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

HEALTH 1
FLAMMABILITY 1
REACTIVITY 0

SAFETY DATA SHEET
VEXCON NO. CS111
STARSEAL VERTICAL STAIN

SECTION I - GENERAL INFORMATION

PRODUCT IDENTIFICATION:
STARSEAL VERTICAL STAIN
VOC CONTENT: <250 GRAMS/LITER OR <2.08 #/GAL
CATEGORY: CONCRETE CURING COMPOUND
COMMON NAME: VINYL TOLUENE ACRYLATE EMULSION STAIN
MANUFACTURER: VEXCON CHEMICALS, INC
ADDRESS: 7240 STATE RD, PHILADELPHIA, PA 19135
EMERGENCY NO: 800.858.2828 (PolySat Inc)
TELEPHONE NO: 215.332.7709 (Vexcon)
CHEM REG NO: 900.424.9300 (CCN# 23822)
PREPARED: NOVEMBER 1996
UPDATED: MAY 2017
PREPARED BY: DARRYL F. MANUEL, PRESIDENT

SECTION II - HAZARD IDENTIFICATION

CLASSIFICATION OF MIXTURE
ASPIRATION - CATEGORY 1
EYE IRRITATION - CATEGORY 2B
SKIN IRRITATION - CATEGORY 2
SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE (NARCOTIC EFFECTS) - CATEGORY 3

SINGLE WORD: WARNING

HAZARD STATEMENT: UNDER NORMAL CONDITIONS OF USE, THIS PRODUCT IS NOT CONSIDERED HAZARDOUS ACCORDING TO REGULATORY GUIDELINES.

PRECAUTIONARY STATEMENT: UNDER NORMAL CONDITIONS OF INTENDED USE, THIS PRODUCT DOES NOT POSE A RISK TO HEALTH. EXCESSIVE EXPOSURE MAY RESULT IN EYE, SKIN OR RESPIRATOR IRRITATION. THIS PRODUCT IS AN ORGANIC LIQUID AND WATER EMULSION. PER NFPA 30 THIS MIXTURE WITH A FLASH POINT GREATER THAN 200 F IS A CLASS III B COMBUSTIBLE LIQUID. ALL PRECAUTIONS PROVIDED ARE FOR THE ORGANIC LIQUID PORTION OF WHICH THIS PRODUCT MAY CONTAIN AS LITTLE AS 5%. USE OF SOLVENT RESISTANT GLOVES, GOGGLES AND OTHER PROTECTIVE CLOTHING IS ADVISED WHEN HANDLING THIS PRODUCT.

KEEP FROM FREEZING.

SECTION III HAZARDOUS INGREDIENTS

<table>
<thead>
<tr>
<th>MATERIAL OR COMPONENTS</th>
<th>CAS NO.</th>
<th>%</th>
<th>HAZARD DATA</th>
</tr>
</thead>
<tbody>
<tr>
<td>WATER</td>
<td></td>
<td>60-70%</td>
<td>N/D</td>
</tr>
<tr>
<td>VINYL TOLUENE ACRYLATE POLYMER EMULSION</td>
<td>60381-61-6</td>
<td>30-40%</td>
<td>N/D</td>
</tr>
</tbody>
</table>
| ODORLESS MINERAL SPIRITS | 64741-65-7 | 1-5% | ACGIH TLV: 100 ppm, 525 mg/m3 (TWA)
|                        |         |       | OSHA PEL: 500 ppm, 2900 mg/m3 (TWA)
|                        |         |       | NIOSH REL: 350 mg/m3 (TWA) |

SECTION IV FIRST AID MEASURES

HEALTH HAZARD DATA HAZARD CLASSIFICATION BASIS FOR CLASSIFICATION SOURCE
ALL INFORMATION IS FOR ODORLESS MINERAL SPIRITS

ROUTES OF EXPOSURE:

INHALATION: THIS PRODUCT MAY CREATE BREATHING DIFFICULTIES, DIZZINESS, LIGHTHEADEDNESS WHEN WORKING IN AREAS WITH HIGH VAPOR CONCENTRATION. ODOLESS MINERAL SPIRITS COMPONENT.

