XYLENES

RICHARD-ALLAN SCIENTIFIC

Revised: 2/1/2004

MATERIAL SAFETY DATA SHEET

XYLENES

RICHARD-ALLAN SCIENTIFIC 4481 CAMPUS DRIVE KALAMAZOO, MICHIGAN 49008 (800) 522-7270 8:00 AM TO 5:00 PM EST

CHEMTREC: (800) 424.9300 24 HOURS SERVICE

RICHARD-ALLAN SCIENTIFIC FURNISHES THIS INFORMATION WITHOUT WARRANTY, REPRESENTATION, AND INDUCEMENT OF LICENSE OF ANY KIND, EXCEPT THAT IT IS ACCURATE TO THE BEST OF OUR KNOWLEDGE, OR OBTAINED FROM SOURCES BELIEVED BY RICHARD-ALLAN SCIENTIFIC TO BE ACCURATE. RICHARD-ALLAN SCIENTIFIC DOES NOT ASSUME ANY LEGAL RESPONSIBILITY FOR USE OR RELIANCE UPON IT. CUSTOMERS ARE ENCOURAGED TO CONDUCT THEIR OWN TESTS. BEFORE USING ANY PRODUCT, READ ITS LABEL.

1. SUBSTANCE IDENTIFICATION

SUBSTANCE: XYLENES

CATALOG NUMBER: 9900-1, 9900-5, 9900-55, 9911, 9915, C4330, C4330-5

TRADE NAMES/SYNONYMS: DIMETHYL BENZENE; XYLOL

CHEMICAL FAMILY: HYDROCARBON, AROMATIC

MOLECULAR FORMULA: C6H4 (CH3)2

MOLECULAR WEIGHT: 106.17

2. COMPOSITION AND INGREDIENTS INFORMATION

TOTAL AROMATIC CONTENT:

MIXTURE OF ORTHO-, META-, AND PARA-DIMETHYL BENZENE, ETHYL BENZENE AND TOLUENE

XYLENE:

CAS#: 1330-20-7

>98.5%

ETHYL BENZENE:

CAS#: 100-41-4

<5%

TOLUENE:

CAS#: 108-88-3

<5%

3. HAZARDS INFORMATION

NFPA RATINGS (SCALE 0-4):

HEALTH 2 FIRE 3 REACTIVITY 0

DANGER: FLAMMABLE LIQUID

WARNING: HARMFUL IRRITANT

XYLENE IS A COLORLESS LIQUID WITH AROMATIC, BENZENE LIKE, ODOR. IT IS FLAMMABLE AND PHOTOCHEMICALLY REACTIVE. XYLENE IS HARMFUL OR FATAL IF SWALLOWED, HARMFUL IF INHALED, IRRITATING TO EYES, NOSE AND THROAT, AND MAY AFFECTS CENTRAL NERVOUS SYSTEM.

PRIMARY ROUTES OF EXPOSURE: INHALATION, INGESTION, SKIN AND EYE CONTACT.

ACUTE EFFECTS:

INHALATION OF HIGH CONCENTRATIONS MAY RESULT IN NAUSEA, VOMITING, HEADACHE, RINGING OF THE EARS, AND SEVERE BREATHING DIFFICULTIES. HIGH VAPOR CONCENTRATIONS ARE ANESTHETIC AND CENTRAL NERVOUS SYSTEM DEPRESSANTS. SKIN CONTACT RESULTS IN LOSS OF NATURAL OILS AND OFTEN RESULTS IN DERMATITIS. SPLASHES ARE TOXIC TO EYES. HEMORRHAGIC INFLAMMATORY LESIONS MAY DEVELOP. INGESTION CAUSES BURNING SENSATION IN MOUTH AND STOMACH, NAUSEA, VOMITING AND SALIVATION. MINUTE AMOUNTS ASPIRATED INTO THE LUNGS CAN PRODUCE SEVERE HEMORRHAGIC PNEUMONITIS AND SEVERE PULMONARY INJURY OR DEATH.

CHRONIC EFFECTS:

CHRONIC INHALATION CAN CAUSE HEADACHES, LOSS OF APPETITE, NERVOUSNESS AND PALE SKIN. REPEATED ER PROLONGED SKIN CONTACT MAY CAUSE A SKIN RASH. REPEATED EXPOSURE OF THE EYES TO HIGH CONCENTRATIONS OF VAPOR MAY CAUSE REVERSIBLE EYE DAMAGE.

