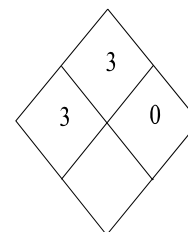


MATERIAL SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION



PRODUCT NAME: TERRACLOR SUPER X® Emulsifiable
GENERAL USE: Fungicide
PRODUCT DESCRIPTION: Amber to dark liquid with an aromatic odor
EPA Registration Number: Not registered. Transfer is pending EPA approval.
MSDS No.: 382_1
CURRENT REVISION DATE: 7 August, 2008

MANUFACTURER:
AMVAC CHEMICAL CORPORATION
4100 E. Washington Blvd.
Los Angeles, CA 90023-4406
Ph: 323-264-3910
FAX: 323-268-1028

EMERGENCY TELEPHONE NUMBERS:
MANUFACTURER: 323-264-3910
TRANSPORTATION (24 HOURS)
CHEMTREC: 800-424-9300
OTHER (24 HOURS)
AMVAC: 323-264-3910

2. COMPOSITION/INFORMATION ON INGREDIENTS

COMPONENT	WT %	CAS No.
Pentachloronitrobenzene (PCNB)	23.2%	82-68-8
Etridiazole (5-Ethoxy-3-(trichloromethyl)-1,2,4-thiadiazole)	5.8%	2593-15-9
Xylene	65%	1330-20-7
(Includes Ethylbenzene and Toluene)	< 13 % < 0.6%	100-41-4 108-88-3
Other Ingredients	6.0%	
(Includes Hexachlorobenzene (HCB))	< 0.01%	118-74-1

Ingredients not precisely identified are proprietary or nonhazardous

OSHA HAZARDOUS COMPONENTS (29 CFR1910.1200)

COMPONENT	HAZARD	OSHA PEL*	ACGIH TLV*
Pentachloronitrobenzene (PCNB)	Dermatitis Methemoglobin		0.5 mg/m ³
Hexachlorobenzene (HCB)	Carcinogen		0.002 mg/m ³
Xylene	Dermatitis Eye Irritant Possible Carcinogen	100 ppm	100 ppm (150 ppm STEL; BEI 1.5 g Methyl hippuric acids/g creatine)

* Exposure Limits 8 hrs. TWA
Terrachlor Super X® is a registered trademark of Chemtura that is being transferred to AMVAC Chemical Corporation.

3. **HAZARDS IDENTIFICATION**

EMERGENCY OVERVIEW:

DANGER! FLAMMABLE LIQUID. Do not use, pour, spill, or store near heat or open flame.

CAUSES SEVERE eye irritation. MAY cause permanent eye damage. May cause moderate skin irritation. May cause skin sensitization. Do not get in eyes, on skin, or on clothing. Harmful if swallowed, inhaled or absorbed through the skin. Avoid breathing vapors or spray mist. Use with adequate ventilation. Do not contaminate feed or foodstuffs.

KEEP OUT OF REACH OF CHILDREN.

Toxic to fish and aquatic organisms.

POTENTIAL HEALTH EFFECTS

ROUTE(S) OF ENTRY: Ingestion, inhalation, eye contact, and skin contact.

SIGNS OF ACUTE OVEREXPOSURE: A person suffering from acute exposure to PCNB may exhibit vomiting, hyperirritability, convulsions, conversion of hemoglobin to methemoglobin. In addition, the product is a mild skin irritant and may lead to contact dermatitis. Toxicology testing in animals has shown that Technical PCNB is a sensitizer. Exposure to the vapors can cause irritation to eyes, lungs, and mucous membranes. Contact with liquid can cause eye irritation, skin irritation and skin defatting. Ingestion or inhalation may produce central nervous system (CNS) depression due to the presence of xylene. Ingestion may result in vomiting. Aspiration (breathing) of the vomitus into the lungs must be avoided as even small quantities may result in aspiration pneumonitis (pneumonia). Prolonged exposure to xylene may result in congestive effects to a wide variety of internal organs.

SIGNS OF CHRONIC OVEREXPOSURE: Same as acute.

OTHER POTENTIAL HEALTH EFFECTS: Laboratory studies on Technical PCNB and on Technical Etridiazole have shown some carcinogenic effects. There is sufficient evidence that EPA has listed PCNB as a possible carcinogen (Group C) and Etridiazole as a probable human carcinogen (Group B2). The IARC has listed PCNB as a carcinogen (Group 3, sufficient animal evidence). The European Union (EU) has determined that no cancer classification is warranted. Laboratory testing of PCNB has shown no evidence of mutagenicity. IARC has recently classified ethylbenzene, a component of the solvent, xylene, as possibly carcinogenic to humans (Group 2B).

