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

HEALTH 2
FLAMMABILITY 3
REACTIVITY 0

SECTION I - GENERAL INFORMATION

PRODUCT IDENTIFICATION:
CERTI-VEX AC 1315 SUPER SEAL HG
VOC CONTENT: <350 GRAMS/LITER OR <2.91#/GAL
COMMON NAME: STYRENE ACRYLATE COPOLYMER IN AROMATIC/EXEMPT SOLVENT
MANUFACTURER: VEXCON CHEMICALS, INC.
ADDRESS: 7240 STATE RD., PHILA., PA 19135 USA
PHONE: 1-215-332-7709
CHEMTREC NO: 1-800-424-9300
PREPARED: SEPTEMBER 2008
UPDATED: NOVEMBER 2016
PREPARED BY: DARRYL F. MANUEL, PRESIDENT

SECTION II – HAZARD IDENTIFICATION

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

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/SPARKS/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. ASCENSION OF MATERIAL INTO THE LUNGS CAN CAUSE CHEMICAL PNEUMONITIS WHICH CAN BE FATAL; USE OF RESPIRATORS IS ADVISED WHEN HANDLING THIS PRODUCT.

SECTION III HAZARDOUS INGREDIENTS

<table>
<thead>
<tr>
<th>MATERIAL OR COMPONENTS</th>
<th>CAS NO.</th>
<th>% HAZARD DATA</th>
</tr>
</thead>
<tbody>
<tr>
<td>STYRENE ACRYLATE POLYMER</td>
<td>25036-16-2</td>
<td>20-35% ND</td>
</tr>
<tr>
<td>TERT BUTYL ACETATE</td>
<td>540-88-5</td>
<td>20-70% OSHA HAZARD: FLAMMABLE LIQUID</td>
</tr>
<tr>
<td>ACETONE</td>
<td>67-64-1</td>
<td>20-35% OSHA PEL: 1000 ppm ACGIH TLV: 500 ppm NIOSH REL: 250 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 IRITANT.

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 TO 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 carbon dioxide, dry chemicals or water spray.

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 incendiarly 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, properly bunged and 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 sparks, static and/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:

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 DISCHARGE OF MATERIAL; IF POSSIBLE TO DO SO WITHOUT HAZARD.

WATER SPILL: REMOVE FROM SURFACE BY SKIMMING OR WITH SUITABLE ABSORBENTS. IF ALLOWED BY LOCAL AUTHORITIES AND ENVIRONMENTAL AGENCIES, SINKING AND/OR SUITABLE DISPERSANTS MAY BE USED IN NON-CONFINED WATERS.

OTHER HANDLING AND STORAGE REQUIREMENTS: KEEP PRODUCT CONTAINERS COOL, DRY AND AWAY FROM SOURCES OF IGNITION. USE AND STORE THIS PRODUCT WITH ADEQUATE VENTILATION EQUIVALENT TO FRESH AIR. KEEP CONTAINER TIGHTLY CLOSED. DO NOT STORE WITH INCOMPATIBLE MATERIALS. STORE IN ACCORDANCE WITH FEDERAL 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 VII HANDLING AND STORAGE

PRECAUTIONARY STATEMENTS: WATER MAY BE UNSUITABLE AS AN EXTINGUISHING MEDIUM BUT HELPFUL IN KEEPING ADJACENT CONTAINERS COOL. AVOID SPREADING BURNING LIQUID WITH WATER USED FOR COOLING PURPOSES. PERSONNEL SHOULD AVOID INHALATION OF VAPORS. PERSONAL CONTACT WITH THE PRODUCT SHOULD BE AVOIdED. IN CASE OF CONTACT WASH IMMEDIATELY WITH WATER. EMBRYO 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 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.

GLOVES: THE USE OF IMPERMEABLE 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 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)
133°F / 56.5°C
VAPOUR PRESSURE: (acetone)
400 mmHg@104°F/39.5°C
SOLUBILITY IN H2O % BY WT:
0.5%
EVAPORATION RATE (BuAc=1):
2.8
SPECIFIC GRAVITY (H2O=1):
0.885
PH (AS IS)
N/A
pH (AS SOLN)
N/A
APPEARANCE AND ODOR:
CLEAR LIQUID WITH SWEET SOLVENT ODOR
FLASH POINT:
-20°C / -4°F (TCC)
(acetone)
AUTOIGNITION TEMP:
465°C / 869°F
FLAMMABLE LIMITS IN AIR, % BY VOL:
LOWER: 2.5% UPPER: 12.8%

SECTION X STABILITY AND REACTIVITY

OTHER HANDLING AND STORAGE REQUIREMENTS: KEEP PRODUCT CONTAINERS COOL, DRY AND AWAY FROM SOURCES OF IGNITION. USE AND STORE THIS PRODUCT WITH ADEQUATE VENTILATION EQUIVALENT TO FRESH AIR. KEEP CONTAINER TIGHTLY CLOSED. DO NOT STORE WITH INCOMPATIBLE MATERIALS. STORE IN ACCORDANCE WITH FEDERAL 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 XI PHYSICAL / CHEMICAL CHARACTERISTICS

PHYSICAL STATES:
L / V / S
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 INSTABILITY:
THIS PRODUCT IS STABLE.
CONDITIONS CONTRIBUTING TO HAZARDOUS REACTIONS:
N/A WILL NOT OCCUR.
SECTION XI TOXICOLOGICAL INFORMATION

