



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

<b>HEALTH</b>	<b>1</b>
<b>FLAMMABILITY</b>	<b>1</b>
<b>REACTIVITY</b>	<b>0</b>

SAFETY DATA SHEET  
VEXCON NO. CE200  
**CERTI-VEX CE 210**  
**PART A**



**SECTION I - GENERAL INFORMATION**

<b>PRODUCT IDENTIFICATION:</b> <b>CERTI-VEX CE 210</b>	
<b>VOC CONTENT:</b>	PART A ONLY: 0 PART B ONLY: 0 <b>AS APPLIED: 0</b>
<b>CATEGORY:</b>	<b>NOT AN AIM VOC CATEGORY</b>
<b>COMMON NAME:</b>	<b>CONCRETE ADHESIVE</b>
<b>MANUFACTURER:</b>	<b>VEXCON CHEMICALS, INC</b>
<b>ADDRESS</b>	7240 STATE RD, PHILADELPHIA, PA 19135
<b>EMERGENCY NO:</b>	800.858.2828 (PolySat Inc)
<b>TELEPHONE NO:</b>	215.332.7709 (Vexcon)
<b>CHEMTREC NO:</b>	800.424.9300 (CCN# 23822)
<b>PREPARED:</b>	NOVEMBER 2016
<b>UPDATED:</b>	JULY 2017
<b>PREPARED BY:</b>	DARRYL F. MANUEL, PRESIDENT

**SECTION III HAZARDOUS INGREDIENTS**

MATERIAL OR COMPONENTS	CAS NO.	%	HAZARD DATA	UN#
BISPHENOL A / EPICHLOROHYDRIN EPOXY RESIN	25068-38-6	75-85%	NONE ESTABLISHED	3082
BENOTONITE CLAY	68953-58-2	10-18%	AS QUARTZ, PRESENT AT LESS THAN 1% ACGIH 0.1 mg/m <sup>3</sup> OSHE PEL (resp) 10mg/m <sup>3</sup> / % SiO <sub>2</sub> +2 OSHA PEL (total) 30 mg/m <sup>3</sup> / % SiO <sub>2</sub> +2	NONE
PIGMENTS: WOLLASTONITE	13983-17-0	15-25%	OSHA PEL: TWA 15 mg/m <sup>3</sup> TOTAL DUST: 5 mg/m <sup>3</sup> RESPIRABLE DUST ACGIH TLV TWA 10 mg/m <sup>3</sup> TOTALS DUST 3 mg/m <sup>3</sup> RESPIRABLE	NONE

**SECTION II - HAZARD IDENTIFICATION**

<p><b>DOT SHIPPING NAME:</b> UN ID NUMBER / SHIPPING NAME / HAZARD CLASS / PKG GROUP IN CONTAINERS LESS THAN 119 GALS: <b>(NON-REGULATED)</b></p> <p>IN CONTAINERS GREATER THAN 119 GALS: <b>UN 3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID N.O.S. (EPOXY RESIN), 9, III</b></p> <p><b>FOR LIMITED QUANTITY AIR &amp; OCEAN SHIPMENT:</b> <b>UN 3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID N.O.S. (EPOXY RESIN), 9, III</b></p> <p><b>PRECAUTIONARY STATEMENT:</b> WARNING! CAUSES SKIN AND EYE IRRITATION . MAY CAUSE AN ALLERGIC SKIN REACTION WASH SKIN THOROUGHLY AND HANDLING. RINSE EYES WITH WATER FOR SEVERAL MINUTES. 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.</p>	
	

**SECTION IV FIRST AID MEASURES**

**HEALTH HAZARD DATA HAZARD CLASSIFICATION**  
**BASIS FOR CLASSIFICATION SOURCE**

<b>ROUTES OF EXPOSURE:</b>	
<b>INHALATION:</b>	VAPOR INHALATION CAN CAUSE NASAL AND RESPIRATORY IRRITATION, DIZZINESS, WEAKNESS, FATIGUE, NAUSEA OR HEADACHE.
<b>SKIN CONTACT:</b>	THIS PRODUCT MAY CAUSE SKIN IRRITATION UPON PROLONGED OR REPEATED CONTACT.
<b>SKIN ABSORPTION:</b>	THIS PRODUCT MAY CAUSE SKIN IRRITATION UPON PROLONGED OR REPEATED CONTACT.
<b>EYE CONTACT:</b>	THIS PRODUCT MAY BE AN EYE IRRITANT.
<b>INGESTION / INHALATION</b>	CAN CAUSE GASTROINTESTINAL IRRITATION, NAUSEA, VOMITING. 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.
<b>EFFECTS OF OVEREXPOSURE:</b>	ANESTHESIA, HEADACHE, NAUSEA, DIZZINESS. LIQUIDS MODERATELY IRRITATING ON SKIN AND EYES.
<b>ACUTE OVEREXPOSURE:</b>	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:**

<b>EYES:</b>	FLUSH WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES. SEEK IMMEDIATE MEDICAL ATTENTION. CONSULT A PHYSICIAN.
<b>SKIN:</b>	WASH WITH SOAP AND LARGE QUANTITIES OF WATER. SEEK MEDICAL ATTENTION IF SKIN IRRITATION DEVELOPS AND PERSISTS.
<b>INHALATION:</b>	MOVE TO LOCATION FREE FROM VAPORS. IF BREATHING IS DIFFICULT, GIVE OXYGEN. IF BREATHING STOPS, BEGIN ARTIFICIAL RESPIRATION AND SEEK IMMEDIATE MEDICAL ATTENTION.
<b>INGESTION:</b>	DO NOT INDUCE VOMITING; SEEK IMMEDIATE MEDICAL ATTENTION.

**SECTION V FIREFIGHTING MEASURES**

<b>EXTINGUISHING MEDIA:</b>	EXCLUDE AIR. FIRES INVOLVING THIS PRODUCT MAY BE CONTROLLED BY <b>REGULAR FOAM, CARBON DIOXIDE, DRY CHEMICALS OR WATER SPRAY.</b> 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. DO NOT USE DIRECT WATER STREAM. MAY SPREAD FIRE.
<b>GENERAL HAZARD:</b>	CAN FORM COMBUSTIBLE MIXTURES AT TEMPERATURES AT OR ABOVE THE FLASH POINT. SMOKE MAY CONTAIN THE ORIGINAL MATERIAL IN ADDITION TO COMBUSTION PRODUCTS OF VARYING COMPOSITION WHICH MAY BE TOXIC AND/OR IRRITATING. COMBUSTION PRODUCTS MAY INCLUDE AND ARE NOT LIMITED TO: PHENOLICS. CARBON MONOXIDE, CARBON DIOXIDE.
<b>UNUSUAL FIRE AND EXPLOSION HAZARD:</b>	CONTAINER MAY RUPTURE FORM GAS GENERATION IN A FIRE SITUATION. VIOLENT STEAM GENERATION OR ERUPTION MY OCCUR UPON APPLICATION OF DIRECT WATER STREAM TO HO LIQUIDS. DENSE SMOKE IS EMITTED WHEN BURNED WITHOUT SUFFICIENT OXYGEN.
<b>SPECIAL FIRE FIGHTING PROCEDURES</b>	THE USE OF <b>SELF-CONTAINED BREATHING APPARATUS</b> 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.

**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**

<b>VENTILATION REQUIREMENTS:</b> 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.
<b>RESPIRATORY (SPECIFY IN DETAIL):</b> 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.
<b>EYES:</b> CHEMICAL GOGGLES AND/OR FACE SHIELD ARE RECOMMENDED TO SAFEGUARD AGAINST POTENTIAL EYE CONTACT, IRRITATION OR INJURY.
<b>GLOVES:</b> THE USE OF IMPERMEABLE GLOVES IS ADVISED TO PREVENT SKIN IRRITATION IN SENSITIVE INDIVIDUALS. IMPERVIOUS GLOVES, (CHEMICAL RESISTANT) SUCH AS NEOPRENE, LATEX OR PVA.
<b>OTHER CLOTHING AND EQUIPMENT:</b> 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 VI ACCIDENTAL RELEASE MEASURES**

<b>AQUATIC TOXICITY (E.G. 96HR.TLM):</b> 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)
<b>STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:</b> <b>LAND SPILL:</b> 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. <b>WATER SPILL:</b> 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.

