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

HEALTH 1
FLAMMABILITY 3
REACTIVITY 0

SECTION I - GENERAL INFORMATION

PRODUCT IDENTIFICATION:
CERTI-VEX AC 1315 SUPER GLOSS

VOC CONTENT: <350 GRAMS/LITER OR <2.92 #/GAL

CATEGORY: CONCRETE CURING COMPOUND

COMMON NAME: STYRENE ACRYLATE COPOLYMER IN AROMATIC/EXEMPT SOLVENT

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 2003

UPDATED: MAY 2020

PREPARED BY: DARRY F. MANUEL, PRESIDENT

SECTION II - HAZARD IDENTIFICATION

CLASSIFICATION OF MIXTURE
FLAMMABLE LIQUIDS – CATEGORY 2
ACUTE TOXICITY: INHALATION – CATEGORY 4
SPECIFIC TARGET ORGAN SYSTEMIC TOXICITY – SINGLE EXPOSURE – CATEGORY 3
ACUTE AQUATIC TOXICITY – CATEGORY 3

SINGLE WORD: DANGER

HAZARD STATEMENT: HIGHLY FLAMMABLE LIQUID AND VAPOR. HARMFUL IF INHALED. MAY CAUSE RESPIRATORY IRRITATION. MAY CAUSE DROWSINESS OR DIZZINESS. HARMFUL TO AQUATIC LIFE.

PRECAUTIONARY STATEMENT FLAMMABLE LIQUID: KEEP AWAY FOR HEAT/SPIRKS/ OPEN FLAMES/SHOT 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>
</tr>
</thead>
<tbody>
<tr>
<td>STYRENE ACRYLATE POLYMER</td>
<td>25036-16-2</td>
<td>35-45%</td>
<td>ND</td>
</tr>
<tr>
<td>TERTIARY BUTYL ACETATE</td>
<td>540-88-6</td>
<td>35-45%</td>
<td>OSHA HAZARD: FLAMMABLE LIQUID OSHA PEL: 200 ppm ACGIH TLV: 200 ppm</td>
</tr>
<tr>
<td>HEAVY AROMATIC SOLVENT NAPTHA</td>
<td>64742-94-5</td>
<td>1-5%</td>
<td>ACGIH TLV: 100 ppm, 525 mg/m3 (TWA) OSHA PEL: 500 ppm, 2900 mg/m3 (TWA) NIOSH REL: 350 mg/m3 (TWA)</td>
</tr>
<tr>
<td>SOLVENT NAPTHA (Petroleum) LIGHT AROMATIC</td>
<td>64742-94-6</td>
<td>&lt;5%</td>
<td>OSHA HAZARD: COMBUSTIBLE TLV 50 ppm</td>
</tr>
</tbody>
</table>

SECTION IV FIRST AID MEASURES

HEALTH HAZARD DATA HAZARD CLASSIFICATION BASIS FOR CLASSIFICATION SOURCE

ROUTES OF EXPOSURE:

INHALATION: 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.

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 DEFAT 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 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. THE USE OF SELF-CONTAINED BREATHING APPARATUS IS RECOMMENDED FOR FIRE FIGHTERS. SEE ALSO SECTION IX.
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, 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, PROMPTLY RETURNED TO A DRUM RECONDITIOner, OR PROPERLY DISPOSED OF.

ELECTRO-STATIC ACCUMULATION HAZARD:
THIS PRODUCT IS EXTREMELY FLAMMABLE AND EXPLOSIVE UNDER NORMAL CONDITIONS IN THE PRESENCE OF FLAME OR SPARK SOURCE.

UNUSUAL FIRE AND EXPLOSION HAZARD:
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 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 SELF-CONTAINED BREATHING APPARATUS WITH SUPPLEMENTAL LOCAL EXHAUST MAY BE REQUIRED. OTHER SPECIAL PRECAUTIONS SUCH AS RESPIRATORY MASKS OR ENVIRONMENTAL CONTAINMENT DEVICES MAY BE REQUIRED IN EXTREME CASES.

BOILING POINT: (760mmHg)
98 C / 208 F
(TERT BUTYL ACETATE)

MELTING POINT: ~62 C, -79 F
(tert butyl acetate)

VAPOR PRESSURE:
41 mmHg @ 77°F/25°C ( tert butyl acetate)

SOLUBILITY IN H20 % BY WT:
0.5%

EVAPORATION RATE (BuAc=1):
MEDIUM 2.8 ( tert butyl acetate)

PH (AS IS) N/A

APPEARANCE AND ODOR:
CLEAR LIQUID WITH SWEET SOLVENT ODOR

FLASH POINT:
4.4°C / 40°F (TCC)
[tert butyl acetate]

AUTIGNITION TEMP:
518°C / 964°F ( tert butyl acetate)

FLAMMABLE LIMITS IN AIR, % BY VOL:
LOWER: 1.26% UPPER: 6.68%
(tert butyl acetate)

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.

