HAZARD RATING
4=EXTREME
3=HIGH
2=MODERATE
1=SLIGHT
0=INSIGNIFICANT

PRODUCT IDENTIFICATION:
CERTI-VEX PENSEAL 244 100% PLUS

VOC CONTENT: <250 GRAMS/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: 800.332.7709 (Vexcon)

CHEMTREC NO: 800.424.9300 (CCN# 23822)

PREPARED: MARCH 2018

UPDATED: MARCH 2018

PREPARED BY: DARRY F. MANUEL, PRESIDENT

SECTION I - GENERAL INFORMATION

SECTION II – HAZARD IDENTIFICATION

CLASSIFICATION OF MIXTURE
FLAMMABLE LIQUIDS – CATEGORY 3
ACUTE TOXICITY, ORAL – CATEGORY 4
ACUTE TOXICITY, INHALATION – CATEGORY 4
ACUTE TOXICITY, DERMAL – CATEGORY 4
SKIN IRRITATION – CATEGORY 2
EYE IRITATION – CATEGORY 2
EYE SENSITIZATION CATEGORY 0
SPECIFIC TARGET ORGAN TOXICITY – SINGLE EXPOSURE – CATEGORY 3
ACUTE AQUATIC TOXICITY – CATEGORY 2

SIGNAL WORD: WARNING

HAZARD STATEMENT: FLAMMABLE LIQUID AND VAPOUR. HARMFUL IF SWALLOWED OR IN CONTACT WITH SKIN. CAUSES SKIN IRRITATION. MAY CAUSE AN ALLERGIC SKIN REACTION. CAUSES SERIOUS EYE IRRITATION. SWALLOWED OR IN CONTACT WITH SKIN. CAUSES SKIN IRRITATION. MAY CAUSE AN ALLERGIC SKIN REACTION. CAUSES SERIOUS EYE IRRITATION.

PRECAUTIONARY STATEMENT: FLAMMABLE LIQUID: KEEP AWAY FOR HEAT/SKATING. OPEN FLAMES/HOT SURFACES- NO SMOKING. 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>
</tr>
</thead>
<tbody>
<tr>
<td>TRIETHOXY (octyl) SILANE</td>
<td>2942-71-1</td>
<td>90-100</td>
<td>ND</td>
<td></td>
</tr>
<tr>
<td>POLYMER</td>
<td>68554-66-6</td>
<td>1-5%</td>
<td>NOT ESTABLISHED</td>
<td>N/A</td>
</tr>
<tr>
<td>BUTYL ACETATE</td>
<td>123-86-4</td>
<td>1-5%</td>
<td>ACGIH TLV 150ppm (TWA)</td>
<td>1123</td>
</tr>
</tbody>
</table>

SECTION IV – FIRST AID MEASURES

HEALTH HAZARD DATA
BASIS FOR CLASSIFICATION SOURCE

ROUTES OF EXPOSURE:

INHALATION:
THIS MATERIAL 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.

INGESTION / INHALATION:
SMALL AMOUNTS OF LIQUID ASPIRATED INTO THE RESPIRATORY SYSTEM DURING INGESTION, OR FROM VOMITING, MAY CAUSE BRONCHOPNEUMONIA OR PULMONARY EDEMA. DO NOT INDUCE VOMITING. SEEK IMMEDIATE MEDICAL ATTENTION.

EFFECTS OF OVEREXPOSITION:
ANESTHESIA, HEADACHE, NAUSEA, DIZZINESS, LIQUIDS MOCERATELY IRRITATING ON SKIN AND EYES.

ACUTE OVEREXPOSURE:
ANESTHESIA, HEADACHE, NAUSEA, DIZZINESS: MODERATE IRRITATION BY LIQUID TO SKIN AND EYES: PROLONGED CONTACT ON THE SKIN WILL CLAY AND DEAF THE SKIN POSSIBLY CAUSING DERMATITIS.

SECTION V – FIREFIGHTING MEASURES

EXTINGUISHING MEDIA:
FIRE 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.