**SECTION IX PHYSICAL / CHEMICAL CHARACTERISTICS**

<b>BOILING POINT:</b> (760mmHg) N/A	<b>MELTING/FREEZING POINT:</b> N/A
<b>VAPOR PRESSURE:</b> N/A	<b>VAPOR DENSITY (AIR=1):</b> N/A
<b>SOLUBILITY IN H2O % BY WT:</b> LOW SOLUBILITY	<b>% VOLATILES BY VOL:</b> 0%
<b>EVAPORATION RATE (BuAc=1):</b> N/A	<b>REALITIVE DENSITY (H2O=1)</b> 1.258
<b>pH (AS IS):</b> N/A	<b>pH (1% SOLN):</b> N/A
<b>APPEARANCE AND ODOR:</b> PIGMENTED LIQUID WITH SLIGHT ODOR	
<b>FLASH POINT:</b> (TEST METHOD)	<b>252°C / 485°F (PMCC)</b>
<b>AUTOIGNITION TEMP:</b>	N/A
<b>FLAMMABLE LIMITS IN AIR, % BY VOL:</b>	N/A

**SECTION VII HANDLING AND STORAGE**

<b>PRECAUTIONARY STATEMENTS:</b> 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.
<b>FIRE FIGHTING:</b> 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.

**SECTION X STABILITY AND REACTIVITY**

<b>CONDITIONS CONTRIBUTING TO INSTABILITY:</b>	THIS PRODUCT IS STABLE.
<b>INCOMPATIBILITY:</b>	THIS PRODUCT IS INCOMPATIBLE WITH STRONG OXIDIZING AGENTS, STRONG ACIDS OR BASES, AND SELECTED AMINES.
<b>HAZARDOUS DECOMPOSITION PRODUCTS:</b>	THERMAL DECOMPOSITION IN THE PRESENCE OF AIR MAY YIELD CARBON MONOXIDE AND/OR CARBON DIOXIDE, AND UNIDENTIFIED ORGANICS.
<b>CONDITIONS CONTRIBUTING TO HAZARDOUS POLYMERIZATION:</b>	N/A WILL NOT OCCUR

## SECTION XI TOXICOLOGICAL INFORMATION

<b>ACUTE TOXICITY</b>	<b>ACUTE ORAL TOXICITY</b> – VERY LOW TOXICITY IF SWALLOWED. HARMFUL EFFECTS NOT ANTICIPATED FROM SWALLOWING SMALL AMOUNTS. LD50, RAT >15,000 mg/kg
	<b>ACUTE DERMAL TOXICITY</b> – PROLONGED SKIN CONTACT IS UNLIKELY TO RESULT IN ABSORPTION OF HARMFUL AMOUNTS. LD50, RABBIT, 23,000 mg/kg
	<b>ACUTE INHALATION TOXICITY</b> – AT ROOM TEMPERATURES, EXPOSURE TO VAPOR IS MINIMAL DUE TO LOW VOLATILITY. VAPOR FROM HEATED MATERIAL, MIST OR AEROSOLS MAY CAUSE RESPIRATORY IRRITATION. THE LC50 HAS NOT BEEN DETERMINED.
<b>SKIN CORROSION/IRRITATION</b>	PROLONGED CONTACT MAY CAUSE SKIN IRRITATION WITH LOCAL REDNESS
	REPEATED CONTACT MAY CAUSE SKIN IRRITATION WITH LOCAL REDNESS
<b>SERIOUS EYE DAMAGE/EYE IRRITATION</b>	MAY CAUSE EYE IRRITATION
	CORNEAL INJURY IS UNLIKELY.
<b>SENSITIZATION</b>	FOR SIMILAR MATERIALS: HAS CAUSED ALLERGIC SKIN REACTIONS IN HUMANS
	HAS DEMONSTRATED THE POTENTIAL FOR CONTACT ALLERGY IN MICE.
	FOR RESPIRATORY SENSITIZATION – NO RELEVANT DATA FOUND.
<b>SPECIFIC TARGET ORGAN SYSTEMIC TOXICITY (SINGLE EXPOSURE)</b>	EVALUATION OF AVAILABLE DATA SUGGEST THAT THIS MATERIAL IS NOT AN STOT-SE TOXICANT.
<b>SPECIFIC TARGET ORGAN SYSTEMIC TOXICITY (REPEATED EXPOSURE)</b>	EXCEPT FOR SKIN SENSITIZATION, REPEATED EXPOSURE TO LOW MOLECULAR WEIGHT EPOXY RESINS OF THIS TYPE ARE NOT ANTICIPATED TO CAUSE ANY SIGNIFICANT ADVERSE EFFECTS.
<b>CARCINOGENICITY</b>	MANY STUDIES HAVE BEEN CONDUCTED TO ASSESS THE POTENTIAL CARCINOGENICITY OF DIGLYCIDYL ETHER OF BISPHENOL A (DGEBA). INDEED THE MOST RECENT REVIEW OF THE AVAILABLE DATA BY THE INTERNATIONAL AGENCY FOR RESEARCH ON CANCER (IARC) HAS CONCLUDED THAT DGEBA IS NOT CLASSIFIED AS A CARCINOGEN. ALTHOUGH SOME WEAK EVIDENCE OF CARCINOGENICITY HAS BEEN REPORTED IN ANIMALS, WHEN ALL OF THE DATA ARE CONSIDERED, THE WEIGHT OF EVIDENCE DOES NOT SHOW THAT DGEBA IS CARCINOGENIC.
<b>TERATOGENICITY</b>	RESIN BASED ON THE DIGLYCIDYL ETHER OR BISPHENOL A (DGEBA) DID NOT CAUSE BIRTH DEFECTS OR OTHER ADVERSE EFFECTS ON THE FETUS WHEN PREGNANT RABBITS WERE EXPOSED BY SKIN CONTACT, THE MOST LIKELY ROUTE OF EXPOSURE OR WHEN PREGNANT RATS OR RABBITS WERE EXPOSED ORALLY.
<b>REPRODUCTIVELY TOXICITY</b>	IN ANIMAL STUDIES, DID NOT INTERFERE WITH REPRODUCTION.

<b>MUTAGENICITY</b>	IN VITRO GENETIC TOXICITY STUDIES WERE NEGATIVE IN SOME CASES AND POSITIVE IN OTHER CASES. ANIMALS GENETIC TOXICITY STUDIES WERE NEGATIVE.
<b>ASPIRATION HAZARD</b>	BASED ON PHYSICAL PROPERTIES, NOT LIKELY TO BE AN ASPIRATION HAZARD.
<b>COMPONENTS INFLUENCING TOXICOLOGY</b>	PROPANE, 2,2-BIS [P-(2,3-EPOXYPROPOXY)PHENYL]-, POLYMERS
	<b>ACUTE INHALATION TOXICITY</b> THE LC50 HAS NOT BEEN DETERMINED.

## SECTION XII ECOLOGICAL INFORMATION

<b>TOXICITY</b>	<b>ACUTE TOXICITY TO FISH</b> MATERIAL IS MODERATELY TOXIC TO AQUATIC ORGANISMS ON AN ACUTE BASIS (LC50/E50 BETWEEN 1 AND 10 mg/L IN THE MOST SENSITIVE SPECIES TESTED).
	LC50, ONCORHYNCHUS MYKISS (RAINBOW TROUT), SEMI-STATIC TEST, 96 HOUR, 2 mg/l
	<b>ACUTE TOXICITY TO AQUATIC INVERTEBRATES</b> EC50, DAPHNIA MAGNA (WATER FLEA), STATIC TEST, 48 HOUR, 1.8 mg/l
	<b>ACUTE TOXICITY TO ALGAE/AQUATIC PLANTS</b> ErC50, SCENEDESMUS CAPRICORNUTUM (FRESH WATER ALGAE), STATIC TEST, 72 HOUR, GROWTH RATE INHIBITION, 11 mg/l.
	<b>TOXICITY TO BACTERIA</b> IC50, BACTERIA, 18 HOUR, RESPIRATION RATES, >42.6 mg/l
	<b>CHRONIC AQUATIC TOXICITY</b>
	<b>CHRONIC TOXICITY TO AQUATIC INVERTEBRATES</b> MATC (MAXIMUM ACCEPTABLE TOXICANT LEVEL), DAPHNIA MAGNA (WATER FLEA), SEMI-STATIC TEST, 21 d, NUMBER OF OFFSPRING, 0.55 mg/l
<b>PERSISTENCE AND DEGRADABILITY</b>	<b>BIODEGRADABILITY:</b> BASED ON STRINGENT OECD TEST GUIDELINES, THIS MATERIAL CANNOT BE CONSIDERED AS READILY BIODEGRADABLE: HOWEVER, THESE RESULTS DO NOT NECESSARILY MEAN THAT THE MATERIAL IS NOT BIODEGRADABLE UNDER ENVIRONMENTAL CONDITIONS. 10-DAY WINDOW: NOT APPLICABLE
	<b>BIODEGRADATION:</b> 12%
	<b>EXPOSURE TIME</b> 28 DAYS
	<b>METHOD</b> OECD TEST GUIDELINE 302B RO EQUIVALENT.