3. HAZARDS IDENTIFICATION, cont'd

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Dermatitis, asthma-like conditions, kidney and liver diseases.

CARE SHOULD BE EXERCISED IN HANDLING PCNB AND ITS FORMULATIONS.

4. FIRST AID MEASURES

EYES: Immediately flush the eyes with copious amounts of clear, cool running water for a minimum of 15 minutes. Hold the eyelids apart during the flushing to ensure rinsing of the entire surface of the eyes and lids with water. Contact a physician immediately. If there will be a delay in getting medical attention, rinse the eyes for at least another 15 minutes.

INHALATION: Remove victim to fresh air. If breathing has ceased, clear the victim's airway and start artificial respiration, preferably mouth-to-mouth. If breathing is difficult, give oxygen. Contact a physician immediately.

INGESTION: DO NOT induce vomiting. If subject is conscious, administer an 8 oz. glass of water containing 2 tbsp. activated charcoal. Never give anything by mouth to an unconscious person. Contact a physician immediately.

SKIN: Remove contaminated clothing. Wash thoroughly with soap and clean water. If a rash or any of the symptoms of acute exposure appear, contact a physician immediately.

NOTE TO PHYSICIANS: This product contains Xylene, an aromatic hydrocarbon solvent. Aspiration of the vomitus may cause aspiration pneumonitis. In addition, the product is a severe eye irritant and a defatting agent. Treat symptomatically. Contact your local poison control center for more medical information.

5. FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES:

Flash Point: 82°F/28°C (TCC)

Autoignition Temperature: 680°F

Flammable Limits:

Lower flammable limit: 0.9%

Upper flammable limit: 6.0%

EXPLOSIVITY:

Mechanical Impact: Not expected to be explosive under mechanical impact conditions.

Static Discharge: May accumulate static electricity.

HAZARDOUS COMBUSTION PRODUCTS: FLAMMABLE LIQUID. This product may emit hazardous fumes of hydrogen chloride, carbon oxides, nitrogen oxides and unidentified organic compounds when it is heated excessively or burned. WEAR SELF-CONTAINED BREATHING APPARATUS.

5. FIRE FIGHTING MEASURES, cont'd

EXTINGUISHING MEDIA: Dry chemical, foam, or carbon dioxide. Water may be used to cool the container, but is not appropriate for extinguishing the fire.

FIRE FIGHTING INSTRUCTIONS: Do not breathe fumes. Wear complete firefighting gear, including protective gloves, eye protection and self-contained breathing apparatus. Wash clothing before reuse.

6. ACCIDENTAL RELEASE MEASURES

GENERAL: Eliminate all sources of ignition. Thoroughly ventilate area. Wear appropriate personal protective equipment (See Section 8). Keep unauthorized personnel out of the area.

SMALL SPILL: Dike area to prevent contamination of water bodies. Absorb liquid on solid support (Diatomaceous earth, Kitty Litter, etc.). Place in covered containers. Clean area with soap and water. The cleaning solutions are also hazardous wastes.

LARGE SPILL: Dike the spill area to prevent contamination of water bodies. Siphon as much liquid as possible into drums for reuse or disposal. Absorb remaining liquid on a solid absorbent. Place absorbed material into a sealable container and seal. Clean the spill area with soap and water. The cleaning solutions are also hazardous wastes.

7. HANDLING AND STORAGE

HANDLING: Keep this product cool and dry. Keep container closed. Store away from feed, food, and drink. Keep away from children and pets. Wash thoroughly after handling this product.

STORAGE: Store product in its original container in a cool, dry, locked place out of the reach of children. Store away from sources of heat and ignition.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: Ventilation should be sufficient to keep the exposure below the TLV.

RESPIRATORY PROTECTION: A properly FIT-TESTED NIOSH/MSHA-approved respirator fitted with organic vapor cartridges with a prefilter approved for pesticides is required for exposures in enclosed areas. For exposures outdoors, a NIOSH/MSHA-approved dust/mist filtering respirator is required.

