



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

| | |
|---------------------|----------|
| HEALTH | 2 |
| FLAMMABILITY | 0 |
| REACTIVITY | 0 |

SAFETY DATA SHEET
VEXCON NO. RP107
CERTI-VEX PATCH

SECTION I - GENERAL INFORMATION

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| PRODUCT IDENTIFICATION: | |
| CERTI-VEX PATCH | |
| VOC CONTENT: NO VOC REQUIRED | |
| CATEGORY: CEMENTITIOUS GROUTING MATERIAL | |
| COMMON NAME: CEMENTITIOUS GROUTING MATERIAL | |
| MANUFACTURER: | VEXCON CHEMICALS, INC. |
| ADDRESS: | 7240 STATE RD., PHILA., PA 19135 USA |
| EMERGENCY NO: | 1-800-858-2828 (PolySat) |
| TELEPHONE NO: | 1-215-332-7709 (Vexcon) |
| CHEMTREC NO: | 1-800-424-9300 (CCN#23822) |
| PREPARED: | SEPTEMBER 1999 |
| UPDATED: | OCTOBER 2016 |
| PREPARED BY: | DARRYL F. MANUEL, PRESIDENT |

SECTION II – HAZARD IDENTIFICATION

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| DOT SHIPPING NAME: UN ID NUMBER / SHIPPING NAME / HAZARD CLASS / PKG GROUP IN CONTAINERS LESS THAN 119 GALS: (NON-REGULATED) IN CONTAINERS GREATER THAN 119 GALS: (NON-REGULATED) FOR LIMITED QUANTITY AIR & OCEAN SHIPMENT: (NON-REGULATED) |
| HEALTH AND SAFETY: THIS PRODUCT IS A GRAY POWDERED SOLID. CONTINUED INHALATION OF DUST OVER A PERIOD OF YEARS WITHOUT PROPER RESPIRATOR AND VENTILATION CONTROLS WILL CAUSE SILICOSIS AND LUNG CANCER. USED ONLY WITH SAFETY GLASSES NEOPRENE GLOVES AND PROTECTIVE CLOTHING RECOMMENDED. |
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SECTION III HAZARDOUS INGREDIENTS

| MATERIAL OR COMPONENTS | CAS NO. | % | HAZARD DATA | UN# |
|---------------------------|------------|--------|----------------------------------------------------------------------------------------------------------------------------------------------|-----|
| PORTLAND CEMENT | 65997-15-1 | 35-45% | OSHA PEL: TWA 50 mppcf NOISH REL; TWA 5 mg/m3 (resp) NIOSH REL: TWA 10 mg/m3 (total) | |
| SILICA CRYSTALLINE QUARTZ | 14808-60-7 | 35-45% | ACGIH TWA: 0.05 mg/m3 RESP. OSHA TWA: 0.1 mg/m3 RESP. OSHA TWA: 0.3 mg/m3 TOTAL OSHA PEL: 5 mg/m3 RESP. OSHA PEL: 15 mg/m3 TOTAL | |
| SILICON DIOXIDE | 7631-86-9 | 15-25% | NOISH REL: TWA 6mg/m3 OSHA PEL; 20mppcf (Mineral Dust) | |