	<b>THEORETICAL OXYGEN DEMAND:</b> 2.35 mg/mg ESTIMATED.
	<b>PHOTO DEGRADATION</b>
	<b>TEST TYPE:</b> HALF LIFE (INDIRECT PHOTOLYSIS)
	<b>SENSITIZER:</b> OH RADICALS
	<b>ATMOSPHERIC HALF-LIFE:</b> 1.92 HOUR
	<b>METHOD:</b> ESTIMATED.
<b>BIOACCUMULATIVE POTENTIAL</b>	<b>BIOACCUMULATION:</b> BIOCONCENTRATION POTENTIAL IS MODERATE (BCF BETWEEN 100 AND 3000 OR LOG POW BETWEEN 3 AND 5).
	<b>PARTITION COEFFICIENT:</b> N-OCTANOL/WATER (LOG POW): 3.242 AT 25 °C ESTIMATED

<b>MOBILITY IN SOIL</b>	<p>POTENTIAL FOR MOBILITY IN SOIL IS LOW (KOC BETWEEN 500 AND 2000). GIVING ITS VERY LOW HENRY'S CONSTANT, VOLATILIZATION FROM NATURAL BODIES OF WATER OR MOIST SOIL IS NOT EXPECTED TO BE AN IMPORTANT FATE PROCESS.</p> <p><b>PARTITION COEFFICIENT (KOC):</b> 1800 – 4400 ESTIMATED.</p>
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**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.	

**SECTION XIII DISPOSAL CONSIDERATIONS**

<p><b>WASTE DISPOSAL METHOD:</b> 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.</p>
<p><b>AQUATIC TOXICITY (E.G. 96HR.TLM):</b> 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)</p>

<p><b>HMIS HAZARD RATINGS:</b> 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</p>			<p><b>KEY</b> 4 -- SEVERE</p>
<p><b>CERTI-VEX CE 210 PART A</b></p>	<p><b>NPCA-HMIS</b></p>	<p><b>NFPA 704</b></p>	
<p><b>HEALTH</b></p>	<p><b>1</b></p>	<p><b>1</b></p>	<p>2 -- MODERATE</p>
<p><b>FLAMMABILITY</b></p>	<p><b>1</b></p>	<p><b>1</b></p>	<p>1 -- SLIGHT</p>
<p><b>REACTIVITY</b></p>	<p><b>0</b></p>	<p><b>0</b></p>	<p>0 -- MINIMAL</p>

**SECTION XV REGULATORY INFORMATION**

<p><b>CERCLA:</b> 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.</p> <p><b>NO REPORTABLE SPILL QUANTITY (RQ) HAS BEEN ESTABLISHED FOR THIS PRODUCT</b></p>
<p><b>SARA TITLE III:</b> 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 HEALTH HAZARD</p>
<p><b>ADDITIONAL REGULATORY CONCERNS:</b> (FEDERAL, FDA, USDA, CPSC, STATE, OTHER)</p> <p>FEDERAL / FDA / USDA:</p>
<p><b>MARINE POLLUTANTS:</b> YES. THIS PRODUCT DOES CONTAIN A MATERIAL ON THE MARINE POLLUTANTS TABLE (HMT 172.101 Appendix B). EPOXY RESIN</p>
<p><b>CALIFORNIA PROP 65:</b> WARNING: This product DOES NOT contain 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><b>CERCLA / RQ:</b> THIS PRODUCT DOES NOT CONTAIN A MATERIAL ON THE RQ TABLE (HMT 172.101 Appendix A):</p>
<p><b>TSCA:</b> IS THIS PRODUCT, OR ALL ITS INGREDIENTS, BEING CERTIFIED FOR INCLUSION ON THE TOXIC SUBSTANCES CONTROL ACT INVENTORY OF CHEMICAL SUBSTANCES? <b>YES</b></p>



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<b>HEALTH</b>	<b>3</b>
<b>FLAMMABILITY</b>	<b>2</b>
<b>REACTIVITY</b>	<b>0</b>

SAFETY DATA SHEET  
VEXCON NO. CE200  
**CERTI-VEX CE 210**  
**PART B**

**SECTION I - GENERAL INFORMATION**

<b>PRODUCT IDENTIFICATION:</b> CERTI-VEX CE 210 PART B	
<b>VOC CONTENT:</b>	PART A ONLY: 0 PART B ONLY: 0 AS APPLIED: 0
<b>CATEGORY:</b>	
<b>COMMON NAME:</b>	HARDENER FOR EPOXY RESIN COATING
<b>MANUFACTURER:</b>	VEXCON CHEMICALS, INC
<b>ADDRESS:</b>	7240 STATE RD, PHILADELPHIA, PA 19135
<b>EMERGENCY NO.:</b>	800.858.2828 (PolySat Inc)
<b>TELEPHONE NO.:</b>	215.332.7709 (Vexcon)
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<b>PREPARED:</b>	NOVEMBER 2016
<b>UPDATED:</b>	JULY 2017
<b>PREPARED BY:</b>	DARRY F. MANUEL, PRESIDENT


**SECTION II - HAZARD IDENTIFICATION**




**DOT SHIPPING NAME:**  
UN ID NUMBER / SHIPPING NAME / HAZARD CLASS / PKG GROUP  
IN CONTAINERS LESS THAN 119 GALS:  
**UN 2735, AMINES, LIQUID CORROSIVE,  
N.O.S. (ISOPHORONEDIAMINE, 1,3,  
BENZENEDIMETHANAMINE), 8, III**

IN CONTAINERS GREATER THAN 119 GALS:  
**UN 2735, AMINES, LIQUID CORROSIVE,  
N.O.S. (ISOPHORONEDIAMINE, 1,3,  
BENZENEDIMETHANAMINE), 8, III**

**FOR LIMITED QUANTITY AIR & OCEAN SHIPMENT:**  
**UN 2735, AMINES, LIQUID CORROSIVE, N.O.S.  
(ISOPHORONEDIAMINE, 1,3, BENZENEDIMETHANAMINE), 8,  
III**

**HEALTH AND SAFETY: DANGER:** HARMFUL IF SWALLOWED OR IF  
INHALED, CAUSES SEVERE SKIN BURNS AND EYE DAMAGE, MAY  
CAUSE AN ALLERGIC SKIN REACTION. SUSPECTED OF DAMAGING  
FERTILITY OF THE UNBORN CHILD. 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**

MATERIAL OR COMPONENTS	CAS NO.	%	HAZARD DATA
BENZYL ALCOHOL	100-51-6	15-40%	US WEEL: TWA 10 ppm
3-AMINOMETHYL-3,5,5-TRIMETHYLCYCLOHEXYLAMINE (ISOPHORONEDIAMINE)	2855-13-2	15-40%	NA
1,3 BENZENEEDIMETHANAMINE	1477-55-0	5-15%	ACGIH: CELING 0.1 mg/m3 ACGIH: CELING: ABSORBED VIA SKIN
1,3 BENZENEEDIMETHANAMINE, POLYMER WITH 2,2-[(1-METHYLETHYLIDENE) BIS (4,1-PHENYLENEOXYMETHYLENE)] BIS [OXIRANE]	110839-13-9	10-30%	DOW IHG: TWA 1 ppm DOW IHG: STEL 3 ppm
4-NONYLPHENOL, BRANCHED	84852-15-3	3-7%	NA
SALICYLIC ACID	69-75-7	1-5%	NA
BENZYL DIMETHYLAMINE	103-83-3	1-5%	NA
PIGMENTS			
PIGMENTS; WOLLASTONITE	13983-17-0	50-75%	OSHA PEL: TWA 15 mg/m3 TOTAL DUST: 5 mg/m3 RESPIRABLE DUST ACGIH TLV TWA 10 mg/m3 TOTALS DUST 3 mg/m3 RESPIRABLE

**SECTION IV FIRST AID MEASURES**

**HEALTH HAZARD DATA HAZARD CLASSIFICATION  
BASIS FOR CLASSIFICATION SOURCE**

ROUTES OF EXPOSURE:	
<b>INHALATION:</b>	THIS PRODUCT MAY CREATE BREATHING DIFFICULTIES. DIZZINESS, LIGHTEADEDNESS WHEN WORKING IN AREAS WITH HIGH VAPOR CONCENTRATION.
<b>SKIN CONTACT:</b>	THIS PRODUCT MAY CAUSE SKIN IRRITATION UPON PROLONGED OR REPEATED CONTACT.
<b>SKIN ABSORPTION:</b>	THIS PRODUCT MAY CAUSE SKIN IRRITATION UPON PROLONGED OR REPEATED CONTACT.
<b>EYE CONTACT:</b>	THIS PRODUCT MAY BE AN EYE IRRITANT.
<b>INGESTION / INHALATION</b>	CAN CAUSE GASTROINTESTINAL IRRITATION, NAUSEA, VOMITING. 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.
<b>ACUTE OVEREXPOSURE:</b>	ANESTHESIA, HEADACHE, NAUSEA, DIZZINESS: MODERATE IRRITATION BY LIQUID TO SKIN AND EYES. PROLONGED CONTACT ON THE SKIN WILL CLAY AND DEFAAT THE SKIN POSSIBLY CAUSING DERMATITIS.