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. IMPERVIOUS, CHEMICAL RESISTANT GLOVES SUCH AS NEOPRENE, LATEX OR PVA. IMPERVIOUS CLOTHING AND BOOTS 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

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

<table>
<thead>
<tr>
<th>LC50 (VAPOR)</th>
<th>RAT</th>
<th>4211 ppm</th>
<th>6 HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 (ORAL)</td>
<td>RAT</td>
<td>4500 MG/KG</td>
<td>BWT</td>
</tr>
<tr>
<td>LD50</td>
<td>RABBIT</td>
<td>&gt;2000 G/KG</td>
<td>BWT</td>
</tr>
</tbody>
</table>

ACUTE EFFECTS

INHALATION

VAPORS OR AEROSOL MAY CAUSE IRRITATION OF THE
**SECTION XII ECOLOGICAL INFORMATION**

**ECOTOXICITY**

- **Acute Toxicity to Fish**: LC50/96 Hours = 78 mg/l
- **Acute Toxicity to Aquatic Invertebrates**: EC50/4 Hours = 370 mg/l
- **Toxicity to Aquatic Plants**: EC50/9 Hours = 60 mg/l
- **Toxicity to Algae**: EC3/16 Hours = Low

**GARCINOGENICITY**

- Specific data not available. T-butanol, the primary metabolite of T-butyl acetate, is an animal carcinogen. In drinking water study, T-butanol induced benign kidney tumors in male rats via an a2μ-globulin mode of action. A tumor mechanism not relevant to humans. In female mice, there was an increase incidence of benign thyroid tumors. A tumor mechanism that most likely is not relevant to humans. This substance is not classified for carcinogenicity by IARC, OSHA, NTP or the EPA.

**DEVELOPMENTAL TOXICITY**

- This substance is not a developmental toxicant. It did not cause maternal toxicity and no embryofetal toxicity or developmental abnormalities were observed in the offspring of animals following inhalation exposure of 1600 ppm for 90 days in a repeated exposure toxicity study conducted via inhalation and there was no adverse effects on estrous cycle length in mice.

**GENETIC TOXICITY**

- Negative for genotoxicity using both in vitro and in vivo test.

**REPRODUCTIVE EFFECTS**

- Ingestion may cause CNS depression, gastric discomfort, and vomiting. This material is an aspiration hazard.
- Skin contact: no systemic toxicity is expected from acute dermal exposure.
- Irritation: skin not a skin irritant. Eyes: no eye irritation.
- Sensitization: does not induce skin sensitization.
- Repeated does toxicity: inhalation repeated exposure studies demonstrated target organ effects in male rats (kidney) by mechanism of action that is not relevant to human n. A nervous system transient behavior changes that were observed immediately after exposure.

**ENVIRONMENTAL FATE AND DEGRADABILITY**

- Biological degradation: expected to hydrolyze slowly in water (half-life 20.5 years or longer). Atmospheric vapors expected to be photochemically degraded by reaction with hydroxyl radicals (halts like 10.7 days). Inherently bioeducrable.
- Other adverse effects: this material is not considered persistent by EPA, and is not expected to contribute to the greenhouse gas effect, stratospheric ozone depletion, tropospheric ozone formation, or particulate matter formation.

**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. One recommended method is disposal in the National Pollution Discharge Elimination System (NPDES) into public waters or waterways unless authorized by a National Pollution Discharge Elimination System (NPDES) permit issued by the Environmental Protection Agency (EPA). 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 SOLUTION</td>
<td>3</td>
<td>II</td>
<td>ORM-D Max 30Kg gross wt (66lbs)</td>
</tr>
<tr>
<td>IATA</td>
<td>AIR</td>
<td>1866</td>
<td>RESIN SOLUTION</td>
<td>3</td>
<td>II</td>
<td>Passenge r Aircraft - 5L Cargo Aircraft - 60L</td>
</tr>
<tr>
<td>IMDG</td>
<td>OCEAN</td>
<td>1866</td>
<td>RESIN SOLUTION</td>
<td>3</td>
<td>II</td>
<td>Marin e Pollutant: This product does contain a material on the Marine Pollutants Table (HMT 172.101 APPENDIX B) AROMATIC 100 &amp; 150</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 64742-95-6 (aromatic 100). 540-88-5 (tertiary butyl acetate).

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 (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: 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 (ACETONE, BUTYL ACETATE) THIS PRODUCT CONTAINS A MATERIAL ON THE RQ TABLE (HMT 172.101 Appendix A): 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:

THIS INFORMATION IS FOR PEOPLE TRAINED IN:
NATIONAL PAINT AND COATINGS ASSOCIATIONS (NPICA)
HAZARDOUS MATERIALS IDENTIFICATION SYSTEM (HMIS)
NATIONAL FIRE PROTECTION ASSOCIATION (NFPA 704)
IDENTIFICATION OF FIRE HAZARDS OF MATERIALS

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

CERTI-VEX AC 1315
SUPER GLOSS

NPCA- HMIS NFPA 704
HEALTH 1 1 2 -- MODERATE
FLAMMABILITY 3 3 1 -- SLIGHT
REACTIVITY 0 0 0 -- MINIMAL