SECTION IV FIRST AID MEASURES

HEALTH HAZARD DATA HAZARD CLASSIFICATION BASIS FOR CLASSIFICATION SOURCE

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| ROUTES OF EXPOSURE: | |
| INHALATION: | DUST CAN CAUSE INFLAMMATION OF NOSE TISSUE LINING AND CORNEA. HYPERSENSITIVITY MAY CAUSE ALLERGIC DERMATITIS. CONTINUED INHALATION OF DUST OVER A PERIOD OF YEARS WITH OUR PROPER RESPIRATOR AND VENTILATION CONTROLS WILL CAUSE SILICOSIS AND LUNG CANCER |
| SKIN CONTACT: | THIS PRODUCT MAY CAUSE SKIN IRRITATION UPON PROLONGED OR REPEATED CONTACT. PRODUCT IS ALKALINE AND CAN IRRITATE THE SKIN |
| SKIN ABSORPTION: | THIS PRODUCT MAY CAUSE SKIN IRRITATION UPON PROLONGED OR REPEATED CONTACT. PRODUCT IS ALKALINE AND CAN IRRITATE THE SKIN |
| EYE CONTACT: | THIS PRODUCT MAY BE AN EYE IRRITANT. |
| INGESTION / INHALATION | CURRENT OSHA STANDARDS FOR CRYSTALLINE SILICA IS 10mg PER CUBIC METER OF AIR DIVIDED BY THE PERCENT S102 AVERAGED OVER AND EIGHT HOUR WORK SHIFT AND FOR TOTAL DUST IS 30 mg/m ³ DIVIDED BY THE PERCENT S12 AVERAGED OVER AND EIGHT HOUR WORK SHIFT. SEEK IMMEDIATE MEDICAL ATTENTION. |
| EFFECTS OF OVEREXPOSURE: | WITHOUT PROPER RESPIRATOR AND VENTILATION CONTROLS PROLONGED INHALATION OF DUST OVER A PERIOD OF YEARS WILL CAUSE SILICOSIS AND LUNG CANCER |
| ACUTE OVEREXPOSURE: | PRODUCT IS ALKALINE AND CAN IRRITATE THE SKIN AND EYES AS WELL AS THE MUCOUS MEMBRANES. |
| EMERGENCY AND FIRST AID PROCEDURES: | |
| EYES: | FLUSH WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES. SEEK IMMEDIATE MEDICAL ATTENTION. CONSULT A PHYSICIAN. |
| 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 IS DIFFICULT, GIVE OXYGEN. IF BREATHING STOPS, BEGIN ARTIFICIAL RESPIRATION AND SEEK IMMEDIATE MEDICAL ATTENTION. THIS PRODUCT CONTAINS SOMETIMES SMALL QUANTITIES OF RESPIRABLE CRYSTALLINE SILICA. PROLONGED / REPEATED INHALATION OF RESPIRABLE CRYSTALLINE SILICA DUST MAY CAUSE DELAYED LUNG INJURY (SILICOSIS) AND INCREASE THE RISKS OF DEVELOPING RESPIRATORY CANCER. |
| INGESTION: | SEEK IMMEDIATE MEDICAL ATTENTION. GIVE MILK OR EGG WHITE BEATEN WITH WATER UNTIL VOMIT FLUID IS CLEAR. IF VOMITING DOES NOT OCCUR, INDUCE VOMITING BY GAGGING THE VICTIM. DO NOT INDUCE VOMITING OR GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. |

SECTION V FIREFIGHTING MEASURES

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| EXTINGUISHING MEDIA: | EXCLUDE AIR. FIRES INVOLVING THIS PRODUCT MAY BE CONTROLLED BY REGULAR FOAM, CARBON DIOXIDE, DRY CHEMICALS OR WATER SPRAY. |
| GENERAL HAZARD: | |
| ELECTRO-STATIC ACCUMULATION HAZARD: | NA |
| UNUSUAL FIRE AND EXPLOSION HAZARD: | NA THIS PRODUCT IN ON COMBUSTIBLE OR EXPLOSIVE |
| SPECIAL FIRE FIGHTING PROCEDURES | NA |

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 SPILL, 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 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.

FIRE FIGHTING: 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.

OTHER HANDLING AND STORAGE REQUIREMENTS: STORE AND USE IN WELL VENTILATED AREA, EQUIVALENT TO FRESH AIR. KEEP CONTAINERS COOL, DRY, AND AWAY FROM SOURCES OF IGNITION. 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, SOURCES OF IGNITION, ETC. USE WITH EXPLOSION PROOF EQUIPMENT IS HIGHLY ADVISABLE.

SECTION VIII EXPOSURE CONTROLS / PERSONAL PROTECTION

VENTILATION REQUIREMENTS: CURRENT OSHA STANDARDS FOR CRYSTALLINE SILICA IS 10mg PER CUBIC METER OF AIR DIVIDED BY THE PERCENT S102 AVVERAGED OVER AND EIGHT HOUR WORK SHIFT AND FOR TOTAL DUST IS 30 mg/m# DIVIDED BY THE PERCENT S12 AVERAGED OVER AND EIGHT HOUR WORK SHIFT.