<b>EMERGENCY AND FIRST AID PROCEDURES:</b>	
<b>EYES:</b>	FLUSH WITH PLENTY OF WATER FOR AT LEAST 30 MINUTES. SEEK IMMEDIATE MEDICAL ATTENTION. CONSULT A PHYSICIAN.
<b>SKIN:</b>	WASH WITH SOAP AND LARGE QUANTITIES OF WATER FOR AT LEAST 15 MNS. SEEK MEDICAL ATTENTION IF SKIN IRRITATION DEVELOPS AND PERSISTS.
<b>INHALATION:</b>	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.
<b>INGESTION:</b>	DO NOT INDUCE VOMITING; GIVE ONE CUP (8OZ OR 240 ml) OF WATER OR MILK IF AVAILABLE. DO NOT GIVE ANYTHING BY MOUTH UNLESS THE PERSON IS FULLY CONSCIOUS. SEEK IMMEDIATE MEDICAL ATTENTION.

### **SECTION V FIREFIGHTING MEASURES**

<b>EXTINGUISHING MEDIA:</b>	EXCLUDE AIR. FIRES INVOLVING THIS PRODUCT MAY BE CONTROLLED BY <b>REGULAR FOAM, CARBON DIOXIDE, DRY CHEMICALS OR WATER SPRAY. ALCOHOL RESISTANT FOAMS (ATC TYPE) ARE PREFERRED.</b> DO NOT USE DIRECT WATER STREAM. MAY SPREAD FIRE
<b>GENERAL HAZARD:</b>	HAZARDOUS COMBUSTION PRODUCTS: DURING A FIRE, SMOKE MAY CONTAIN THE ORIGINAL MATERIAL IN ADDITION TO COMBUSTION PRODUCTS OF VARYING COMPOSITION WHICH MAY BE TOXIC AND/OR IRRITATING. COMBUSTION PRODUCTS MAY INCLUDE AND ARE NOT LIMITED TO NITROGEN OXIDES, CARBON MONOXIDE, CARBON DIOXIDE.
<b>UNUSUAL FIRE AND EXPLOSION HAZARD:</b>	VIOLENT STEAM GENERATION OR ERUPTION MAY OCCUR UPON APPLICATION OF DIRECT WATER STREAM TO HOT LIQUIDS. DENSE SMOKE IS PRODUCED WHEN PRODUCT BURNS.
<b>SPECIAL FIRE FIGHTING PROCEDURES</b>	THE USE OF <b>SELF-CONTAINED BREATHING APPARATUS</b> 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 VI ACCIDENTAL RELEASE MEASURES**

<b>STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:</b> 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.
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### **SECTION VII HANDLING AND STORAGE**

<b>PRECAUTIONARY STATEMENTS:</b> 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.
<b>FIRE FIGHTING:</b> 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.
<b>OTHER HANDLING AND STORAGE REQUIREMENTS:</b> 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**

<b>VENTILATION REQUIREMENTS:</b> 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.
<b>RESPIRATORY (SPECIFY IN DETAIL):</b> 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.
<b>EYES:</b> CHEMICAL GOGGLES AND/OR FACE SHIELD ARE RECOMMENDED TO SAFEGUARD AGAINST POTENTIAL EYE CONTACT, IRRITATION OR INJURY.
<b>GLOVES:</b> THE USE OF IMPERMEABLE GLOVES IS ADVISED TO PREVENT SKIN IRRITATION IN SENSITIVE INDIVIDUALS. IMPERVIOUS GLOVES, (CHEMICAL RESISTANT) SUCH AS NEOPRENE, LATEX OR PVA.
<b>OTHER CLOTHING AND EQUIPMENT:</b> 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**

<b>BOILING POINT:</b> (760mmHg) 221°C / 430°F	<b>MELTING/FREEZING POINT:</b> PMCC
<b>VAPOR PRESSURE:</b> 1.55mmHG@68°F/20°C	<b>VAPOR DENSITY (AIR=1):</b> >1
<b>SOLUBILITY IN H2O % BY WT:</b> SLIGHTLY SOLUBLE	<b>% VOLATILES BY VOL:</b> 0%
<b>EVAPORATION RATE (BuAc=1):</b> NA	<b>RELATIVE DENSITY (H2O=1)</b> 1.768
<b>pH (AS IS):</b> N/A	<b>pH (1% SOLN):</b> N/A
<b>APPEARANCE AND ODOR:</b>	PIGMENTED LIQUID. MODERATE AMINE ODOR
<b>FLASH POINT:</b> (TEST METHOD)	<b>93°C / 200°F (TCC)</b>
<b>AUTOIGNITION TEMP:</b>	NA
<b>FLAMMABLE LIMITS IN AIR, % BY VOL:</b>	NA

**SECTION X STABILITY AND REACTIVITY**

<b>CONDITIONS CONTRIBUTING TO INSTABILITY:</b>	THIS PRODUCT IS STABLE.
<b>INCOMPATIBILITY:</b>	THIS PRODUCT IS INCOMPATIBLE WITH STRONG OXIDIZING AGENTS, STRONG ACIDS OR BASES, AND SELECTED AMINES.
<b>HAZARDOUS DECOMPOSITION PRODUCTS:</b>	THERMAL DECOMPOSITION IN THE PRESENCE OF AIR MAY YIELD CARBON MONOXIDE AND/OR CARBON DIOXIDE, AND UNIDENTIFIED ORGANICS.
<b>CONDITIONS CONTRIBUTING TO HAZARDOUS POLYMERIZATION:</b>	N/A WILL NOT OCCUR

**SECTION XI TOXICOLOGICAL INFORMATION**

<b>ACUTE TOXICITY</b>	<b>ACUTE ORAL TOXICITY</b>
	LOW TOXICITY IF SWALLOWED. SWALLOWING MAY RESULT IN GASTROINTESTINAL IRRITATION OR ULCERATION. SWALLOWING MAY RESULT IN BURNS OF THE MOUTH AND THROAT.
	<b>AS PRODUCT:</b> SINGLE DOSE ORAL LD50 HAS NOT BEEN DETERMINED.
	BASED ON INFORMATION FOR COMPONENT (S): LD50 RAT, 1,000 mg/kg ESTIMATED.
	<b>ACUTE DERMAL TOXICITY</b>
	PROLONGED OR WIDESPREAD SKIN CONTACT MAY RESULT IN ABSORPTION OF POTENTIALLY HARMFUL AMOUNTS. THE DERMAL LD50 HAS NOT BEE DETERMINED
	<b>ACUTE INHALATION TOXICITY</b>
	EXCESSIVE EXPOSURE MAY CAUSE IRRITATION TO UPPER RESPIRATORY TRACT (NOSE, THROAT). MAY CAUSE CENTRAL NERVOUS SYSTEM DEPRESSION. SYMPTOMS MAY INCLUDE HEADACHE, DIZZINESS AND DROWSINESS, PROGRESSING TO IN COORDINATION AND UNCONSCIOUSNESS. PROLONGED EXCESSIVE EXPOSURE MAY CAUSE SERIOUS ADVERSE EFFECTS, EVEN DEATH.
<b>SKIN CORROSION/IRRITATION</b>	BRIEF CONTACT MAY CAUSE SKIN BURNS. SYMPTOMS MAY INCLUDE PAIN, SEVERE LOCAL REDNESS AND TISSUE DAMAGE
<b>SERIOUS EE DAMAGE/EYE IRRITATION</b>	MAY CAUSE SEVERE IRRITATION WITH CORNEAL INJURY WHICH MAY RESULT IN PERMANENT IMPAIRMENT OF VISION, EVEN BLINDNESS. CHEMICAL BURNS MAY OCCUR. VAPOR MAY CAUSE LACRIMATION (TEARS)