SKIN PROTECTION: Applicators and other handlers must wear long-sleeved shirt and long pants; waterproof gloves; and shoes plus socks. Follow manufacturer's instructions for cleaning/maintaining personal protection equipment (PPE). If no such instructions are available, use detergent and hot water. Keep and wash PPE separately from other laundry.

8. **EXPOSURE CONTROLS/PERSONAL PROTECTION, cont'd**

EYE PROTECTION: Safety glasses with side shields should be used whenever hazardous chemicals are being handled. Goggles or full face shield should be used if there is a potential for splashing.

OTHER PROTECTION: An eyewash station and a safety shower should be located in the work area.

9. **PHYSICAL AND CHEMICAL PROPERTIES**

PHYSICAL STATE:	Liquid
APPEARANCE:	Amber to dark liquid
ODOR:	Solvent odor
ODOR THRESHOLD:	None established
BOILING POINT:	300°F/149°C
FREEZING/MELTING POINT:	42°F /5.6°C
SPECIFIC GRAVITY:	1.02 g/mL @ 20°C
DENSITY:	8.5 lb/gal
VAPOR PRESSURE (mm/Hg):	10.3 mm Hg @ 100°F
VAPOR DENSITY:	Heavier than air
PERCENT VOLATILE BY VOL:	65%
SOLUBILITY IN WATER:	Emulsifiable
SOLUBILITY (Other):	This product is soluble in aromatic solvents
PARTITION COEFFICIENT (O/W):	Not applicable
pH (5% in water):	Not determined
EVAPORATION RATE:	0.96 (Butyl acetate = 1)

10. **STABILITY AND REACTIVITY**

CHEMICAL STABILITY (Conditions to avoid): This product is stable under normal storage and use conditions. Do not freeze. Solids can form at low temperatures (less than 42°F/5.6°C).

INCOMPATIBILITY: Avoid heat, flame, and strong oxidizing materials.

HAZARDOUS DECOMPOSITION PRODUCTS: This product may emit hazardous fumes of hydrogen chloride, carbon oxides, nitrogen oxides and unidentified organic compounds when it is heated excessively or burned. **WEAR SELF-CONTAINED BREATHING APPARATUS** when these conditions are present.

HAZARDOUS POLYMERIZATION: This product will not polymerize.

11. TOXICOLOGICAL INFORMATION

INGESTION:	Oral LD ₅₀ (rat):	> 5000 mg/kg
DERMAL:	Skin LD ₅₀ (rabbit):	> 2000 mg/kg
INHALATION:	Inhalation LC ₅₀ (rat):	> 4.4 mg/L (aerosol, 4 hour test)
IRRITATION:	Eye irritation:	Severely irritating (Toxic Category I)
	Skin irritation: (rabbit)	Moderately irritating (Toxic Category III)
SENSITIZATION:	Skin sensitization (guinea pig)	Sensitizer.

NOTE: The following information is based on PCNB technical grade, Etridiazole or on the solvent, Xylene.

TERATOGENICITY: PCNB has shown no developmental effects.

MUTAGENICITY: PCNB is not genotoxic..

CARCINOGENICITY: Laboratory studies on Technical PCNB and on Technical Etridiazole have shown some carcinogenic effects. There is sufficient evidence that EPA has listed PCNB as a possible carcinogen (Group C) and Etridiazole as a probable human carcinogen (Group B2). The IARC has listed PCNB as a carcinogen (Group 3, sufficient animal evidence). The European Union (EU) has determined that no cancer classification is warranted. IARC has recently classified ethylbenzene, a component of the solvent, xylenes, as possibly carcinogenic to humans (Group 2B), based on sufficient evidence for carcinogenicity in experimental animals, but inadequate evidence for cancer in exposed humans. Technical PCNB does contain small amounts (<0.05%) of HCB, a known carcinogen.

REPRODUCTIVE TOXICITY: PCNB is not a reproductive toxicant.

TOXICOLOGICALLY SYNERGISTIC PRODUCTS: No information is available.

12. ECOLOGICAL INFORMATION

GENERAL: This pesticide is toxic to fish and aquatic organisms. Drift and runoff from treated areas may be hazardous to fish and aquatic organisms in adjacent aquatic sites. Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters. Do not apply directly adjacent to potable water supplies.

