

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



HEALTH	1
FLAMMABILITY	0
REACTIVITY	0

SAFETY DATA SHEET
 VEXCON O. CT115
STARSEAL EF HARDENER 204

SECTION I - GENERAL INFORMATION

PRODUCT IDENTIFICATION: STARSEAL EF HARDENER 204	
VOC CONTENT:	0 GRAMS/LITER
CATEGORY:	NOT REQUIRED
COMMON NAME:	SILICATE SOLUTION
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:	FEBRUARY 1996
UPDATED:	APRIL 2020
PREPARED BY:	DARRY F. MANUEL , PRESIDENT

SECTION II – HAZARD IDENTIFICATION

CLASSIFICATION OF MIXTURE SKIN IRRITATION – CATEGORY 2 EYE IRRITATION – CATEGORY 2B
SINGLE WORD: WARNING
HAZARD STATEMENT: CAUSES SKIN IRRITATION. CAUSES EYE IRRITATION.
PRECAUTIONARY STATEMENT: CAUTION: ALKALINE OR BASIC LIQUID.MAY IRRITATE MUCOUS MEMBRANES. LONG TERM OVEREXPOSURE MAY CUASE DAMAGE TO SKIN AND/OR RESPIRATORY TRACT. USE WITH ADEQUATE VENTILATION. DO NOT INDUCE VOMITING IF SWALLOWED. USE OF GLOVES, GOGGLES AND OTHER PROTECTIVE CLOTHING IS ADVISED WHEN HANDLING THIS PRODUCT. KEEP FROM FREEZING.
 

SECTION III HAZARDOUS INGREDIENTS

MATERIAL OR COMPONENTS	CAS NO.	%	HAZARD DATA	UN#
WATER	7723-18-5	80-90%	NA	NONE
SILICIC ACID, SODIUM SALT	1344-09-8	10-20%	5 mg/M3 MIST OR DUST	N/A
THIS PRODUCT DOES NOT CONTAIN ANY SECTION 313 REPORTABLE INGREDIENTS.				

SECTION IV FIRST AID MEASURES

HEALTH HAZARD DATA HAZARD CLASSIFICATION BASIS FOR CLASSIFICATION SOURCE

ROUTES OF EXPOSURE:

INHALATION:	NO THRESHOLD LIMIT VALUES HAVE BEEN ESTABLISHED FOR THIS SILICATE SOLUTION. PROLONGED INHALATION OF VAPORS MAY CAUSE IRRITATION OF RESPIRATORY TRACT MUCOUS MEMBRANES. SPRAY MIST IRRITATING TO RESPIRATORY TRACT.
SKIN CONTACT:	FULL EFFECTS NOT DEFINED.
SKIN ABSORPTION:	FULL EFFECT NOT DEFINED. MAY CAUSE MODERATE IRRITATION UPON CONTINUED CONTACT.
EYE CONTACT:	FULL EFFECT NOT DEFINED. CAN CAUSE SEVERE IRRITATION IF NOT TREATED.
INGESTION / INHALATION	FULL EFFECT NOT DEFINED. IRRITATION TO MUCOUS MEMBRANES OF THE MOUTH, THROAT, ESOPHAGUS AND STOMACH.
EFFECTS OF OVEREXPOSURE:	NO THRESHOLD LIMIT VALUES HAVE BEEN ESTABLISHED FOR THIS SILICATE SOLUTION.
ACUTE OVEREXPOSURE:	NO THRESHOLD LIMIT VALUES HAVE BEEN ESTABLISHED FOR THIS SILICATE SOLUTION.
CHRONIC OVEREXPOSURE:	DUSTS AND MISTS ARE IRRITATING TO MUCOUS MEMBRANES OF THERE RESPIRATORY TRACT, MOUTH, THROAT, ESOPHAGUS AND STOMACH. IRRITATING TO EYES AND SKIN. THE CHRONIC LOCAL EFFECT MAY CONSIST OF MULTIPLE AREAS OF SUPERFICIAL DESTRUCTION OF THE SKIN OR PRIMARY IRRITANT IN VARYING DEGREES TO RESPIRATORY TRACT TISSUES.

EMERGENCY AND FIRST AID PROCEDURES:

EYES:	FLUSH WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES. SEEK MEDICAL ATTENTION OR CONSULT PHYSICIAN.
SKIN:	WASH WITH SOAP AND LARGE QUANTITIES OF WATER. SEEK MEDICAL ATTENTION IF SKIN IRRITATION DEVELOPS AND PERSISTS.
INHALATION:	REMOVE TO FRESH AIR. IF NOT BREATHING, GIVE ARTIFICIAL RESPIRATION, PREFERABLY MOUTH-TO-MOUTH. IF BREATHING IS DIFFICULT, GIVE OXYGEN.
INGESTION:	KEEP INDIVIDUAL CALM. DO NOT INDUCE VOMITING. GIVE LARGE QUANTITIES OF WATER/MILK. KEEP AIRWAY CLEAR. CONSULT A PHYSICIAN.