<b>SENSITIZATION</b>	SKIN CONTACT MAY CAUSE AN ALLERGIC SKIN REACTION. A COMPONENT IN THE MIXTURE HAS CAUSED ALLERGIC SKIN REACTIONS IN HUMANS. CONTAINS COMPONENT(S) WHICH HAVE CAUSED ALLERGIC SKIN SENSITIZATION IN GUINEA PIGS. CONTAINS COMPONENT(S) WHICH HAVE DEMONSTRATED THE POTENTIAL FOR CONTACT ALLERGY IN MICE. FOR RESPIRATORY SENSITIZATION: NO RELEVANT DATA FOUND.
<b>SPECIFIC TARGET ORGAN SYSTEMIC TOXICITY (SINGLE EXPOSURE)</b>	EVALUATION OF AVAILABLE DATA SUGGESTS THAT THIS MATERIAL IS NOT A STOT-SE TOXICANT.
<b>SPECIFIC TARGET ORGAN SYSTEMIC TOXICITY (REPEATED EXPOSURE)</b>	FOR THE COMPONENT(S) TESTED: IN ANIMALS, EFFECTS HAVE BEEN REPORTED ON THE FOLLOWING ORGANS: CENTRAL NERVOUS SYSTEM MUSCLES THYMUS URINARY TRACT RESPIRATORY TRACT LIVER KIDNEY GASTROINTESTINAL TRACT TESTES
<b>CARCINOGENICITY</b>	CONTAINS COMPONENT(S) WHICH DO NOT CAUSE CANCER IN LABORATORY ANIMALS.
<b>TERATOGENICITY</b>	BASED ON INFORMATION FOR COMPONENT(S): HAS CAUSED BIRTH DEFECTS IN LABORATORY ANIMALS ONLY AT DOSES TOXIC TO THE MOTHER. HAS BEEN TOXIC TO THE FETUS IN LABORATORY ANIMALS AT DOSES TOXIC TO THE MOTHER. DID NOT CAUSE BIRTH DEFECTS IN THE FETUS EVEN AT DOSES WHICH CAUSED TOXIC EFFECTS IN THE MOTHER.
<b>REPRODUCTIVE TOXICITY</b>	IN A THREE-GENERATION REPRODUCTION STUDY IN RATS, NONYLPHENOL DID NOT INTERFERE WITH STANDARD REPRODUCTIVE PARAMETER. HOWEVER, SOME ADDITIONAL ENDPOINTS WHICH ARE CONSIDERED MARKERS OF POTENTIAL REPRODUCTIVE TOXICITY WERE AFFECTED AT HIGHER DOSES THAT PRODUCED SYSTEMIC TOXICITY TO THE PARENT ANIMALS. CONTAINS COMPONENT(S) WHICH DID NOT INTERFERE WITH FERTILITY IN ANIMAL STUDIES. CONTAINS COMPONENT(S) WHICH DID NOT INTERFERE WITH REPRODUCTION IN ANIMALS STUDIES.

**SECTION XII ECOLOGICAL INFORMATION**

<b>MUTAGENICITY</b>	CONTAINS COMPONENT(S) WHICH WERE NEGATIVE IN SOME IN VITRO GENETIC TOXICITY STUDIES AND POSITIVE IN OTHERS. CONTAINS A COMPONENT(S) WHICH WERE NEGATIVE IN THE IN VITRO GENETIC TOXICITY STUDIES. CONTAINS COMPONENTS(S) WHICH WERE NEGATIVE IN ANIMAL GENETIC TOXICITY STUDIES.
<b>ASPIRATION HAZARD</b>	BASED ON PHYSICAL PROPERTIES, NOT LIKELY TO BE AN ASPIRATION HAZARD.
<b>COMPONENTS INFLUENCING TOXICOLOGY</b>	
<b>BENZYL ALCOHOL</b>	<b>ACUTE DERMAL TOXICITY</b> LD50, RABBIT, >2,000 mg/kg. NO DEATHS OCCURRED AT THIS CONCENTRATION. <b>ACUTE INHALATION TOXICITY</b> LC50, RAT, 4 HOURS, VAPOUR, 11 mg/l
<b>3-AMINOMETHYL-3,5,5-TRIMETHYLCYCLOHEXYLAMINE (ISOPHORONEDIAMINE)</b>	<b>ACUTE DERMAL TOXICITY</b> LD50, RATE, MALE AND FEMALE, >2,000 mg/kg. NO DEATHS OCCURRED AT THIS CONCENTRATION. <b>ACUTE INHALATION TOXICITY</b> LC50, RAT, 4 HOUR, DUST/MIST, > 5.01 mg/l
<b>1,3 BENZENE DIMETHANAMINE</b>	<b>ACUTE DERMAL TOXICITY</b> LD50, RAT, >3,100 mg/kg. NO DEATHS OCCURRED AT THIS CONCENTRATION. <b>ACUTE INHALATION TOXICITY</b> PROLONGED EXCESSIVE EXPOSURE MAY CAUSE SERIOUS ADVERSE EFFECTS, EVEN DEATH. EXCESSIVE EXPOSURE MAY CAUSE SEVERE IRRITATION TO UPPER RESPIRATORY TRACT (NOSE AND THROAT) AND LUNGS. SALIVATION LC50, RAT, 4 HOUR, DUST/MIST, 1.34 mg/l
<b>1,3 BENZENE DIMETHANAMINE, POLYMER WITH 2,2-[(1-METHYLETHYLIDENE) BIS (4,1-PHENYLENE OXYMETHYLENE)] BIS [OXIRANE]</b>	<b>ACUTE DERMAL TOXICITY</b> THE DERMAL LD50 HAS NOT BEEN DETERMINED. <b>ACUTE INHALATION TOXICITY</b> LC50 HAS NOT BE DETERMINED.
<b>4-NONYLPHENOL, BRANCHED</b>	<b>ACUTE DERMAL TOXICITY</b> LD50, RABBIT, 2,031 – 2,831 mg/kg <b>ACUTE INHALATION TOXICITY</b> LC50 MOUSE, FEMALE, VAPOUR, > 3.636 mg/l
<b>SALICYLIC ACID</b>	<b>ACUTE DERMAL TOXICITY</b> LD50, RAT, > 2,000 mg/kg ESTIMATED. <b>ACUTE INHALATION TOXICITY</b> LC50 HAS NOT BEN DETERMINED.
<b>BENZYL DIMETHYLAMINE</b>	<b>ACUTE DERMAL TOXICITY</b> LD50, RAT, MALE, 1,477 mg/kg <b>ACUTE INHALATION TOXICITY</b> LC50, RAT, MALE AND FEMALE, 4 HOUR VAPOUR, 2.05 mg/l

<b>TOXICITY</b>	
<b>ENXYL ALCOHOL</b>	<b>ACUTE TOXICITY TO FISH</b> MATERIAL IS PRACTICALLY NON-TOXIC TO AQUATIC ORGANISMS ON AN ACUTE BASIS (LC50/EC50/EL50/LL50 > 100 mg/L IN MOST SENSITIVE SPECIES TESTED). LC50, PIMEPHALES PROMELAS (FATHEAD MINNOW). STATIC, 96 HOUR, 460 mg/l METHOD NO SPECIFIED. <b>ACUTE TOXICITY TO AQUATIC INVERTEBRATES.</b> EC50, DAPHNIA MAGNA (WATER FLEA), 48 HOURS, 230 mg/l OECD TEST GUIDELINE 202 <b>ACUTE TOXICITY TO ALGAE/AQUATIC PLANTS</b> EC50, PSEUDOKIRCHNERIELLA SUBCAPITATA )GREEN ALGAE), STATIC, 72 HOUR, GROWTH RATE, 770 mg/l. OECD TEST GUIDELINE 201 <b>TOXICITY TO BACTERIA</b> EC50, ACTIVATED SLUDGE, RESPIRATION INHIBITION, 49 HOUR, RESPIRATION RATES, . 2,100 mg/l, OECD 209 TEST. CHRONIC TOXICITY TO AQUATIC INVERTEBRATES NOEC, DAPHNIA MAGNA, SEMI-STATIC TEST, 21 D, 51 mg/l
<b>3-AMINOMETHYL-3,5, 5-TRIMETHYLCYCLOHEXYLAMINE (ISOPHORONEDIAMINE)</b>	<b>ACUTE TOXICITY TO FISH</b> MATERIAL IS LIGHTLY TOXIC TO AQUATIC ORGANISMS ON AN ACUTE BASIS, (LC50/EC50 BETWEEN 10 AND 100 mg/l IN THE MOST SENSITIVE SPECIES TESTED), LC50. LEUCISCUS IDUS (GOLDEN ORFE), SEMI-STATIC TEST 96 HOUR, 110 mg/l <b>ACUTE TOXICITY TO AQUATIC INVERTEBRATES</b> EC50, DAPHNIA MAGNA (WATER FLEA), STATIC, 48 HOUR, 23 mg/l, OECD TEST GUIDELINE 202 OR EQUIVALENT. <b>TOXICITY TO BACTERIA</b> EC10, BACTERIA, 18 HOUR, 1,120 mg/l CHRONIC TOXICITY TO AQUATIC INVERTEBRATES NOEC DAPHNIA MAGNA (WATER FLEA), 21 D, NUMBER OF OFFSPRING, 3 mg/l
<b>1,3 BENZENE DIMETHANAMINE</b>	<b>ACUTE TOXICITY TO FISH</b> MATERIAL IS SLIGHTLY TOXIC TO AQUATIC ORGANISMS ON AN ACUTE BASIS (LC50/EC50 BETWEEN 10 AND 100 mg/l IN THE MOST SENSITIVE SPECIES TESTED). LC50, LEUCISCUS IDUS (GOLDEN ORFE) 96 HOUR, 75 mg/l <b>ACUTE TOXICITY TO AQUATIC INVERTEBRATES</b> EC50, DAPHNIA MAGNA (WATER FLEA) STATIC TEST 48 HOUR, 15.2 mg/l OECD TEST GUIDELINE 202 OR EQUIVALENT <b>ACUTE TOXICITY TO ALGAE /AQUATIC PLANTS</b> EC50, ALGA SCENEDESMUS SP STATIC TEST, 72 HOUR BIOMASS, 12 mg/l OECD