<table>
<thead>
<tr>
<th>TOXICITY</th>
<th>RATS</th>
<th>4211 ppm</th>
<th>6 HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 (VAPOR)</td>
<td>RAT</td>
<td>4211 ppm</td>
<td>6 HOURS</td>
</tr>
<tr>
<td>LD50 (ORAL)</td>
<td>RABBIT</td>
<td>&gt;2000 ppm</td>
<td>20 HOURS</td>
</tr>
</tbody>
</table>

**ACUTE TOXICITY**
- LD50 (Rat): 4500 mg/kg BWT
- LD50 (Rabbit): >2000 mg/kg BWT

**ACUTE EFFECTS**
- Inhalation: Vapors or aerosol may cause irritation of the eyes, nose and throat as well as CNS depression, dizziness, loss of concentration, with collapse, coma and death. Possible in cases of severe over exposure. Inhalation of airborne droplets may cause irritation of the respiratory tract.
- Ingestion: May cause CNS depression, gastric distress, discomfort, and vomiting. This material is an aspiration hazard.
- Skin Contact: No systemic toxicity is expected from acute dermal exposure.

**SENSITIZATION**
- Does not induce skin sensitization.

**REPEATED DOES TOXICITY**
- This substance is not toxic to reproduction. The reproductive toxicity of T-butyl acetate has been investigated in rats via a inhalation route. There were no adverse effects on reproductive performance or sperm number or fertility at 1600 ppm. The highest exposure level tested. In addition, no gross or histopathologic effects were observed in the reproductive organs of male and female rats or mice exposed at 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.

**REPRODUCTIVE EFFECTS**
- This substance is not a developmental toxicant. It did not cause maternal toxicity and no embryofetal toxicity or developmental abnormalities were observed in the off sprin of animals following inhalation exposures of 1600 ppm.

**DEVELOPMENTAL TOXICITY**
- 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 a-2u-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.

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

**ECOTOXICITY**
- NO DATA AVAILABLE
- NON DATA AVAILABLE
- Expected to show low toxicity to higher plants

**ENVIRONMENTAL FATE AND PATHWAYS**
- Expected to be emitted and partition predominantly to the atmosphere. Accidental releases to water or soil are expected to evaporated and undergo atmospheric decomposition processes.
- Behavior in environmental compartments; released material would be expected to show high soil mobility and to volatilize readily form soil. NAD surface waters, forming atmospheric vapor.
- Biodegradation: expected to hydrolyze slowly in water (half-life of 0.5 years or longer). Atmospheric vapors expected to be photochemically degraded by reaction with hydroxyl radicals (half-life of 19.7 days), inherently biodegradable.
- Bioaccumulation: biodegradation factor (BCF) 5.61 (QDSAR calculated value). This material is not expected to bioaccumulate.
- Other adverse effects: this material is not considered persistent by EPA. 

**ACUTE FISH TOXICITY**
- LC50/96 HOURS: 240 mg/l

**ACUTE TOXICITY TO AQUATIC INVERTEBRATES**
- EC50/48 HOURS: 350 mg/l

**TOXICITY TO AQUATIC PLANTS**
- PSEUDO MONAS PUTIDA 76 mg/l

**TOXICITY TO MICROORGANISMS**
- EC3/16 HOURS: ENTOSPIRUS SULCATUM 970 mg/l

**TOXICITY TO AQUATIC PLANTS**
- NO DATA AVAILABLE

**ACUTE TOXICITY TO BACTERIA**
- NO DATA AVAILABLE

**ACUTE TOXICITY TO FISH**
- NO DATA AVAILABLE

**ACUTE TOXICITY TO AQUATIC INVERTEBRATES**
- NO DATA AVAILABLE

**EC50/48 HOURS**
- 240 mg/l

**EC50/48 HOURS**
- 350 mg/l

**EC50/48 HOURS**
- 76 mg/l

**EC50/48 HOURS**
- 970 mg/l

**EC50/48 HOURS**
- 240 mg/l

**EC50/48 HOURS**
- 350 mg/l

**EC50/48 HOURS**
- 76 mg/l

**EC50/48 HOURS**
- 970 mg/l
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>Passenger Aircraft - 5L Cargo Aircraft - 50L</td>
</tr>
<tr>
<td>IMDG</td>
<td>OCEAN</td>
<td>1866</td>
<td>RESIN SOLUTION</td>
<td>3</td>
<td>II</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

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 (ACETONE, 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, OPSC, 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

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: 5000 POUNDS (ACETONE, BUTYL ACETATE) THIS PRODUCT CONTAINS A MATERIAL ON THE RQ TABLE (HMT 172.101 Appendix A): 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, EXPRESS OR IMPLIED, AND ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OR COMPLETENESS OF THE INFORMATION CONTAINED HEREIN.

HMIS HAZARD RATINGS:

CERTI-VEX AC 1315 SUPER SEAL HG | NPCA-HMIS NFPA 704
---|---|---
HEALTH | 2 | 2 | 3 -- SERIOUS
FLAMMABILITY | 3 | 3 | 1 -- SLIGHT
REACTIVITY | 0 | 0 | 0 -- MINIMAL

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

HMIS HAZARD RATINGS:

THIS INFORMATION IS FOR PEOPLE TRAINED IN:

NATIONAL PAINT AND COATINGS ASSOCIATIONS (NPACA) HAZARDOUS MATERIALS IDENTIFICATION SYSTEM (HMIS) NATIONAL FIRE PROTECTION ASSOCIATION (NFPA 704) IDENTIFICATION OF FIRE HAZARDS OF MATERIALS

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

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

NPCA-HMIS

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: 5000 POUNDS (ACETONE, BUTYL ACETATE) THIS PRODUCT CONTAINS A MATERIAL ON THE RQ TABLE (HMT 172.101 Appendix A): ACETONE, BUTYL ACETATE,