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. OSHA/NOISH APPROVED RESPIRATORS 3M9900 OR EQUIVALENT.

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

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

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| BOILING POINT: (760mmHg) NA | MELTING/FREEZING POINT: NA |
| VAPOR PRESSURE: NA | VAPOR DENSITY (AIR=1): NA |
| SOLUBILITY IN H2O % BY WT: NA | % VOLATILES BY VOL: NA |
| EVAPORATION RATE (AIR=1): NA | SPECIFIC GRAVITY (H2O=1) 2.65 |
| pH (AS IS): N/A | pH (1% SOLN): WITH WATER 12 |
| APPEARANCE AND ODOR: | GRAY POWDER |
| FLASH POINT: (TEST METHOD) | NA |
| AUTOIGNITION TEMP: | NA |
| FLAMMABLE LIMITS IN AIR, % BY VOL: | NA |

SECTION X STABILITY AND REACTIVITY

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| CONDITIONS CONTRIBUTING TO INSTABILITY: | WATER |
| INCOMPATIBILITY: | WATER |
| HAZARDOUS DECOMPOSITION PRODUCTS: | NA |
| CONDITIONS CONTRIBUTING TO HAZARDOUS POLYMERIZATION: | N/A WILL NOT OCCUR |

SECTION XI TOXICOLOGICAL INFORMATION

| GENERAL EFFECTS OF ACUTE EXPOSURE | | |
|------------------------------------------|--------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | COMPONENT ANALYSIS | SILICA, CRYSTALLINE, QUARTZ – LD50 (ORAL) – 500 mg/kg, RAT PORTLAND CEMENT – NA |
| | EYE | IRRITATING TO EYES. MAY CAUSE BURNS IN THE PRESENCE OF MOISTURE. SYMPTOMS MAY INCLUDE DISCOMFORT OR PAIN, EXCESS BLINKING AND TEAR PRODUCTION, WITH POSSIBLE REDNESS AND SWELLING |
| | SKIN | MAY CAUSE SKIN IRRITATION. MAY CAUSE BURNS IN THE PRESENCE OF MOISTURE. SKIN CONTACT DURING HYDRATION MAY SLOWLY DEVELOP CUFFICIENT HEAT THAT MAY CAUSE SEVERE BURNS POSSIBLY RESULTING IN PERMANENT INJURY. DO NOT ALLOW PRODUCT TO HARDEN AROUND ANY BODY PART OR ALLOW CONTINUOUS, PROLONGED CONTACT WITH SKIN. HANDLING CAN CAUSE DRY SKIN. |
| | INGESTION | MAY BE HARMFUL IS |