	TEST GUIDELINE 201 OR EQUIVALENT	
	CHRONIC TOXICITY TO AQUATIC INVERTEBRATES	
	NOEC, DAPHNIA MAGNA (WATER FLEA) 21 D, NUMBER OF OFFSPRING 4.7 mg/l	
<b>1,3-BENZENEDIMETHANAMINE, POLYMER WITH 2,2'-[(1-METHYLETHYLIDENE)BIS (4,1-PHENYLENEOXYMETHYLENE)] BIS [OXIRANE]</b>	<b>ACUTE TOXICITY TO FISH</b>	
	MATERIAL IS MODERATELY TOXIC TO AQUATIC ORGANISMS ON AN ACUTE BASIS (LC50/EC50 BETWEEN 1 AND 10 mg/l IN THE MOST SENSITIVE SPECIES TESTED).	
	LL50, RAINBOW TROUT (ONCORHYNCHUS MYKISS) STATIC TEST, 96 HOUR, 64 mg/l OECD TEST GUIDELINE 203 OR EQUIVALENT.	
	<b>ACUTE TOXICITY TO AQUATIC INVERTEBRATES</b>	
	EL50, DAPHNIA MAGNA (WATER FLEA), STATIC TEST 48 HOUR, 1.46 mg/l OECD TEST GUIDELINE 202 OR EQUIVALENT.	
	<b>ACUTE TOXICITY TO ALGAE/AQUATIC PLANTS.</b>	
	EL50 PSEUDOKIRCHNERIELLA SUBCAPITATA (GREEN ALGAE) STATIC TEST, 72 HOUR, CELL YIELD INHIBITION, > 30 mg/l OECD TEST GUIDELINE 201 OR EQUIVALENT.	
	<b>TOXIC TO BACTERIA</b>	
	EC50 ACTIVATED SLUDGE, AEROBIC, 3 HOUR RESPIRATION RATES, 88.9 mg/l ACTIVATED SLUDGE TEST (OECD 209)	
<b>4-NONYPHENOL, BRANCHED</b>	<b>ACUTE TOXICITY TO FISH</b>	
	MATERIAL IS HIGHLY TOXIC TO AQUATIC ORGANISMS ON AN ACUTE BASIS (LC50/EC50 BETWEEN 0.1 AND 1 mg/l IN THE MOST SENSITIVE SPECIES TESTED)	
	LC50, PIMEPHALES PROMELAS (FATHEAD MINNOW) FLOW-THROUGH TEST, 96 HOUR 0.135 mg/l OECD TEST GUIDE LINE 203 OR EQUIVALENT.	
	<b>ACUTE TOXICITY TO AQUATIC INVERTEBRATES</b>	
	EC50, DAPHNIA MAGNA (WATER FLEA) 48 HOUR, 0.14 mg/l DIRECTIVE 84/449/EEC, C.2	
	<b>ACUTE TOXICITY TO ALGAE/AQUATIC PLANTS.</b>	
	EC50 ALGA SCENEDESMUS SP. 72 HOUR BIOMASS, 1.3 mg/l METHOD NOT SPECIFIED.	
	<b>CHRONIC TOXICITY TO FISH</b>	
	NOEC PIMEPHALES PROMELAS (FATHEAD MINNOW) FLOW THROUGH TEST 33 D, SURVIVAL 0.0074 mg/l	
	<b>CHRONIC TOXICITY TO AQUATIC INVERTEBRATES</b>	
	NOEC, DAPHNIA MAGNA (WATER FLEA) SEMI-STATIC TEST 21 D NUMBER OF OFFSPRING, 0.024 mg/l	
<b>SALICYLIC ACID</b>	<b>ACUTE TOXICITY TO FISH</b>	
	MATERIAL IS SLIGHTLY TOXIC TO AQUATIC ORGANISMS ON AN ACUTE BASIS (LC50/EC50 BETWEEN 10 AND 100 mg/l IN THE MOST SENSITIVE SPECIES TESTED).	
	LC50 EMERALD SHINER (NOTROPIS ATERINOIDES),	

	96 HOUR >150 mg/l METHOD NOT SPECIFIED	
	LC50 LEUCISCUS IDUS (GOLDEN ORFE) STATIC TEST, 48 HOUR 90 mg/l METHOD NOT SPECIFIED.	
	<b>ACUTE TOXICITY TO AQUATIC INVERTEBRATES.</b>	
	LC50, DAPHNIA MAGNA (WATER FLEA). 24 HOUR, 105-230 mg/l METHOD NOT SPECIFIED.	
	<b>TOXIC TO BACTERIA</b>	
	EC50, ACTIVATED SLUDGE, 3 HOUR, >3,200 mg/l OECD 209 TEST.	
<b>BENZYL DIMETHYLAMINE</b>	<b>ACUTE TOXICITY TO FISH</b>	
	MATERIAL IS MODERATELY TOXIC TO AQUATIC ORGANISMS ON AN ACUTE BASIS (LC50/EC50 BETWEEN 1 AND 10 mg/l IN THE MOST SENSITIVE SPECIES TESTED).	
	MAY INCREASE pH OF AQUATIC SYSTEMS TO > pH10 WHICH MAY BE TOXIC TO AQUATIC ORGANISMS.	
	LC50 PIMEPHALES PROMELAS (FATHEAD MINNOWS) FLOW THROUGH TEST, 96 HOUR, 37.8 mg/l OECD TEST GUIDELINE 203 OR EQUIVALENT.	
	<b>ACUTE TOXICITY TO AQUATIC INVERTEBRATES</b>	
	EC50 DAPHNIA MAGNA (WATER FLEA) STATIC TEST, 48 HOUR, >100 mg/l OECD TEST GUIDELINE 202 OR EQUIVALENT	
	<b>ACUTE TOXICITY TO ALGAE/AQUATIC PLANTS</b>	
	EC50, DESMODESMUS SUBSPICATUS (GREEN ALGAE) STATIC TEST, 72 HOUR, GROWTH RATE INHIBITION, 1.34 mg/l	
	<b>TOXIC TO BACTERIA</b>	
	EC50 PSEUDOMONAS PUTIDA, GROWTH INHIBITION, 17 HOUR GROTH INHIBITION, 534 mg/l DIN 38412	
	<b>CHRONIC TOXICITY TO AQUATIC INVERTEBRATES.</b>	
	NOEC DAPHNIA MAGNA (WATER FLEA) SEMI-STATIC TEST 21 DAY NUMBER OF OFFSPRING, 0.789 mg/l	
	LOEC, DAPHNIA MAGNA (WATER FLEA), SEMI-STATIC, 21D NUMBER OF OFFSPRING 2.622 mg/l	
	<b>PERSISTENCE OF DEGRADABILITY</b>	
<b>BENZYL ALCOHOL</b>	<b>BIODEGRADABILITY:</b> MATERIAL IS READILY BIODEGRADABLE. PASSES OECD TEST(S) FOR READY BIODEGRADABILITY	
	10DAY WINDOW: NA	
	<b>BIODEGRADATION:</b> 92-96%	
	<b>EXPOSURE TIME:</b> 14D	
	<b>METHOD:</b> OECD TEST GUIDELINE 301C OR EQUIVALENT	
	<b>THEORETICAL OXYGEN DEMAND:</b> 2.52 mg/l	
	<b>PHOTO DEGRADATION</b>	
	<b>TEST TYPE:</b> HALF-LIFE (INDIRECT PHOTOLYSIS)	
	<b>SENSITIZER:</b> OH RADICALS.	
	<b>ATMOSPHERIC HALF-LIFE:</b> 1.296D	
<b>METHOD:</b> ESTIMATED.		

