.

INGESTION: DO NOT INDUCE VOMITING; SEEK IMMEDIATE MEDICAL ATTENTION.
**SECTION V FIREFIGHTING MEASURES**

**EXTINGUISHING MEDIA:** 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 SPREADING WATER DIRECTLY INTO STORAGE CONTAINERS DUE TO DANGER OF BOIL OVER.

**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 PREASSURIZED, CUT, WELD, BRAZE, SOLDIER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO 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.

**GENERAL HAZARD:** USE PROPER GROUNDING AND眾至得 EYES:

CHEMICAL GOGGLES AND/OR FACE SHIELD ARE RECOMMENDED TO SAFEGUARD AGAINST POTENTIAL EYE CONTACT, IRRITATION OR INJURY.

**STATIC ELECTRO- ACCUMULATION 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 EXTREME HEAT, OVERPRESSURIZATION OF THE CONTAINERS CAN RESULT.

**UNUSUAL FIRE AND EXPLOSION HAZARD:**

**VAPOR IS HEAVIER THAN AIR** AND MAY TRAVEL ALONG THE GROUND OR THROUGH VENTILATION SYSTEM CONSIDERABLE DISTANCE TO A SOURCE OF IGNITION AND FLASH BACK.

**KEEP WORK AREAS FREE OF HOT METAL** SURFACES AND OTHER SOURCES OF IGNITION.

**THE USE OF SELF-CONTAINED BREATHING APPARATUS** WITH FULL FACE PIECE OPERATED IN PRESSURE-DEMAND OR OTHER POSITIVE PRESSURE MODE SHOULD BE PROVIDED FOR FIREFIGHTERS 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.

**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 SPILL, IMPLEMENT CLEAN UP PROCEDURES AND, IF IN PUBLIC AREA, KEEP PUBLIC AWAY AND ADVISE AUTHORITIES. ALSO, IF THIS PRODUCT IS SUBJECT TO CERCLA REQUIRING 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 (USE AN EXPLOSION PROOF OR HAND PUMP) OR WITH A SUITABLE ABSORBENT. PREPARE A CONVEYANCE FOR TRANSPORTATION OF RECOVERED MATERIAL AND ENSURE CONFORMITY TO EPA, FEDERAL, STATE, AND LOCAL DISPOSAL REGULATIONS.

**WATER SPILL:** REMOVE FROM SURFACE BY SKIMMING OR WITH SUITABLE ABSORBENTS. IF ALLOWED BY LOCAL AUTHORITIES AND/OR VAPOR CONSUMING AGENCIES, MAY BE USED IN NON-CONFINED WATERS. CONSULT AN EXPERT ON SUITABLE ABSORBENTS. IF ALLOWED BY LOCAL AUTHORITIES AND/OR VAPOR CONSUMING AGENCIES, MAY BE RECOVERED UNDER LOCAL MECHANICAL VENTILATION, OR LOW AREAS. CONTAIN SPILLED LIQUID WITH SAND OR EARTH. DO NOT USE COMBUSTIBLE MATERIALS SUCH AS SAWDUST. RECOVER BY PUMPING (USE AN EXPLOSION PROOF OR HAND PUMP) OR WITH A SUITABLE ABSORBENT.

**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 AREAS WITH WATER. CLOTHING MUST BE WASHED AND DRIED BEFORE REUSE. CONTAINERS OF THIS MATERIAL MAY BE HAZARDOUS WHEN EMPTIED SINCE EMPTIED CONTAINERS RETAIN PRODUCT RESIDUE (VAPOR, LIQUID AND/OR SOLID). ALL HAZARD PRECAUTIONS GIVEN IN THIS DATA SHEET MUST BE OBSERVED.

**SECTION VIII EXPOSURE CONTROLS / PERSONAL PROTECTION**

**VENTILATION REQUIREMENTS:** LOCAL MECHANICAL VENTILATION MAY BE SUBSTITUTED TO LIMIT 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 SPECIFIC 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 AVERAGE (TWA) LIMIT OF OSHA APPROVED CARTRIDGE RESPIRATOR OR CARTRIDGE WITH A RESPIRATORY MASK. Full FACE ORGANIC VAPOR CARTRIDGE. FULL FACE ORGANIC VAPOR CARTRIDGE IF EYE PROTECTION IS NEEDED.

**EYES:** CHEMICAL GOGGLES AND/OR FACE SHIELD ARE RECOMMENDED TO SAFEGUARD AGAINST POTENTIAL EYE CONTACT, IRRITATION OR INJURY.

**OTHER CLOTHING AND EQUIPMENT:** TO PREVENT BODY CONTACT, IMPERVIOUS CLOTHING AND BOOTS ARE RECOMMENDED. IMPERVIOUS APRON AND HELMETS (HEAD COVER) ARE RECOMMENDED WHEN WORKING WITH THIS PRODUCT. THE AVAILABILITY OF EYE WASHES AND SAFETY SHOWER IN WORK AREAS IS RECOMMENDED.