POTENTIAL HEALTH EFFECTS:

INHALATION MAY CAUSE DIZZINESS, HEADACHE, NAUSEA OR VOMITING. EYE CONTACT MAY CAUSE SEVERE EYE IRRITATION. SKIN CONTACT MAY CAUSE SKIN IRRITATION.

INGESTION HARMFUL MAY BE FATAL IF SWALLOWED, MAY CAUSE NAUSEA OR VOMITING.

4. FIRST-AID PROCEDURES

INHALATION:

REMOVE FROM EXPOSURE AREA TO FRESH AIR IMMEDIATELY. IF BREATHING HAS STOPPED, GIVE ARTIFICIAL RESPIRATION. IF BREATHING IS DIFFICULT, GIVE OXYGEN. KEEP AFFECTED PERSON WARM AND AT REST, GET MEDICAL ATTENTION IMMEDIATELY.

EYE CONTACT:

WASH EYES IMMEDIATELY WITH LARGE AMOUNTS OF WATER, OCCASIONALLY LIFTING UPPER AND LOWER LIDS, UNTIL NO EVIDENCE OF CHEMICAL REMAINS (AT LEAST 15-20 MINUTES). GET MEDICAL ATTENTION IMMEDIATELY.

SKIN CONTACT:

REMOVE CONTAMINATED CLOTHING AND SHOES IMMEDIATELY. WASH AFFECTED AREA WITH SOAP OR MILD DETERGENT AND LARGE AMOUNTS OF WATER UNTIL NO EVIDENCE OF CHEMICAL REMAINS (AT LEAST 15-20 MINUTES). GET MEDICAL ATTENTION IF IRRITATION PERSISTS.

INGESTION:

IF SWALLOWED, DO NOT INDUCE VOMITING, IF VOMITING DOES OCCUR, INSURE VICTIM'S HEAD IS LOWER THAN HIPS IN ORDER TO PREVENT ASPIRATION. CALL A PHYSICIAN IMMEDIATELY.

ANTIDOTE: NO SPECIFIC ANTIDOTE. TREAT SYMPTOMATICALLY AND SUPPORTIVELY.

5. FIREFIGHTING PROCEDURES

FIRE AND EXPLOSION HAZARD:

DANGEROUS FIRE HAZARD WHEN EXPOSED TO HEAT OR FLAME, DUE TO LOW ELECTROCONDUCTIVITY OF THE SUBSTANCE, FLOW OR AGITATION MAY GENERATE ELECTROSTATIC CHARGES RESULTING IN SPARKS WITH POSSIBLE IGNITION. VAPORS ARE HEAVIER THAN AIR AND MAY TRAVEL A CONSIDERABLE DISTANCE TO A SOURCE

OF IGNITION AND FLASH BACK. VAPOR-AIR MIXTURES ARE EXPLOSIVE.

FLASH POINT: 63 DEG. F - 77 DEG. F (17 DEG. C - 25 DEG. C) (CC)

UPPER EXPLOSIVE LIMIT: 7,0% LOWER EXPLOSIVE LIMIT: 1.0%

AUTOIGNITION TEMP.: 986 DEG. F (530 DEG. C)

FLAMMABILITY CLASS (OSHA): IB

FIRE FIGHTING MEDIA:

DRY CHEMICAL, CARBON DIOXIDE, WATER SPRAY OR REGULAR FOAM (1993 EMERGENCY RESPONSE GUIDEBOOK, DOT P 5800.5). FOR LARGER FIRES, USE WATER SPRAY, FOG OR REGULAR FOAM (1993 EMERGENCY RESPONSE GUIDEBOOK, DOT P 5800.5).

FIRE RESPONSE PROCEDURES:

MOVE CONTAINER FROM FIRE AREA IF YOU CAN DO IT WITHOUT RISK, COOL CONTAINERS WITH FLOODING QUANTITIES OF WATER, APPLY FROM AS FAR A DISTANCE AS POSSIBLE, AVOID BREATHING TOXIC VAPORS, KEEP UPWIND. APPLY COOLING WATER TO SIDES OF CONTAINERS THAT ARE EXPOSED TO FLAMES UNTIL WELL AFTER FIRE IS OUT

WATER MAY BE INEFFECTIVE (NFPA 325M, FIRE HAZARD PROPERTIES OF FLAMMABLE LIQUIDS, GASES, AND VOLATILE SOLIDS, 1991)

UNUSUAL FIRE AND EXPLOSION HAZARDS:

VAPORS MIX READILY WITH AIR, MAY EXPLODE IF IGNITED IN AN ENCLOSED AREA, FLASHBACK ALONG VAPOR TRAIL MAY OCCUR. FLOW, AGITATION ETC., CAN CAUSE BUILD-UP OF ELECTROSTATIC CHARGE DUE TO LIQUID'S LOW CONDUCTIVITY. REACTS VIOLENTLY WITH STRONG OXIDANTS.