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| | | SWALLOWED. MAY CAUSE STOMACH DISTRESS, NAUSEA OR VOMITING. |
| | INHALATION | EXPOSURE TO AIRBORNE CONCENTRATIONS ABOVE STATURORY OR RECOMMENDED EXPOSURE LIMITS MAY CAUSE IRRITATION OF THE NOSE, THROAT AND LUNGS. MAY CAUSE MECHANICAL IRRITATION (ABRASION). |
| GENERAL EFFECTS OF CHRONIC EXPOSURE | | |
| | TARGET ORGANS | LUNGS |
| | CHRONIC EFFECTS | HAZARDOUS BY OSHA CRITERIA: RESPIRABLE CRYSTALLINE SILICA IS THE FORM OF QUARTZ OF CRISTOBALITE FROM OCCUPATIONAL SOURCES IS LISTED BY THE INTERNATIONAL AGENCY FOR RESEARCH ON CANCER (IARC) AND NATIONAL TOXICOLOGY PROGRAM (NTP) AS A LUNG CARCINOGEN. PROLONGED EXPOSURE TO RESPIRABLE CRYSTALLINE SILICA HAS BEEN KNOWN TO CAUSE SILICOSIS, A LUNG DISEASE, WHICH MAY BE DISABLING. WHILE THERE MYA BE A FACTOR OF INDIVIDUAL SUSCEPTIBILITY TO A GIVEN EXPOSURE TO RESPIRABLE SILICA DUST, THE RISK OF CONTRACTING SILICOSIS AND THE SEVERITY OF THE DISEASE IS CLEARLY RELATED TO THE AMOUNT OF DUST EXPOSURE AND THE LENGTH OF TIME (USUALLY YEARS) OF EXPOSURE. |
| | CARCINOGENICITY | HAZARDOUS BY OSHA CREITERIA |
| | INGREIENTS | SILICA, CRYSTALLINE, QUARTZ - G-A2, I-1, N-1, CP65 |
| | | PORTLAND CEMENT – G-A4 |
| | INHALATION | THE METHOD OF EXPOSURE TO CRYSTALLINE SILICA CAN LEAD TO ADVERSE HEALTH EFFECTS DESCRIBED BELOW: |
| | SILICOSIS | THE MAJOR CONCER IS SILICOSIS, CAUSED BY THE INHALATION AND RETENTION OF RESPIRABLE CRYSTALLINE SILICA DUST. SILICOSIS CAN EXIST IN SEVERAL FORMS: CHRONIC (OR ORDINARY) ACCELERATED, OR ACUTE. CHRONIC OR ORDINARY SILICOSIS (OFTEN REFERRED TO AS SIMPLE SILICOSIS) IS THE MOST COMMON FORM OF SILICOSIS, AND CAN OCCURE AFTER MANY YEARS OF EXPOSURE TO RELATIBELY LOW LEVELS OF AIRBORNE RESPIRABLE CRYSTALLINE SILICA |

