



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

HEALTH	1
FLAMMABILITY	1
REACTIVITY	0

MATERIAL SAFETY DATA SHEET
VEXCON NO. PS105
STARSEAL WATERPROOF 500

GENERAL INFORMATION

PRODUCT IDENTIFICATION:
STARSEAL WATERPROOF 500
VOC CONTENT: <100 GRAMS/LITER OR <0.83 #/GAL.
CATEGORY: WATER PROOFING SEALER (SCAQMD 100 g/L)
COMMON NAME: ALKOXYLSILANE EMULSION, WATER REPELLENT
DOT SHIPPING NAME:
SHIPPING NAME / HAZARD CLASS / UN NUMBER / PACKING GROUP
IN CONTAINERS LESS THAN AND GREATER THAN 119 GALS:

**STARSEAL WATERPROOF 500
(NON-REGULATED)**

FOR LIMITED QUANTITY AIR & OCEAN SHIPMENT:

**STARSEAL WATERPROOF 500
(NON-REGULATED)**

HEALTH AND SAFETY COMBUSTIBLE LIQUID: THIS PRODUCT IS A SOLVENT IN WATER EMULSION. ALL PRECAUTIONS PROVIDED ARE FOR THE SOLVENT PORTION OF WHICH THIS CONTAINS **LESS THAN 5%**. COMBUSTIBLE LIQUID: USE ONLY WITH ADEQUATE VENTILATION. IF SWALLOWED, DO NOT INDUCE VOMITING. USE OF SOLVENT RESISTANT GLOVES, GOGGLES, AND OTHER PROTECTIVE CLOTHING IS ADVISED WHEN HANDLING THIS PRODUCT. FLASH POINT: SOLVENT H2O EMULSION 245 DEGREES F (NON-FLAMMABLE). **KEEP FROM FREEZING.**

SECTION I

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 (Chemtrec)
PREPARED: FEBRUARY 1996
UPDATED: AUGUST 2011
PREPARED BY: DARRYL F. MANUEL, PRESIDENT

SECTION II HAZARDOUS INGREDIENTS

MATERIAL OR COMPONENTS	CAS NO.	%	HAZARD DATA	UN#
OCTYLTRIETHOXY SILANE	2943-75-1	5-20%	NONE	N/A
STODDARD SOLVENT	8052-41-3	1-5%	ACGIH TLV: 100 ppm, 525 mg/m3 (TWA) OSHA PEL: 500 ppm, 2900 mg/m3 (TWA) NIOSH REL: 350 mg/m3 (TWA)	1255
UNIDENTIFIED SILOXANE IMPURITIES	NONE	TRACE	NOT ESTABLISHED	N/A

SECTION III PHYSICAL / CHEMICAL CHARACTERISTICS

BOILING POINT: (760mmHg) 210°F / 98°C	MELTING POINT: -40°C .. / -40°F (Stoddard Solvent)
VAPOR PRESSURE: 5 mmHg@68°F/25°C (Stoddard solvent)	VAPOR DENSITY (AIR=1): 4.8 (Stoddard solvent) HEAVIER THAN AIR
SOLUBILITY IN H2O % BY WT: 100%	% VOLATILES BY VOL: 100%
EVAPORATION RATE (BuAc=1): 0.1 SLOW (MINERAL SPIRITS)	SPECIFIC GRAVITY (H2O=1) 0.982
pH (AS IS) 5-6 TYPICAL	pH (1% SOLN) N/A
APPEARANCE AND ODOR: WHITE TO YELLOW CLOUDY EMULSION WITH SLIGHT PAINT SOLVENT ODOR	

SECTION IV FIRE AND EXPLOSION DATA

FLASH POINT: (TEST METHOD)	118°C / 245°F (TCC)
AUTOIGNITION TEMP:	232°C / 450°F (STODDARD SOLVENT)
FLAMMABLE LIMITS IN AIR, % BY VOL:	LOWER: 0.8% UPPER: 6.0% (STODDARD SOLVENT)
EXTINGUISHING MEDIA:	EXCLUDE AIR. FIRES INVOLVING THIS PRODUCT MAY BE CONTROLLED BY REGULAR FOAM, CARBON DIOXIDE, DRY CHEMICALS . WATER MAY BE USED TO REDUCE THE RATE OF BURNING AND FOR COOLING PURPOSES.
GENERAL HAZARD:	COMBUSTIBLE 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. EMPTY DRUMS SHOULD BE COMPLETELY DRAINED, PROPERLY BUNGED AND PROMPTLY RETURNED TO A DRUM RECONDITIONER, OR PROPERLY DISPOSED OF.
ELECTRO-STATIC ACCUMULATION HAZARD:	<u>USE PROPER GROUNDING</u>
UNUSUAL FIRE AND EXPLOSION HAZARD:	COMBUSTIBLE VAPORS MAY ACCUMULATE IN THE CONTAINER HEADSPACE ON FORMATION OF HYDROLYSIS BYPRODUCTS . 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.
SPECIAL FIRE FIGHTING PROCEDURES	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. USE WATER SPRAY TO COOL FIRE EXPOSED SURFACES AND TO PROTECT PERSONNEL. ISOLATE "FUEL" SUPPLY FROM FIRE. AVOID SPREADING BURNING LIQUID WITH WATER USED FOR COOLING PURPOSES.