6. ACCIDENTAL RELEASE MEASURES

SMALL SPILL:

REMOVE ALL IGNITION SOURCES. WEAR PROTECTIVE EQUIPMENT, APPROPRIATE GLOVES, SAFETY GLASSES AND APRON. VENTILATE AREA OF SPILL OR LEAK. STOP LEAK IF YOU CAN DO IT WITHOUT RISK, TAKE UP WITH SAND OR OTHER ABSORBENT MATERIAL AND PLACE INTO CONTAINERS FOR LATER DISPOSAL.

LARGE SPILL:

WEAR AN APPROVED RESPIRATOR. FOLLOW THE ABOVE PROCEDURE AND DIKE FAR AHEAD OF SPILL FOR LATER DISPOSAL. KEEP UNNECESSARY PEOPLE AWAY; ISOLATE HAZARD AREA AND RESTRICT ENTRY, NO SMOKING, FLAMES OR FLARES IN HAZARD AREA. IF SPILL IS VERY LARGE CALL FIRE DEPARTMENT IMMEDIATELY. USE WATER SPRAY TO REDUCE VAPORS

REPORTABLE QUANTITY (RQ): 1000 POUNDS

THE SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT (SARA) SECTION 304 REQUIRES THAT A RELEASE EQUAL TO OR GREATER THAN THE REPORTABLE QUANTITY FOR THIS SUBSTANCE BE IMMEDIATELY REPORTED TO THE LOCAL EMERGENCY PLANNING COMMITTEE AND THE STATE EMERGENCY RESPONSE COMMISSION (40 CFR 355.40). IF THE RELEASE OF THIS SUBSTANCE IS REPORTABLE UNDER CERCLA SECTION 103, THE NATIONAL RESPONSE CENTER MUST BE NOTIFIED IMMEDIATELY AT 800-424-8802 OR 202-426-2675 IN THE METROPOLITAN WASHINGTON, D.C. AREA (40 CFR 302.6).

7. HANDLING AND STORAGE

GENERAL HANDLING:

FLAMMABLE:

STORE IN A COOL, DRY PLACE AWAY FROM HEAT, SPARKS AND OPEN FLAMES. VAPORS MAY BE EXPLOSIVE. DO NOT GET INTO EYES, AVOID CONTACT WITH SKIN AND CLOTHING. AVOID BREATHING VAPOR. KEEP CONTAINERS TIGHTLY DOSED AND IN AN UPRIGHT POSITION TO PREVENT LEAKAGE. WASH HANDS THOROUGHLY AFTER HANDLING, CONTAINERS OF THIS MATERIAL MAY BE HAZARDOUS WHEN EMPTY. SINCE EMPTIED CONTAINERS RETAIN PRODUCT RESIDUES, ASSUME EMPTIED CONTAINERS TO HAVE THE SAME HAZARD QUALITIES AS FULL CONTAINERS.

XYLENE IS A CLASS]B FLAMMABLE LIQUID (NFPA). FOLLOW MAXIMUM ALLOWED PILE HEIGHTS SPECIFIED IN THE BOCA CODES OR THE NFPA MANUAL. LOCAL FIRE AUTHORITIES SHOULD BE NOTIFIED FOR STORAGE OF THIS MATERIAL IN ANY QUANTITY. LOCAL PERMITS ARE REQUIRED FOR STORAGE IN WAREHOUSE QUANTITIES.

PROTECT AGAINST PHYSICAL DAMAGE:

OUTSIDE OR DETACHED STORAGE IS PREFERABLE. INSIDE STORAGE SHOULD BE IN STANDARD FLAMMABLE LIQUID STORAGE ROOM OR CABINET. SEPARATE FROM OXIDIZING MATERIALS (NFPA 49, HAZARDOUS CHEMICALS DATA, 1975). STORE AWAY FROM INCOMPATIBLE SUBSTANCES.

8. EXPOSURE CONTROL (PERSONAL PROTECTION)

VENTILATION:

PROVIDE LOCAL EXHAUST OR GENERAL DILUTION VENTILATION TO MEET PUBLISHED EXPOSURE LIMITS, VENTILATION EQUIPMENT MUST BE EXPLOSION-PROOF.