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| | | DUST. IT IS FURTHER DEFINED AS EITHER SIMPLE OR COMPLICATED SILICOSIS. SIMPLE SILICOSIS IS CHARRIZED BY LUNG LESIONS (SHOWN AS RADIOGRAPHIC OPACITIES) LESS THAN 1 CENTERMETER IN DIAMETER, PRIMARILY IN THE UPPER LUNG ZONES. OFTEN, SIMPLE SILICOSIS IS NOT ASSOCIATED WITH SYMPTOMS. DETECTABEL CHANGES IN LUNG FUNCTION OR DIASBILITY. SIMPLE SILICOSIS MAY BE PROGRESSIVE AND MAY DEVELOP INTO COMPLICATED SILICOSIS OR PROGRESSIVE MASSIVE FIBROSIS (PMF). COMPLICATED SILICOSIS OR PMF IS CHARACTERIZED BY LUNG LESIONS (SHOWN AS RADIOGRAPHIC OPACITIES) GREATER THAN 1 CENTIMETER IN DIAMETER. ALTHOUGH THERE MAY BE NO SYMPTOMS ASSOCIATED WITH COMPLICATED SILICOSIS OR PMF, THE SYMPTOMS, IF PRESENT, ARE SHORTNESS OF BREATH, WHEEZING, COUGH AND SPETUM PRODUCTION. COMPLICATED SILICOSIS OR PMF MAY BE ASSOCIATED WITH DECREASED LUNG FUNCTION AND MAY BE DISABLING. ADVANCED COMPLICATED SILICOSIS OR PMF MAY LEAD TO DEATH. ADVANCED COMPLICATED SILICOSIS OR PMF CAN RESULT IN HEART DISEASE SECONDARY TO THE LUNG DISEASE (COR PUMONALE). ACCELERATED SILICOSIS CAN OCCUR WITH EXPOSURE TO HIGH CONCENTRATIONS OF RESPIRABLE CRYSTALLINE SILICA OVER A RELATIVELY SHORT PERIOD: THE LUNCH LESIONS CAN APPEAR WITHIN FIVE (5) YEARS OF INITIAL EXPOSURE. PROGRESSION CAN BE RAPID. ACCELERATED SILICOSIS IS SIMILAR TO CHRONIC OR ORDINARY SILICOSIS, EXCEPT THAT LUNG LESIONS APPEAR EARLIER AND PROGRESSION IS MORE RAPID. ACUTE SILICOSIS CAN OCCUR WITH EXPOSURE TO VERY HIGH CONCENTRATIONS OF RESIRABLE CRYSTALLINE SILICA OVER A VERY SHORT TIME PERIOD, SOMETHIMES AS SHORT |
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| | | AS A FEW MONTH. THE SYMPTOMS OF ACUTE SILICOSIS INCLUDE PROGRESSIVE SHORTNESS OF BREATH, FEVER, COUGH, AND WEIGHT LOSS. ACUTE SILICOSIS IS FATAL. |
| | CANCER | <p>IARC – THE INTERNATIONAL AGENCY FOR RESEARCH OF CANCER (IARC) CONCLUDED THAT THERE WAS “SUFFICIENT EVIDENCE IN HUMANS FOR THE CARCINOGENICITY OF CRYSTALLINE SILICA IN THE FORMS OF QUARTZ OR CRISTOBALITE FROM OCCUPATIONAL SOURCES” AND THAT THERE IS “SUFFICIENT EVIDENCE IN EXPERIMENTAL ANIMALS FOR THE CARCINOGENICITY OF QUARTZ AND CRISTOBALITE” THE OVER ALL IARC EVALUATION WAS THAT “ CRYSTALLINE SILICA INHALED IN THE FORM OF QUARTZ OF CRISTOBALITE FORM OCCUPATIONAL SOURCES IS CARCINOGENIC TO HUMANS (GROUP 1)” THE IARC EVALUATION NOTED THAT “CARCINOGENICITY WAS NOT DETECTED IN ALL INDUSTRIAL CIRCIMSTANCES STUDIES. CARCINOGENICITY MAY BE DEPENDENT ON THE INHERENT CHARACTERISTICE OF THE CRYSTALLINE SILICA OR ON EXTERNAL FACTORS AFFECTING ITS BIOLOGICAL ACTIVITY OR DISTRIBUTION OF ITS POLYMORPHS”.</p> <p>NTP – THE NATIONAL TOXICOLOGY PROGRAM IN IT NINTH ANNUAL REPORT ON CARCINOGENS CLASSIFIED “SILICA, CRYSTALLINE (RESPIRABLE)” AS A KNOWN HUMAN CARCINOGEN.</p> <p>OSHA – CRYSTALLINE SILICA (QUARTZ) IS NOT REGULATED BY THE U.S. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION AS A CARCINOGEN.</p> |
| | AUTOIMMUNE DISEASES | SEVERAL STUDIES HAVE REPORTED EXCESS CASES OF SEVERAL AUTOIMMUNE DISORDERS – SCLERODERMA, SYSTEMIC LUPUS, ERYTHEMATOSUS, RHEMATOID ARTHRITIS – AMONG SILICA EXPOSED WORKERS. |
| | TUBERCULOSIS | INDIVIDUALS WITH SILICOSIS ARE AT INCREASED RISK TO DEVELOP PULMONARY TUBERCULOSIS, IF EXPOSED TO PERSONS |

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| | | WITH TUBERCULOSIS. SEVERAL STUDIES HAV E REPORTED EXCESS CASES OF KIDNEY DISEASE, INCLUDING END STAGE RENAL DISEASE, AMONG SILICA EXPOSED WORKERS. |
| | KIDNEY DISEASE | |
| | NON-MALIGNANT RESPIRATOR DISEASE | THE READES IS REFERRED TO SECTION 3.5 OF THE NIOSH SPECIAL HAZARD REVIEW FOR INFORMATION CONCERNING THE ASSOCIATION BETWEEN EXPOSURE TO CRYSTALLINE SILICA AND CHRONIC BRONCHITIS, EMPHYSEMA AND SMALL AIRWAYS DISEASE. THERE ARE STUDIES THAT DISCLOSE AN ACCOSCATION BETWEEN DUSTS FOUND IN VARIOUS MINING OCCUPATIONS AND NON-MILIGNANT RESPIRATORY DISEASES, PARTICULARLY AMONG SMOKERS. IT IS UNCLER WHETHER THE OBSERVED ASSOCIATIONS EXIST ONLY WITH UNDERLYING SISLICOSIS, ONLY AMONG SMOKERS, OR RESULT FROM EXPOSURE TO MINERAL DUSTS GENERALLY (INDEPENDENT OF THE PRESENCE OR ABSENCE OF CRYSTALLINE SILICA , OR THE LEVER OF CRYSTALLIN E IN THE DUST |