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 PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL,
**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 REQUIREMENTS, NOTIFY THE NATIONAL RESPONSE CENTER. PREVENT LIQUID FROM ENTERING SEWERS, WATERSOURCES, 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. CONSULT AN EXPERT ON DISPOSAL OF ABSORBENTS. CONSULT AN EXPERT ON DISPOSAL OF STORAGE CONTAINERS EXPOSED TO FIRE SHOULD BE KEPT COOL WITH WATER SPRAY IN ORDER TO PREVENT PRESSURE BUILD UP.

**SECTION VII HANDLING AND STORAGE**

**PRECAUTIONARY STATEMENTS:** PERSONNEL SHOULD AVOID INHALATION OF VAPORS. PERSONAL CONTACT WITH THE PRODUCT SHOULD CONTACT USE BE MADE. REMOVE SATURATED APPAREL AND FLUSH AFFECTED BODY AREAS WITH WATER. CLOTHING MUST BE WASHED AND DRIED BEFORE REUSE. PERSONNEL SHOULD AVOID INHALATION OF VAPORS, INGESTION, OR CUTTING OR EXPOSURE TO THE SKIN. IN CASE OF INGESTION, DO NOT INDUCE VOMITING; GIVE 2-3 CUPS OF WATER OR MILK AND CALL PHYSICIAN. PERSONNEL SHOULD AVOID INHALATION OF VAPORS, CONTACT WITH THE SKIN, OR CONTACT WITH THE EYES. IN CASE OF CONTACT WITH THE EYES, FLUSH WITH 2-3 LITERS OF WATER OR EYE FIGHTER, OR GAS MASK OR AIR-PACK. CHEMICAL CARTRIDGE RESPIRATOR: HALF MASK ORGANIC VAPOR CARTRIDGE. FULL FACE ORGANIC VAPOR CARTRIDGE IF EYE PROTECTION IS NEEDED.

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

**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.

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

**GLOVES:** THE USE OF IMPERVIOUS GLOVES IS ADVISED TO PREVENT SKIN IRRITATION IN SENSITIVE INDIVIDUALS. IMPERVIOUS GLOVES, CHEMICAL RESISTANT) SUCH AS NEOPRENE, LATEX OR PVA.

**OTHER CLOTHING AND EQUIPMENT:** TO PREVENT BODY CONTACT, IMPERVIOUS CLOTHING AND BOOTS (HEAD COVER) ARE RECOMMENDED. IMPERVIOUS 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)
- 126°C / 256°F (butyl acetate)

**VAPOR PRESSURE:**
- 13 mmHg@68°F/20°C (butyl acetate)

**SOLUBILITY IN H2O % BY WT:**
- N/A

**FLASH POINT:**
- 27°C / 80.6°F (CC) (butyl acetate)

**AUTO-IGNITION TEMP:**
- 420°C / 780°F (butyl acetate)

**FLAMMABLE LIMITS IN AIR, % BY VOL:**
- LOWER: 1.2% 
- UPPER: 7.6% (butyl acetate)

**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**

**ACUTE TOXICITY**
- **ORAL**
  - LD 50 ORAL - RAT: 10768 mg/l
- **INHALATION**
  - LC50 INHALATION – RAT: 4H - 390 ppm
- **DERMAL**
  - LD 50 DERMAL – RABBIT: 17600 mg/kg