SPECIFIC TOXICITIES: The following LC₅₀ values are available for this product:

Species	Pentachloronitrobenzene, LC ₅₀	Etridiazole, LC ₅₀
Bluegill (Leponis macrochirus)	0.1 mg/l (96 h)	3.27 mg/l (216 h)
Rainbow trout (Oncorhynchus mykiss)	0.55 mg/l (96 h)	2.4 mg/l (96 h)

12. ECOLOGICAL INFORMATION, cont'd

Species	Pentachloronitrobenzene, LC ₅₀	Etridiazole, LC ₅₀
Sheepshead minnow (Cyprinodon variegatus)		4.0 mg/l (96 h)
Water flea (Daphnia magna)	0.77 mg/l (96 h)	3.1 mg/l (48 h)
Algae (EC ₅₀)		0.072 mg/l (120 h)

13. DISPOSAL CONSIDERATIONS

PESTICIDE DISPOSAL: Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional office for guidance.

CONTAINER DISPOSAL: Triple rinse(or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities. Contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional office for guidance.

14. TRANSPORTATION INFORMATION

DOT CLASS: 3
UN NUMBER: 1993
IMDG CLASS (sea): 3
MARINE POLLUTANT: Yes
PACKING GROUP: III
HAZARD LABEL(s): Flammable Liquid
ADR CLASS (road): 3
PROPER SHIPPING NAME(s): Flammable Liquid(s), n.o.s., (Xylene, Pentachloronitrobenzene)
REPORTABLE QUANTITY: Yes

PACKAGING

GENERAL DESCRIPTION: 200 L drum

15. REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS: This product is currently in the process of being registered by AMVAC under EPA/FIFRA Regulations. It is a violation of Federal Law to use this product in any manner inconsistent with its labeling. Read and follow all label directions. This product is excluded from listing requirements under EPA/TSCA.

SARA TITLE III DATA:

Section 311 & 312 Hazard Categories:

Immediate Health Hazard:	Yes
Delayed Health Hazard:	Yes
Fire Hazard:	Yes
Reactive Hazard:	No
Sudden Pressure Release Hazard:	No

Section 302 Extremely Hazardous Substances: None

Section 313 Toxic Chemicals:

Pentachloronitrobenzene (PCNB, CAS No. 82-68-8) - 23.2%;
Xylene (CAS 1330-20-7) - < 65%
Ethylbenzene (CAS 100-41-4) - < 13%
Toluene (CAS 108-88-3) - < 0.6%
Hexachlorobenzene (118-74-1) - < 0.05%

CERCLA Reportable Quantities (RQ):

Pentachloronitrobenzene (PCNB) - 100 lbs; Xylene - 100 lbs; Ethylbenzene - 1000 lbs;
Toluene - 1000 lbs; Hexachlorobenzene (HCB) - 10 lbs; Product (calculated on Xylene content) - 154 lbs

STATE REGULATIONS:

CALIFORNIA (Proposition 65): This product contains chemicals known to the State of California to cause cancer or birth defects or other reproductive harm - Etridiazole, Hexachlorobenzene (HCB), Ethylbenzene and Toluene.

16. OTHER INFORMATION

MSDS STATUS:

Date This Revision: 7 August, 2008

Date Previous Revision: New MSDS

Person Responsible for Preparation: Gary A. Braden

REASONS FOR REVISION: New product for AMVAC Chemical Corporation.

DISCLAIMER: This information is provided for the limited guidance to the user. While AMVAC believes that the information is, as of the date hereof, reliable, it is the user's responsibility to determine the suitability of the information for its purposes. The user is advised not to construe the information as absolutely complete since additional information may be necessary or desirable when particular, exceptional, or variable conditions or circumstances exist (like combinations with other materials), or because of applicable regulations. No express or implied warranty of merchantability or fitness for a particular purpose or otherwise is made hereunder with respect to the information or the product to which the information relates.

16. OTHER INFORMATION, cont'd

ABBREVIATIONS:

ACGIH	-	American Conference of Governmental Industrial Hygienists
BEI	-	Biological Exposure Index
CERCLA	-	Comprehensive Environmental Response, Compensation, and Liability Act
EPA	-	Environmental Protection Agency
FIFRA	-	Federal Insecticide, Fungicide, and Rodenticide Act
IARC	-	International Agency for Research on Cancer
NTP	-	National Toxicology Program
OSHA	-	Occupational Safety and Health Agency
SARA	-	Superfund Amendments and Reauthorization Act
TSCA	-	Toxic Substances Control Act

This is the last page of this MSDS. There should be 9 pages.