SECTION V REACTIVITY DATA

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 VI HEALTH HAZARD INFORMATION

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. STODDARD SOLVENT COMPONENT.
SKIN CONTACT:	THIS PRODUCT MAY CAUSE SKIN IRRITATION UPON PROLONGED OR REPEATED CONTACT. STODDARD SOLVENT COMPONENT.
SKIN ABSORPTION:	THIS PRODUCT MAY CAUSE SKIN IRRITATION UPON PROLONGED OR REPEATED CONTACT. STODDARD SOLVENT COMPONENT.
EYE CONTACT:	THIS PRODUCT MAY BE AN EYE IRRITANT. STODDARD SOLVENT COMPONENT.
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 STODDARD SOLVENT COMPONENT. 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 IS DIFFICULT, GIVE OXYGEN. IF BREATHING STOPS, BEGIN ARTIFICIAL RESPIRATION AND SEEK IMMEDIATE MEDICAL ATTENTION. NOTE: THIS MATERIAL RELEASES ETHYL ALCOHOL UPON HYDROLYSIS. ETHYL ALCOHOL CAUSES OPTIC NEUROPATHY, METABOLIC ACIDOSIS AND RESPIRATORY DEPRESSION. SIGNS AND SYMPTOMS OF OVEREXPOSURE INCLUDE HEADACHE, BLURRED VISION, CONSTRICTED VISION, SHORTNESS OF BREATH, DIZZINESS AND VERTIGO. INGESTION OF ETHYL ALCOHOL MAY LEAD TO BLINDNESS OR DEATH.
INGESTION:	DO NOT INDUCE VOMITING; SEEK IMMEDIATE MEDICAL ATTENTION.

SECTION VII PRECAUTIONS FOR SAFE HANDLING AND USE AND SPILL CONTROL

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 SPILL, IMPLEMENT CLEAN UP PROCEDURES AND, IF IN PUBLIC AREA, KEEP PUBLIC AWAY AND ADVISE AUTHORITIES. ALSO, IF THIS PRODUCT IS SUBJECT TO CERCLA REPORTING NOTIFY THE NATIONAL RESPONSE CENTER. PREVENT LIQUID FROM ENTERING SEWERS, WATERCOURSES, 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 RECOVERED MATERIAL AND ENSURE CONFORMITY TO EPA, FEDERAL, STATE, AND LOCAL DISPOSAL REGULATIONS. 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. CONSULT AN EXPERT ON DISPOSAL OF RECOVERED MATERIAL AND ENSURE CONFORMITY TO EPA, FEDERAL, STATE, AND LOCAL DISPOSAL REGULATIONS. 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 VIII CONTROL MEASURES

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. 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 SPECIAL PRECAUTIONS

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 HELPFUL IN KEEPING ADJACENT CONTAINERS COOL. PERSONNEL SHOULD AVOID INHALATION OF VAPORS.
OTHER HANDLING AND STORAGE REQUIREMENTS: STORE AND USE IN WELL VENTILATED AREA, EQUIVALENT TO FRESH AIR. 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.

HMIS HAZARD RATINGS:

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			KEY
WATERPROOF 100 & 500	NPCA-HMIS	NFPA 704	4 -- SEVERE
HEALTH	1	1	3 -- SERIOUS
FLAMMABILITY	1	1	2 -- MODERATE
REACTIVITY	0	0	1 -- SLIGHT
			0 -- MINIMAL

SECTION X 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 8052-41-3 (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).
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: ACUTE, CHRONIC, FIRE
ADDITIONAL REGULATORY CONCERNS: (FEDERAL, FDA, USDA, CPSC, STATE, OTHER) FEDERAL / FDA / USDA:
MARINE POLLUTANTS: <u>NO</u> . THIS PRODUCT DOES NOT CONTAIN A MATERIAL ON THE MARINE POLLUTANTS TABLE (HMT 172.101 Appendix B).
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

PREPARED BY:	DARRYL MANUEL / PRESIDENT
COMPANY:	VEXCON CHEMICALS, INC.
ADDRESS:	7240 STATE RD., PHILA., PA 19135 USA
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