<p><b>3-AMINOMETHYL-3,5,5-TRIMETHYLCYCLOHEXYLAMINE (ISOPHORONEDIAMINE)</b></p>	<p><b>BIODEGRADABILITY:</b> MATERIALS EXPECTED TO BIODEGRADE VERY SLOWLY (IN THE ENVIRONMENT). FAILS TO PASS OECD/EEC TEST FOR READILY BIODEGRADABILITY</p> <p>10 DAY WINDOW: FAIL</p> <p><b>BIODEGRADATION:</b> 8%</p> <p><b>EXPOSURE TIME:</b> 28 D</p> <p><b>METHOD:</b> OECD TEST GUIDELINE 301A OR EQUIVALENT</p> <p><b>10-DAY WINDOW:</b> NA</p> <p><b>BIODEGRADATION:</b> 42%</p> <p><b>EXPOSURE TIME:</b> 3 HOURS</p> <p><b>METHOD:</b> OECD TEST GUIDELINE 303a OR EQUIVALENT.</p> <p><b>THEORETICAL OXYGEN DEMAND:</b> 3.38 mg/l</p> <p><b>PHOTO DEGRADATION</b> <b>TEST TYPE:</b> HALF LIFE (INDIRECT PHOTOLYSIS) <b>SENSITIZER:</b> OH RADICALS <b>ATMOSPHERIC HALF-LIFE:</b> 0.126D <b>METHOD:</b> ESTIMATED.</p>
<p><b>1,3-BENZENEDIMETHANAMINE</b></p>	<p><b>BIODEGRADABILITY:</b> MATERIAL IS INHERENTLY BIODEGRADABLE (REACHED &gt;20% BIODEGRADATION IN OECD TEST(S) FOR INHERENT BIODEGRADABILITY). BASED ON STRINGENT OECD TEST GUIDELINES, THIS MATERIAL CANNOT BE CONSIDERED AS READILY BIODEGRADABLE; HOWEVER, THESE RESULTS DO NOT NECESSARILY MEAN THAT THE MATERIAL IS NOT BIODEGRADABLE UNDER ENVIRONMENTAL CONDITIONS.</p> <p>10-DAY WINDOW: NA</p> <p><b>BIODEGRADATION:</b> 22%</p> <p><b>EXPOSURE TIME</b> 28D</p> <p><b>METHOD:</b> OECD TEST GUIDELINE 302C OR EQUIVALENT</p> <p><b>10-DAY WINDOW:</b> FAIL</p> <p><b>BIODEGRADATION</b> 49%</p> <p><b>EXPOSURE TIME:</b> 28D</p> <p><b>METHOD:</b> OECD TEST GUIDELINE 301b OR EQUIVALENT</p> <p><b>THEORETICAL OXYGEN DEMAND:</b> 3.17 mg/l</p> <p><b>PHOTO DEGRADATION:</b> <b>TEST TYPE:</b> HALF-LIFE (INDIRECT PHOTOLYSIS) <b>SENSITIZER:</b> OH RADICALS. <b>ATMOSPHERIC HALF-LIFE:</b> 0.15 D <b>METHOD:</b> ESTIMATED</p>
<p><b>1,3 BENZENEDIMETHANAMINE, POLYMER WITH 2,2-{{1-METHYLETHYLIDENE}}BIS (4,1-PHENYLENEOXYMETHYLENE) BIS [OXIRANE]</b></p>	<p><b>BIODEGRADABILITY:</b> MATERIAL IS NOT READILY BIODEGRADABLE ACCORDING TO OECD/EEC GUIDELINES.</p> <p>10-DAY WINDOW: FAIL</p> <p><b>BIODEGRADATION:</b> 0%</p> <p><b>EXPOSURE TIME</b> 28 D</p> <p><b>METHOD:</b> OECD TEST GUIDELINE 301f OR EQUIVALENT.</p>
<p><b>4-NONYLPHENOL, BRANCHED</b></p>	<p><b>BIODEGRADABILITY:</b> BASED ON STRINGENT OECD TEST GUIDELINES, THIS MATERIAL CANNOT BE CONSIDERED AS READILY BIODEGRADABLE; HOWEVER, THESE RESULTS DO NOT NECESSARILY</p>

	<p>MEAN THAT THE MATERIAL IS NOT BIODEGRADABLE UNDER ENVIRONMENTAL CONDITIONS.</p> <p>10-DAY WINDOW: FAIL</p> <p><b>BIODEGRADATION:</b> 48.2%</p> <p><b>EXPOSURE TIME:</b> 35 D</p> <p><b>METHOD:</b> OECD TEST GUIDELINE 301B OR EQUIVALENT</p> <p><b>THEORETICAL OXYGEN DEMAND:</b> 3.29 mg/mg</p> <p><b>PHOTO DEGRADATION</b> <b>TEST TYPE:</b> HALF-LIFE (INDIRECT PHOTOLYSIS) <b>SENSITIZER:</b> OH RADICALS <b>ATMOSPHERIC HALF-LIFE:</b> 0.207 D <b>METHOD:</b> ESTIMATED.</p>
<p><b>SALICYLIC ACID</b></p>	<p><b>BIODEGRADABILITY:</b> MATERIAL IS READILY BIODEGRADABLE. PASSES OECD TEST(S) FOR READY BIODEGRADABILITY.</p> <p>10-DAY WINDOW: NA</p> <p><b>BIODEGRADATION:</b> 88.1%</p> <p><b>EXPOSURE TIME:</b> 14 D</p> <p><b>METHOD:</b> OECD TEST GUIDELINE 301C OR EQUIVALENT.</p> <p><b>THEORETICAL OXYGEN DEMAND:</b> 1.62 mg/mg</p> <p><b>PHOTO DEGRADATION</b> <b>TEST TYPE:</b> HALF-LIFE (INDIRECT PHOTOLYSIS) <b>SENSITIZER:</b> OH RADICALS. <b>ATMOSPHERIC HALF-LIFE:</b> 0.823 D <b>METHOD:</b> ESTIMATED.</p>
<p><b>BENZYL DIMETHYLAMINE</b></p>	<p><b>BIODEGRADABILITY:</b> MATERIAL IS EXPECTED TO BIODEGRADE VERY SLOWLY (IN THE ENVIRONMENT). FAILS TO PASS OECD/EEC TEST FOR READY BIODEGRADABILITY. MATERIAL IS ULTIMATELY BIODEGRADABLE (REACHES &gt;70% MINERALIZATION IN OECD TEST(S) FOR INHERENT BIODEGRADABILITY).</p> <p>10-DAY WINDOW: NA</p> <p><b>BIODEGRADATION:</b> 0 – 2%</p> <p><b>EXPOSURE TIME:</b> 28 D</p> <p><b>METHOD:</b> OECD TEST GUIDELINE 301C OR EQUIVALENT.</p> <p>10-DAY WINDOW: NA</p> <p><b>BIODEGRADATION:</b> 90-100%</p> <p><b>EXPOSURE TIME:</b> 12D</p> <p><b>METHOD</b> OECD TEST GUIDELINE 302B OR EQUIVALENT.</p> <p><b>THEORETICAL OXYGEN DEMAND:</b> 3.20 mg/mg</p> <p><b>PHOTO DEGRADATION</b> <b>TEST TYPE:</b> HALF-LIFE (INDIRECT PHOTOLYSIS) <b>SENSITIZER:</b> OH RADICALS <b>ATMOSPHERIC HALF-LIFE:</b> 0.130 D <b>METHOD:</b> ESTIMATED.</p>
<p><b>BIOACCUMULATIVE POTENTIAL</b></p>	
<p><b>BENZYL ALCOHOL</b></p>	<p><b>BIOACCUMULATION:</b> BIOCONCENTRATION POTENTIAL IS LOW (BCG &lt;100 OR LOG POW &lt;3).</p> <p><b>PARTITION COEFFICIENT:</b> N-OCTANOL/WATER (LOG POW): 1.10 MEASURED.</p>