SKIN CONTACT: THIS PRODUCT MAY CAUSE SKIN IRRITATION UPON PROLONGED OR REPEATED CONTACT. ODOLESS MINERAL SPIRITS COMPONENT.

SKIN ABSORPTION: THIS PRODUCT MAY CAUSE SKIN IRRITATION UPON PROLONGED OR REPEATED CONTACT. ODOLESS MINERAL SPIRITS COMPONENT.

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 OVEREXPOSURE: TLV 50 ppm

ANESTHESIA, HEADACHE, NAUSEA, DIZZINESS. LIQUIDS MODERATELY 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 DEFEAT THE SKIN POSSIBLY CAUSING DERMATITIS.

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.

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

**EXTINGUISHING MEDIA:**
Fires involving this product may be controlled by foam, carbon dioxide, dry chemicals, or water spray.

**GENERAL HAZARD:**
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, grind, or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition. Do not weld, weld, or cause injury or death. Empty drums should be completely drained, properly bunged and promptly returned to a drum reconditioner, or properly disposed of.

**ELECTRO-STATIC ACCUMULATION HAZARD:**
Use proper grounding.

**UNUSUAL FIRE AND EXPLOSION HAZARD:**
Product will burn if temperature exceeds boiling point of water mix under some conditions. No unusual hazards.

**SPECIAL FIRE FIGHTING PROCEDURES:**
None. The use of self-contained breathing apparatus with full face-piece operated in pressure-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.

SECTION VI ACCIDENTAL RELEASE MEASURES

**STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:**
Eliminate sources of ignition (flares, flames, pilot lights, electrical sparks). 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. Dike spill area with sand or earth to contain spilled liquid and prevent spreading. Do not use combustible materials such as sawdust. Pump liquid to salvage tank. Remaining liquid can be taken up on sand, earth, floor absorbent, or with another suitable absorbent material and shoveled into containers. Consult an expert on disposal of recovered material and ensure conformity to EPA, federal, state, and local disposal regulations.

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/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.

**OTHER HANDLING AND STORAGE REQUIREMENTS:**
Store in well ventilated area. Keep container tightly closed. Do not store with incompatible materials. Store in accordance 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, 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.

**EYES:**
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)
212°F / 100°C

**VAPOR PRESSURE:**
17.5 mmHg@68°F/20°C

**SOLUBILITY IN H2O % BY WT:**
100%

**EVAPORATION RATE**
(BuAc=1): 0.6

**PH (AS IS):**
6-9

**SPECIFIC GRAVITY (H2O=1):**
1.08

**APPEARANCE AND ODOR:**
Liquid with paint-like odor, various colors

**FLASH POINT:**
(TEST METHOD)
>93°C / >200°F (TCC)

**AUTOIGNITION TEMP:**
N/D

**FLAMMABLE LIMITS IN AIR, % BY VOL:**
LOWER: N/D  UPPER: N/D

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.

**CONDITIONS CONTRIBUTING TO HAZARDOUS POLYMERIZATION:**
N/A will not occur.
SECTION XI TOXICOLOGICAL INFORMATION

TOXICITY DATA

COMPONENT ANALYSIS – LD50/LC50
ODORLESS MINERAL SPIRITS
INHALATION – LC50 – RAT: >5.04 mg/L/4H
Dermal – LD50 – Rat: >7000 mg/kg
Dermal – LD50 – Rabbit: >2000 mg/kg

ACUTE EFFECTS

MAY BE IRRITATION TO SKIN, EYES AND RESPIRATORY TRACT. HIGH CONCENTRATIONS OF VAPOR OR MIST MAY CAUSE NAUSEA, VOMITING, HEADACHES, DIZZINESS, LOSS OF COORDINATION, NUMBNESS AND OTHER CENTRAL NERVOUS SYSTEM EFFECTS. MAY BE HARMFUL IF SWALLOWED. MAY CAUSE THROAT IRRITATION, NAUSEA, VOMITING, DIARRHEA AND CENTRAL NERVOUS SYSTEM EFFECTS. ASPIRATION HAZARD: BREATHING PRODUCT INTO THE LUNGS DURING INGESTION OR VOMITING MAY CAUSE LUNG INJURY AND POSSIBLE DEATH.