**TOXICOLOGICALLY SYNERGISTIC PRODUCTS:**
- NO INFORMATION AVAILABLE

**PRODUCTS: DELAYED AND IMMEDIATE EFFECTS AS WELL AS CHRONIC EFFECTS FROM SHORT AND LONG-TERM EXPOSURE.**
IRRITATION: NO INFORMATION AVAILABLE
SENSITIZATION: NO INFORMATION AVAILABLE
CARCINOGENICITY: NOT LISTED: IARC, NTP, ACGIH, OSHA
MUTAGENIC EFFECTS: NO INFORMATION AVAILABLE
REPRODUCTIVE EFFECTS: NO INFORMATION AVAILABLE
DEVELOPMENTAL EFFECTS: NO INFORMATION AVAILABLE
TERATOGENICITY: NO INFORMATION AVAILABLE
STOT-SINGLE EXPOSURE: CENTRAL NERVOUS SYSTEM (CNS)
STOT-REPEATED EXPOSURE: NONE KNOWN
ASPIRATION HAZARD: NO INFORMATION AVAILABLE
SYSTEMIC EFFECTS, BOTH ACUTE AND DELAYED: SYMPTOMS OF OVEREXPOSURE MAY BE HEADACHE, DIZZINESS, TIRENESS, NAUSEA AND VOMITING.
ENDOCRINE DISRUPTOR INFORMATION: NO INFORMATION AVAILABLE
OTHER ADVERSE EFFECTS: THE TOXICOLOGICAL PROPERTIES HAVE NOT BEEN FULLY INVESTIGATED

SECTION XII ECOLOGICAL INFORMATION

ECOTOXICITY
- FRESHWATER ALGAE: EC50=674.7 mg/L 75 H (DESMODESMUS SUBSPICATUS)
- FRESHWATER FISH – LEPOMIS MACROCHIRUS: LC50= 100 mg/L 96 H
- FRESHWATER FISH – PIMEPHALUS PROMELAS: LC50: 17-19 mg/L 96 H
- MICROTOX: EC50= 70.0 mg/L 5 MIN
- EC50= 82.2 mg/L 15 MIN
- EC50=95.9 mg/L 18 H
- EC50= 98.9 mg/L 30 MIN
- WATER FLEA: EC50=72.8 mg/L 24H (DAPHNIA MAGNA)
- PERSISTANCE AND DEGRADABILITY: PERSISTENCE IS UNLIKELY BASED ON INFORMATION AVAILABLE
- BIOACCUMULATION/ACCUMULATION: NO INFORMATION AVAILABLE
- MOBILITY: WILL LIKELY BE MOBILE IN THE ENVIRONMENT DUE TO ITS VOLATILITY. LOG POW 2.3

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>
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</thead>
<tbody>
<tr>
<td>DOT</td>
<td>GROUND</td>
<td>1866</td>
<td>RESIN SOLUTION</td>
<td>3</td>
<td>II</td>
</tr>
<tr>
<td>IATA</td>
<td>AIR</td>
<td>1866</td>
<td>RESIN SOLUTION</td>
<td>3</td>
<td>II</td>
</tr>
<tr>
<td>IMDG</td>
<td>OCEAN</td>
<td>1866</td>
<td>RESIN SOLUTION</td>
<td>3</td>
<td>II</td>
</tr>
<tr>
<td>MARINE POLLUTANT</td>
<td>THIS PRODUCT DOES NOT CONTAIN A MATERIAL. ON THE MARINE POLLUTANTS TABLE (HMT 172.101 APPENDIX B)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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 202-426-2975.
The REPORTABLE SPILL QUANTITY (RQ) OF THIS PRODUCT IS 5,000 POUNDS (BUTYL ACETATE).
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: IMMEDIATE (ACUTE) HEALTH HAZARD, FIRE HAZARD.
ADDITIONAL REGULATORY CONCERNS: (FEDERAL, FDA, USDA, CPSC, STATE, OTHER)
CALIFORNIA: WARNING: This product does not contains chemicals known to the state of California to cause cancer or birth defects or other reproductive harm.
CERCLA / RQ: 5000 POUNDS (ACETONE, BUTYL ACETATE)
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
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:
- HEALTH: 2 2 4=SEVERE
- FLAMMABILITY: 2 2 3=SERIOUS
- REACTIVITY: 0 0 2=MODERATE
- MOBILITY: 1=SLIGHT
- MOBILITY: 0=MINIMAL

PREPARED BY DARRYL MANUEL / PRESIDENT
COMPANY: VEXCON CHEMICALS, INC.
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VEXCON CERTI-VEX PENSEAL 244 100% PLUS
NPZA-HMIS NFPA 704 KEY
HEALTH 2 2 4=SEVERE
FLAMMABILITY 2 2 3=SERIOUS
REACTIVITY 0 0 2=MODERATE
MOBILITY 1=SLIGHT
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