SECTION V FIREFIGHTING MEASURES

EXTINGUISHING MEDIA:	FIRES INVOLVING THIS PRODUCT MAY BE CONTROLLED BY CARBON DIOXIDE, DRY CHEMICALS OR WATER SPRAY.
GENERAL HAZARD:	EMPTY DRUMS SHOULD BE COMPLETELY DRAINED, PROPERLY BUNGED AND PROMPTLY RETURNED TO A DRUM RECONDITIONER, OR PROPERLY DISPOSED OF.
UNUSUAL FIRE AND EXPLOSION HAZARD:	NONE
SPECIAL FIRE FIGHTING PROCEDURES:	WATER SOLUTION - ADDITIVES WILL NOT BURN UNLESS DISTILLED FROM SOLUTION

SECTION VI ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:	FLUSH WITH WATER TO SAFE AREA. USE STANDARD ABSORBENTS. 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).
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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 FROM FREEZING. STORE AT TEMPERATURES ABOVE 32°F / 0°C.

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):	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 PHYSICAL / CHEMICAL CHARACTERISTICS

BOILING POINT: (760mmHg) 133°F / 56°C	MELTING POINT: N/A
VAPOR PRESSURE: 181 mmHg@68°F/20°C	VAPOR DENSITY (AIR=1): N/A
SOLUBILITY IN H2O % BY WT: 100%	% VOLATILES BY VOL: 80-90% H2O
EVAPORATION RATE (BuAc=1): LESS THAN	SPECIFIC GRAVITY (H2O=1) 1.068
pH (AS IS): 9 TYPICAL	pH (1% SOLN): 7 TYPICAL
APPEARANCE AND ODOR: COLORLESS, BASICALLY ODOR FREE LIQUID (MAY CONTAIN FUGITIVE DYE)	
FLASH POINT: (TEST METHOD)	N/A WATER SOLUTION
AUTOIGNITION TEMP:	N/A
FLAMMABLE LIMITS IN AIR, % BY VOL:	LOWER: N/A UPPER: N/A

SECTION X STABILITY AND REACTIVITY

CONDITIONS CONTRIBUTING TO INSTABILITY:	THIS PRODUCT IS STABLE.
INCOMPATIBILITY:	PRODUCT IS ALKALINE - AVOID CONTACT WITH ACIDIC MATERIALS.
HAZARDOUS DECOMPOSITION PRODUCTS:	N/A
CONDITIONS CONTRIBUTING TO HAZARDOUS POLYMERIZATION:	N/A WILL NOT OCCUR

SECTION XI TOXICOLOGICAL INFORMATION

ROUTES OF EXPOSURE/ SYMPTOMS/ CORROSIVENESS	LD50 – ORAL (RAT) 1960 mg/kg (Sodium Silicat)	
	LC50 – INHALATION (RAT) NA	
	IRRITATION	MAY BE AN IRRITANT
	TOXICOLOGICALLY SYNERGISTIC	NO INFORMATION AVAILBALE
CHRONIC EXPOSURE	CARCINOGENICITY	THERE ARE NO KNOWN CARCINOGENS N THIS PORDUCT
	SENSITIZATION	NO INFORMATION AVAILABLE
	MUTAGENIC EFFECTS	NO INFORMATION AVAILABLE
	REPRODUCTIVE EFFECTS	NO INFORMATION AVAILABLE
	DEVELOPMENTAL EFFECTS (IMMEDIATE/DELAYED)	NO INFORMATION AVAILABLE
	TERATOGENICITY	NO INFORMATION AVAILABLE
	OTHER ADVERSE EFFECTS	NO INFORMATION AVAILABLE
	ENDOCRINE DISRUPTOR INFORMATION	NO INFORMATION AVAILABLE

SECTION XII ECOLOGICAL INFORMATION

ECOTOXICITY	NO INFORMATION AVAILABLE
PERSISTENCE AND DEGRADABILITY	NO INFORMATION AVAILABLE
DIOACUMULATION/ACCUMULATION	NO INFORMATION AVAILABLE
MOBILITY	NO INFORMATION 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: FLUSH WITH WATER TO CHEMICAL SAFE AREA - USE STANDARD ABSORBENTS: SAND, EARTH, FLOOR ABSORBENT, ETC. DISPOSE IN COMPLIANCE WITH EPA AND/OR STATE 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).

SECTION XIV TRANSPORTATION INFORMATION

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

SECTION XV REGULATORY INFORMATION

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.

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:
 NA

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

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
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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:			KEY
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			
STARSEAL EF HARDENER 204	NPCA-HMIS	NFPA 704	4 -- SEVERE
HEALTH	1	1	3 -- SERIOUS
FLAMMABILITY	0	0	2 -- MODERATE
REACTIVITY	0	0	1 -- SLIGHT
			0 -- MINIMAL