SECTION XII ECOLOGICAL INFORMATION

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| ECOTOXICITY | THIS PRODUCT IS NOT KNOWN TO BE ECOTOXIC. NORMAL DILUTION OF THIS PRODUCT TO DRAINS, SEWERS, SPETIC SYSTEMS AND TREATMENT PLANTS IS NOT CONSIDERED ENVIRONMENTALLY HARMFUL. |
| AQUATIC TOXICITY | NA |
| PERSISTENCE/DEGRADABILITY | NA |
| BIOACCUMULATION/ACCUMULATION | NA |
| MOBILITY IN ENVIRONMENT | NA |
| ENVIRONMENTAL FATE | NA |

SECTION XIII DISPOSAL CONSIDERATIONS

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| 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: DISPOSE OF AS A COMMON NON HAZARDOUS WASTE, IN COMPLIANCE WITH LOCAL AND FEDERAL REGULATIONS. NOT CONSIDERED A HAZARDOUS WASTE BY THE EPA (RCRA). |

SECTION XIV TRANSPORTATION INFORMATION

| Governing Body | Mode | UN Number | Proper Shipping Name | Hazard Class | Packing Group |
|--------------------------|--------------------------------------------------------------------------------------------------|--------------|----------------------|--------------|---------------|
| DOT | GROUND | NON-REGULATE | NON-REGULATE | NON-REGULATE | NA |
| IATA | AIR | NON-REGULATE | NON-REGULATE | NON-REGULATE | NA |
| IMDG | OCEAN | NON-REGULATE | NON-REGULATE | NON-REGULATE | NA |
| MARINE POLLUTANT: | THIS PRODUCT DOES NOT CONTAIN A MATERIAL ON THE MARINE POLLUTANTS TABLE (HMT 172.101 APPENDIX B) | | | | |

SECTION XV REGULATORY INFORMATION

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| <p>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.</p> |
| <p>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: HAZARDOUS</p> |
| <p>ADDITIONAL REGULATORY CONCERNS: (FEDERAL, FDA, USDA, CPSC, STATE, OTHER)</p> |
| <p>FEDERAL / FDA / USDA:</p> |
| <p>MARINE POLLUTANTS: THIS PRODUCT DOES NOT CONTAIN A MATERIAL ON THE MARINE POLLUTANTS TABLE (HMT 172.101 Appendix B). SEE SECTION XIV</p> |
| <p>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)</p> |
| <p>CERCLA / RQ: NONE ESTABLISHED. THIS PRODUCT DOES NOT CONTAIN A MATERIAL ON THE RQ TABLE (HMT 172.101 Appendix A):</p> |
| <p>TSCA: IS THIS PRODUCT, OR ALL ITS INGREDIENTS, BEING CERTIFIED FOR INCLUSION ON THE TOXIC SUBSTANCES CONTROL ACT INVENTORY OF CHEMICAL SUBSTANCES? YES</p> |

SECTION XVI OTHER INFORMATION

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| 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. | |

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| HMIS HAZARD RATINGS: | | | KEY 4 -- SEVERE |
| THIS INFORMATION IS FOR PEOPLE TRAINED IN: NATIONAL PAINT AND COATINGS ASSOCIATIONS (NPCA) HAZARDOUS MATERIALS IDENTIFICATION SYSTEM (HMIS) NATIONAL FIRE PROTECTION ASSOCIATION (NFPA 704) IDENTIFICATION OF FIRE HAZARDS OF MATERIALS | | | |
| CERTI-VEX PATCH | NPCA-HMIS | NFPA 704 | 3 -- SERIOUS |
| HEALTH | 2 | 2 | 2 -- MODERATE |
| FLAMMABILITY | 0 | 0 | 1 -- SLIGHT |
| REACTIVITY | 0 | 0 | 0 -- MINIMAL |