RESPIRATOR:

THE FOLLOWING RESPIRATORS AND MAXIMUM USE CONCENTRATIONS ARE RECOMMENDATIONS BY THE U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES, NIOSH POCKET GUIDE TO CHEMICAL HAZARDS; NIOSH CRITERIA DOCUMENTS OR BY THE U.S. DEPARTMENT OF LABOR, 29CFR 1910 SUBPART Z THE SPECIFIC RASP]RATER SELECTED MUST BE BASED ON CONTAMINATION LEVELS FOUND IN THE WORK PLACE, MUST NOT EXCEED THE WORKING LIMITS OF THE RESPIRATOR AND BE JOINTLY APPROVED BY THE NATIONAL INSTITUTE FOR OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (NIOSH-MSHA).

XYLENE (O-, M-, AND P-ISOMERS):

1000 PPM:

ANY CHEMICAL CARTRIDGE RESPIRATOR WITH ORGANIC VAPOR CARTRIDGE(S),

ANY POWERED AIR-PURIFYING RESPIRATOR WITH ORGANIC VAPOR CARTRIDGE(S).

ANY SUPPLIED-AIR RESPIRATOR.

ANY SELF-CONTAINED BREATHING APPARATUS.

ESCAPE:

ANY AIR-PURIFYING FULL FACEPIECE RESPIRATOR (GAS MASK) WITH A CHIN-STYLE OR FRONT- OR BACK- MOUNTED ORGANIC VAPOR CANISTER.

ANY APPROPRIATE ESCAPE-TYPE SELF-CONTAINED BREATHING APPARATUS.

FOR FIRE FIGHTING AND OTHER IMMEDIATELY DANGEROUS TO LIFE OR HEALTH CONDITIONS:

ANY SELF-CONTAINED BREATHING APPARATUS THAT HAS A FULL FACEPIECE AND IS OPERATED IN A PRESSURE-DEMAND OR OTHER POSITIVE-PRESSURE MODE. ANY SUPPLIED-AIR RESPIRATOR THAT HAS A FULL FACEPIECE AND IS OPERATED IN A PRESSURE-DEMAND OR OTHER POSITIVE-PRESSURE MODE IN COMBINATION WITH AN AUXILIARY SELF-CONTAINED BREATHING APPARATUS OPERATED IN PRESSURE-DEMAND OR OTHER POSITIVE-PRESSURE MODE.

CLOTHING: LABORATORY COAT

GLOVES:

EMPLOYEE MUST WEAR APPROPRIATE PROTECTIVE GLOVES TO PREVENT CONTACT WITH

THIS SUBSTANCE.

EYE PROTECTION:

EMPLOYEE MUST WEAR SPLASH-PROOF OR DUST-RESISTANT SAFETY GOGGLES TO PREVENT EYE CONTACT WITH THIS SUBSTANCE.

EMERGENCY EYE WASH:

WHERE THERE IS ANY POSSIBILITY THAT AN EMPLOYEE'S EYES AND/OR SKIN MAY BE EXPOSED TO THIS SUBSTANCE, THE EMPLOYER SHOULD PROVIDE AN EYE WASH FOUNTAIN AND QUICK DRENCH SHOWER WITHIN THE IMMEDIATE WORK AREA FOR EMERGENCY USE.

EXPOSURE GUIDELINES:

100 PPM (434 MG/M3) OSHA TWA

150 PPM (651 MG/M3.) OSHA STEL

100 PPM (434 MG/M3) ACGIH TWA

150 PPM (651 MG/M3) ACGIH STEL

100 PPM (434 MG/M3) NIOSH RECOMMENDED TWA

150 PPM (651 MG/M3) NIOSH RECOMMENDED

100PPM (440 MG/M3) DFG MAKS TWA

9. PHYSICAL AND CHEMICAL PROPERTIES

DESCRIPTION: LIGHT COLORED OR COLORLESS MOBILE LIQUID WITH AN AROMATIC ODOR.

BOILING POINT: 280 DEG. F - 291 DEG. F (138 DEG. C - 144 DEG. C)

MELTING POINT: -54 DEG. F - 55 DEG. F (-48 DEG. C - 13 DEG. C)

SPECIFIC GRAVITY: 0.9

VOLATILITY: 100%

VAPOR PRESSURE: 6.72 MMHg @ 21 DEG. C

EVAPORATION RATE (BUTYL ACETATE = 1): 0.8

SOLUBILITY IN WATER: INSOLUBLE

FLASH POINT: 17 DEG. C - 25 DEG. C (CC)

VAPOR DENSITY: 3.7

SOLVENT SOLUBILITY:

SOLUBLE IN ALCOHOL, ETHER, ACETONE, PETROLEUM ETHER, BENZENE, CARBON TETRACHLORIDE, ORGANIC SOLVENTS.