REPEATED DOSE EFFECTS

BASED ON BEST CURRENT INFORMATION, THERE IS NO KNOWN REPRODUCTIVE TOXICITY ASSOCIATED WITH THIS PRODUCT.

CARCINOGENICITY

BASED ON BEST CURRENT INFORMATION, THERE IS NO KNOWN MUTAGENICITY ASSOCIATED WITH THIS PRODUCT.

TARGET ORGANS EFFECTS

PROLONGED OR REPEATED EYE CONTACT MAY CAUSE INFLAMMATION OF THE MEMBRANE LINING THE EYELIDS AND COVERING THE EYEBALL (CONJUNCTIVITIS). PROLONGED OR REPEATED SKIN CONTACT MAY CAUSE DRYING, CRACKING, REDNESS, ITCHING, AND OR SWELLING (DERMATITIS)

SECTION XII ECOLOGICAL INFORMATION

ECOTOXICITY

COMPONENT ANALYSIS – ECOTOXICITY – AQUATIC TOXICITY
NAPHTHA (PETROLEUM), HEAVY ALKYLATE (64741-65-7)
72 HRS EC50 SELENASTRUM CAPRICORNUTUM – 3000 mg/L

PERSISTENCE/DEGRADABILITY
NOT EXPECTED TO PERSIST.

BIOACCUMULATION/ACCUMULATION
NOT EXPECTED TO BIOACCUMULATE

MOBILITY IN ENVIRONMENTAL MEDIA
NOT KNOWN

OTHER ADVERSE EFFECTS
NOT AVAILABLE. ALSO SEE SECTION 12 ECOLOGICAL INFORMATION

OCTANOL/WATER PARTITION COEFFICIENT
NOT AVAILABLE

SECTION XIII DISPOSAL CONSIDERATIONS

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).

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>
</tr>
</thead>
<tbody>
<tr>
<td>DOT</td>
<td>GROUND</td>
<td>NON-REGULATE D</td>
<td>NON-REGULATE D</td>
<td>NON-REGULATE D</td>
<td>NA</td>
</tr>
<tr>
<td>IATA</td>
<td>AIR</td>
<td>NON-REGULATE D</td>
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<tr>
<td>IMDG</td>
<td>OCEAN</td>
<td>NON-REGULATE D</td>
<td>NON-REGULATE D</td>
<td>NON-REGULATE D</td>
<td>NA</td>
</tr>
<tr>
<td>MARINE POLLUTANT:</td>
<td></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>
</tr>
</tbody>
</table>
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 64741-65-7 (Stoddard Solvent).

**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. No reportable spill quantity (RQ) has been established for this product (Stoddard Solvent, aromatic solvent naphtha).

**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); see Section XIV.

**CALIFORNIA PROP 65:** Warning: This product contains chemicals known to the state of California to cause cancer or birth defects or other reproductive harm. (Epichlorohydrin, Ethylbenzene, Crystalline Silica particles of respirable size)

**CERCLA / RQ:** None established. This product does not contain a material on the RQ table (HMT 172.101 Appendix A).

**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:**

<table>
<thead>
<tr>
<th>STARSEAL VERTICAL STAINS</th>
<th>NPCA-HMIS</th>
<th>NFPA 704</th>
<th>KEY</th>
</tr>
</thead>
<tbody>
<tr>
<td>HEALTH</td>
<td>1</td>
<td>1</td>
<td>2 -- MODERATE</td>
</tr>
<tr>
<td>FLAMMABILITY</td>
<td>1</td>
<td>1</td>
<td>1 -- SLIGHT</td>
</tr>
<tr>
<td>REACTIVITY</td>
<td>0</td>
<td>0</td>
<td>0 -- MINIMAL</td>
</tr>
</tbody>
</table>