**SECTION IX PHYSICAL / CHEMICAL CHARACTERISTICS**

**BOILING POINT:** (760mmHg) 56°C 134 F (acetone)

**MELTING/FREEZING POINT:** ~90 C -139 F (acetone)

**VAPOR PRESSURE:** 184 mmHg@88°F/20°C (acetone)

**SOLUBILITY IN H2O:** % VOLATILES BY VOL: MISCIBLE

**EXPANSION RATE (BuAc=1):** %.836

**SPECIFIC GRAVITY (H2O=1):** 1.000

**pH (AS IS):** N/A

**APPEARANCE AND ODOR:** CLEAR LIQUID WITH PAINT SOLVENT ODOR

**FLASH POINT:** (TEST METHOD) -17°C / 1.4°F (TCC) (acetone)

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

**FLAMMABLE LIMITS IN AIR, % BY VOL:** LOWER: 2.5% UPPER: 12.8% (acetone)

**SECTION XI TOXICOLOGICAL INFORMATION**

**ORAL RAT L50:** 5800 MG/KG

**INHALATION RAT LC50:** 50,100 MG/M3

**IRRITATION EYE RABBIT (STANDARD SIZE):** 20 MG SEVERE

**CNACER LIST:** ACETONE (67-64-1): NO KNOWN NTP CARCINOGEN, NO ANTICIPATED NTP CARCINOGEN AND IARC CATEGORY- NONE.

**REPRODUCTIVE EFFECTOR:**
SECTION XII ECOLOGICAL INFORMATION

**ENVIRONMENTAL FATE**

- **WHEN RELEASED INTO SOIL**
  - This material is expected to biodegrade.
  - This material is expected to leach into groundwater.
  - This material is expected to quickly evaporate.

- **WHEN RELEASED INTO WATER**
  - This material is expected to readily biodegrade.
  - This material is expected to quickly evaporate.

- **WHEN RELEASED INTO AIR**
  - This material has a log octanol-water partition coefficient of less than 3.0.
  - This material is not expected to significantly bioaccumulate.

- **AQUATIC TOXICITY** (E.G. 96 HR.TLM)
  - This material is expected to be toxic to aquatic life. The LC50/96HRS values for fish are over 100mg/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>
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<tr>
<th>Governing Body</th>
<th>Mode</th>
<th>UN Number</th>
<th>Proper Shipping Name</th>
<th>Hazard Class</th>
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<tr>
<td>DOT</td>
<td>GROUND</td>
<td>1866</td>
<td>RESIN SOLUTION</td>
<td>3, II</td>
<td>ORM-D Max 30 Kg gross wt. (66lbs)</td>
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<tr>
<td>IATA</td>
<td>AIR</td>
<td>1866</td>
<td>RESIN SOLUTION</td>
<td>3, II</td>
<td>Passenger Aircraft - 5L</td>
<td>Cargo Aircraft - 60L</td>
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<tr>
<td>IMDG</td>
<td>OCEAN</td>
<td>1866</td>
<td>RESIN SOLUTION</td>
<td>3, II</td>
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</table>

**MARINE POLLUTANT:** This product does not contain a material on the Marine Pollutants Table (HMT 172.101 Appendix B).

SECTION XV REGULATORY INFORMATION

**TSCA:** The solvent portion of this product is listed on the TSCA inventory as a UVCB (Unknown, Variable Composition or Biological) chemical at CAS Registry Number 8052-41-3 (Stoddard Solvent).

**CERCLA:** If the reportable quantity of this product is accidently 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).

**CERCLA / RQ:** 5000 POUNDS (ACETONE)

**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 not contain a material on the Marine Pollutants Table (HMT 172.101 Appendix B).

**CALIFORNIA PROP 65:**

**TSCEA:** 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

The information provided in this material safety data sheet has been obtained from sources believed to be reliable. Vexcon provides no warranties, expressed or implied, and assumes no responsibility for the accuracy or completeness of the information contained herein.

**HMIS HAZARD RATINGS:**


<table>
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<tr>
<th>Certi-Vex PenSeal 244-40% AIM</th>
<th>NPCA-HMIS</th>
<th>NFPA 704</th>
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**KEY**

<table>
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<tr>
<th>HEALTH</th>
<th>FLAMMABILITY</th>
<th>REACTIVITY</th>
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</thead>
<tbody>
<tr>
<td>1</td>
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<td>0</td>
</tr>
</tbody>
</table>

**4 -- SEVERE**

**2 -- MODERATE**

**1 -- SLIGHT**

**0 -- MINIMAL**