10. STABILITY AND REACTIVITY INFORMATION

REACTIVITY: STABLE UNDER NORMAL TEMPERATURES AND PRESSURES.

INCOMPATIBILITIES:

NITRIC ACID: EXOTHERMIC REACTION.

OXIDIZERS (STRONG): FIRE AND EXPLOSION HAZARD.

PLASTICS, RUBBER, COATINGS: MAY BE ATTACKED.

SULFURIC ACID: EXOTHERMIC REACTION.

ACETIC ACID + AIR: POTENTIALLY EXPLOSIVE REACTION.

1,3-DICHLORO-5,5-DIMETHYL-2,4-IMIDAZOLIDINDIONE: POTENTIALLY EXPLOSIVE REACTION.

NITRIC ACID + PRESSURE: POTENTIALLY EXPLOSIVE REACTION.

DECOMPOSITION:

THERMAL DECOMPOSITION PRODUCTS MAY RELEASE ACRID SMOKE AND IRRITATING FUMES.

POLYMERIZATION:

HAZARDOUS POLYMERIZATION HAS NOT BEEN REPORTED TO OCCUR UNDER NORMAL TEMPERATURES AND PRESSURES.

11. TOXICITY

XYLENES:

IRRITATION DATA:
200 PPM EYE-HUMAN
87 MG EYE-RABBIT MILD
5 MG/24 HOURS EYE-RABBIT SEVERE
100% SKIN RABBIT MODERATE
500 MG/24 HOURS SKIN-RABBIT MODERATE.

TOXICITY DATA:

10,000 PPM/6 HOURS INHALATION-MAN LDLO
200 PPM INHALATION-HUMAN TCLO
5000 PPM/4 HOURS INHALATION-RAT LC50
450 PPM INHALATION-, GUINEA PIG LDLO
50 MG/KG ORAL-HUMAN LDLO
4300 MG/KG ORAL-RAT LD50
1700 MG/KG SUBCUTANEOUS-RAT LD50
129 MG/KG INTRAVENOUS-RABBIT LDLO
2 MG/KG INTRAPERITONEAL-MAMMAL LDLO
2459 MG/KG INTRAPERITONEAL-GUINEA PIG LDLO
REPRODUCTIVE EFFECTS DATA (RTECS), (DPIRDU), (851FAI), (38MKAJ).

CARCINOGEN STATUS:

HUMAN INADEQUATE EVIDENCE, ANIMAL INADEQUATE EVIDENCE. (IARC GROUP-3).

AT INCREASED RISK FROM EXPOSURE: PREGNANT WOMEN.

12. ECOLOGICAL INFORMATION

ACUTE EFFECTS:

ACUTE TOXIC EFFECTS MAY INCLUDE THE DEATH OF ANIMALS, BIRDS, OR FISH, AND DEATH OR LOW GROWTH RATE IN PLANTS. ACUTE EFFECTS ARE SEEN TWO TO FOUR DAYS AFTER ANIMALS OR PLANTS COME IN CONTACT WITH A TOXIC CHEMICAL SUBSTANCE. XYLENE HAS HIGH ACUTE TOXICITY TO AQUATIC LIFE. XYLENE CAUSES INJURY TO VARIOUS AGRICULTURAL AND ORNAMENTAL CROPS.

CHRONIC EFFECTS:

CHRONIC TOXIC EFFECTS MAY INCLUDE SHORTENED LIFESPAN, REPRODUCTIVE PROBLEMS, LOWER FERTILITY, AND CHANGES IN APPEARANCE AND BEHAVIOR. CHRONIC EFFECTS CAN BE SEEN LONG AFTER FIRST EXPOSURE(S) TO A TOXIC CHEMICAL. XYLENE HAS HIGH CHRONIC TOXICITY TO AQUATIC LIFE.

13. DISPOSAL GUIDELINES

OBSERVE ALL FEDERAL, STATE AND LOCAL REGULATIONS WHEN STORING OR DISPOSING

OF THIS SUBSTANCE. FOR ASSISTANCE, CONTACT THE DISTRICT DIRECTOR OF THE ENVIRONMENTAL PROTECTION AGENCY.