3-AMINOMETHYL-3,5,5-TRIMETHYLCYCLOHEXYLAMINE (ISOPHORONEDIAMINE)	<b>BIOACCUMULATION:</b> BIOCONCENTRATION POTENTIAL IS LOW (BCF <100 OR LOG POW <3).
	<b>PARTITION COEFFICIENT:</b> N-OCTANOL/WATER (LOG POW): 0.79 MEASURED.
1,3-BENZENEDIMETHANAMINE	<b>BIOACCUMULATION:</b> BIOCONCENTRATION POTENTIAL IS LOW (BCF <100 OR LOG POW <3).
	<b>PARTITION COEFFICIENT:</b> N-OCTANOL/WATER (LOG POW): 0.18 OECD TEST GUIDELINE 107 OR EQUIVALENT.
1,3-DENZENEDIMETHANAMINE, POLYMER WITH 2,2-[1-METHYLETHYLIDENE] BIS (4,1-PHENYLENEOXYMETHYLENE)] BIS [OXIRAN]	<b>BIOACCUMULATION:</b> BIOCONCENTRATION POTENTIAL IS LOW (BCF <100 OR LOG POW <3).
	<b>PARTITION COEFFICIENT:</b> N-OCTANOL/WATER (LOG POW): 3.6 AT 25°C
	<b>BIOCONCENTRATION FACTOR (BCF):</b> 4.77 FISH ESTIMATED.
4-NONYLPHENOL, BRANCHED	<b>BIOACCUMULATION:</b> BIOCONCENTRATION POTENTIAL IS HIGH (BCF >3000 OR LOG POW BETWEEN 5 AND 7).
	<b>PARTITION COEFFICIENT:</b> N-OCTANOL/WATER (LOG POW): 5.4 AT 23°C OECD GUIDELINE 117 (PARTITION COEFFICIENT (N-OCTANOL/WATER), HPLC METHOD).
	<b>BIOCONCENTRATION FACTOR (BCF):</b> 271 PIMEPHALES PROMELAS (FATHEAD MONNOWS) 20 D MEASURED.
SALICYLIC ACID	<b>BIOACCUMULATION:</b> BIOCONCENTRATION POTENTIAL IS LOW (BCF <100 LOG POW <3)
	<b>PARTITION COEFFICIENT:</b> N-OCTANOL/WATER (LOG POW): 2.26 MEASURED.
BENZYL DIMETHYLAMINE	<b>BIOACCUMULATION:</b> BIOCONCENTRATION POTENTIAL IS LOW (BCF <100 OR LOG POW <3)
	<b>PARTITION COEFFICIENT:</b> N-OCTANOL/WATER (LOG POW): 1.98 MEASURED.
	<b>BIOCONCENTRATION FACTOR (BCF):</b> <= 22 CYPRINUS CARPIO (CARP) 42 DAY MEASURED.
<b>MOBILITY IN SOIL</b>	
BENZYL ALCOHOL	POTENTIAL FOR MOBILITY I SOIL IS VERY HIGH (KOC BETWEEN 0 AND 50).
	GIVEN ITS VERY LOW HENRY'S CONSTANT, VOLATILIZATION FROM NATURAL BODIES OF WATER OR MOIST SOIL IS NOT EXPECTED TO BE AN IMPORTANT FATE PROCESS.
	<b>PARTITION COEFFICIENT (KOC):</b> 16 ESTIMATED.
3-AMINOMETHYL-3,5,5-TRIMETHYLCYCLOHEXYLAMINE (ISOPHORONEDIAMINE)	POTENTIAL FOR MOBILITY IN SOIL IS MEDIUM (KOC BETWEEN 150 AND 500)
	GIVEN ITS VERY LOW HENRY'S CONSTANT, VOLATILIZATION FROM NATURAL BODIES OF WATER OR MOIST SOIL IS NOT EXPECTED TO BE AN IMPORTANT FATE PROCESS.
	<b>PARTITION COEFFICIENT (KOC):</b> 340 ESTIMATED.
1,3-BENZENEDIMETHANAMINE	POTENTIAL FOR MOBILITY IN SOIL IS LOW (KOC BETWEEN 500 AND 2000).
	GIVEN ITS VERY LOW HENRY'S CONSTANT,

	VOLATILIZATION FROM NATURAL BODIES OF WATER OR MOIST SOIL IS NOT EXPECTED TO BE AN IMPORTANT FATE PROCESS.
	<b>PARTITION COEFFICIENT (KOC):</b> >910 ESTIMATED.
1,3-BENZENEDIMETHANAMINE, POLYMER WITH 2,2-[1-METHYLETHYLIDENE]BIS (4,1-PHENYLENEOXYMETHYLENE)] BIS [OXIRANE]	EXPECTED TO BE RELATIVELY IMMOBILE IN SOIL (KOC >5000)
	<b>PARTITION COEFFICIENT (KOC):</b> > 5000 OECD 121: HPLC METHOD
	ADSORPTION/SOIL SOIL
4-NONYLPHENOL, BRANCHED	EXPECTED TO BE RELATIVELY IMMOBILE IN SOIL (KOC >5000)
	<b>PARTITION COEFFICIENT (KOC):</b> >5000 ESTIMATED.
SALICYLIC ACID	POTENTIAL FOR MOBILITY IN SOIL IS VERY HIGH (KOC BETWEEN 0 AND 50).
	GIVEN ITS VERY LOW HENRY'S CONSTANT, BOLATILIZATION FROM NATURAL BODIES OF WATER OR OIST SOIL IS NOT EXPECTED TO BE AN IMPORTANT FATE PROCESS.
	<b>PARTITION COEFFICIENT (KOC):</b> 24 ESTIMATED.
BENZYL DIMETHYLAMINE	POTENTIAL FOR MOBILITY IN SOIL IS LOW (KOC BETWEEN 500 AND 2000)
	<b>PARTITION COEFFICIENT (KOC):</b> 630 ESTIMATED.

### SECTION XIII DISPOSAL CONSIDERATIONS

<b>WASTE DISPOSAL METHOD:</b> 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.
<b>AQUATIC TOXICITY (E.G. 96HR.TLM):</b> 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)

### SECTION XIV TRANSPORTATION INFORMATION

Governig Body	Mode	UN Number	Proper Shipping Name	Hazard Class	Packig Group
DOT	GROUND	2735	AMINES, LIQUID, CORROSIVE N.O.S. (ISOPHORONEDIAMINE, 1,3-BENZENEDIMETHANAMINE)	8 CORROSI VE	III
IATA	AIR	2735	AMINES, LIQUID, CORROSIVE N.O.S. (ISOPHORONEDIAMINE, 1,3-BENZENEDIMETHANAMINE)	8 CORROSI VE	III
IMDG	OCEAN	2735	AMINES, LIQUID, CORROSIVE N.O.S. (ISOPHORONEDIAMINE, 1,3-BENZENEDIMETHANAMINE)	8 CORROSI VE	III
<b>MARINE POLLUTANT:</b>			THIS PRODUCT DOES CONTAIN A MATERIAL. ON THE MARINE POLLUTANTS TABLE (HMT 172.101 APPENDIX B) 4-NONYLPHENOL, BRANCHED		

**SECTION XV REGULATORY INFORMATION**

<b>CERCLA:</b> 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. <b>NO REPORTABLE SPILL QUANTITY (RQ) HAS BEEN ESTABLISHED FOR THIS PRODUCT</b>
<b>SARA TITLE III:</b> 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 HEALTH HAZARD
<b>ADDITIONAL REGULATORY CONCERNS:</b> (FEDERAL, FDA, USDA, CPSC, STATE, OTHER)
PENNSYLVANIA WORKER AND COMMUNITY RIGHT TO KNOW ACT: THE FOLLOWING CHEMICALS ARE LISTED BECAUSE OF THE ADDITIONAL REQUIREMENTS OF PENNSYLVANIA LAW: BENZYL ALCOHOL, 100-51-6, 1,3-BENZENEDIMETHAAMINE 1477-55-0
<b>MARINE POLLUTANTS:</b> YES. THIS PRODUCT DOES CONTAIN A MATERIAL ON THE MARINE POLLUTANTS TABLE (HMT 172.101 Appendix B). 4-NONYLPHENOL, BRANCHED
<b>CALIFORNIA PROP 65:</b> WARNING: This product DOES NOT contain 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: THIS PRODUCT DOES NOT CONTAIN A MATERIAL ON THE RQ TABLE (HMT 172.101 Appendix A):
<b>TSCA:</b> IS THIS PRODUCT, OR ALL ITS INGREDIENTS, BEING CERTIFIED FOR INCLUSION ON THE TOXIC SUBSTANCES CONTROL ACT INVENTORY OF CHEMICAL SUBSTANCES? <b>YES</b>

**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.	

<b>HMIS HAZARD RATINGS:</b> 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			<b>KEY</b>  4 -- SEVERE
<b>CERTI-VEX CE 210 PART B</b>	<b>NPCA-HMIS</b>	<b>NFPA 704</b>	
<b>HEALTH</b>	<b>3</b>	<b>3</b>	2 -- MODERATE
<b>FLAMMABILITY</b>	<b>1</b>	<b>1</b>	1 -- SLIGHT
<b>REACTIVITY</b>	<b>0</b>	<b>0</b>	0 -- MINIMAL