STORE IN ACCORDANCE WITH 29 CFR 1910.106.

THE UNUSED PRODUCT IS A RCRA HAZARDOUS WASTE IF DISCARDED, THE RCRA ID NUMBER IS: U239

IF THE WASTE IS A SPENT SOLVENT, THE APPROPRIATE SPENT SOLVENT CODE SHOULD BE USED.

DISPOSAL MUST BE IN ACCORDANCE WITH STANDARDS APPLICABLE TO GENERATORS OF HAZARDOUS WASTE, 40 CFR 262.

OTHER DISPOSAL CONSIDERATIONS:

THE WASTE MATERIAL SHOULD BE TREATED AND/OR DISPOSED OF AT SITE AUTHORIZED TO HANDLE HAZARDOUS CHEMICAL WASTE. APPROPRIATE FEDERAL, STATE AND LOCAL REGULATORY AUTHORITIES SHOULD BE CONTACTED BEFORE DISCHARGE, TREATMENT OR DISPOSAL OF WASTE MATERIAL, THE INFORMATION OFFERED HERE IS FOR THE PRODUCT AS SHIPPED. USE AND/OR ALTERATIONS TO THE PRODUCT SUCH AS MIXING WITH OTHER MATERIALS MAY SIGNIFICANTLY CHANGE THE CHARACTERISTICS OF THE MATERIAL AND AFTER THE RCRA CLASSIFICATION AND THE PROPER DISPOSAL METHOD.

14. TRANSPORT INFORMATION

PROPER SHIPPING NAME: XYLENES

HAZARD CLASS OR DIVISION: 3

IDENTIFICATION NUMBERS: UN1307

PACKING GROUP: II

LABEL(S) REQUIRED (IF NOT EXCEPTED): FLAMMABLE LIQUID,

SPECIAL PROVISIONS: T8; REFERS TO TRANSPORTATION OF IM PORTABLE TANKS

PACKAGING AUTHORIZATIONS:

EXCEPTIONS:

173.150: FOR SMALL QUANTITIES OF FLAMMABLE LIQUIDS

NON-BULK PACKAGING:

173.202: FOR LIQUID HAZARDOUS MATERIAL IN PACKING GROUP II

QUANTITY LIMITATIONS:

PASSENGER AIRCRAFT OR RAILCAR: 5 L

CARGO AIRCRAFT ONLY: 60 L

15. REGULATORY INFORMATION

SARA TITLE III (SUPERFUND AMENDMENT AND REAUTHORIZATION ACT):

SECTION 302 AND 304:

EXTREMELY HAZARDOUS SUBSTANCE LIST (40 CFR 355): NOT LISTED

SECTION 311:

HAZARD CATEGORIZATION (40 CFR 370): ACUTE, CHRONIC, AND FIRE

SECTION 313:

TOXIC CHEMICALS LISTING (40 CFR 372.65): LISTED AS A TOXIC CHEMICAL

CERCLA (COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND LIABILITY ACT):

SECTION 102(A) HAZARDOUS SUBSTANCES (40 CFR 302.4): LISTED

REPORTABLE QUANTITY: 1,000 POUNDS.

SECTION 101(14) REPORTABLE QUANTITY: 1,000 LBS

RCRA (RESOURCE CONSERVATION AND RECOVERY ACT.): 40 CFR 261.33 HAZARDOUS WASTE NUMBER: U239

NJ-RTK (NEW JERSEY- STATE RIGHT TO KNOW): ENVIRONMENTAL HAZARDOUS SUBSTANCE LIST: LISTED. SUBSTANCE #: 2014

TSCA (TOXIC SUBSTANCE CONTROL ACT): XYLENE IS LISTED ON THE TSCA INVENTORY.

CALIFORNIA PROPOSITION 65:

THIS PRODUCT CONTAINS SMALL AMOUNTS OF TOLUENE AND BENZENE WHICH ARE LISTED SUBSTANCES.

WARNING:

TOLUENE IS A CHEMICAL KNOWN TO THE STATE OF CALIFORNIA TO CAUSE BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM. BENZENE IS A CHEMICAL KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER

16. OTHER INFORMATION

XYLENE, AS MANUFACTURED BY RICHARD-ALLAN SCIENTIFIC, IS INTENDED FOR LEGAL USE IN LABORATORIES AND MANUFACTURING ENVIRONMENTS.

REVISION: FEBRUARY 2004