KOP-COAT, INC EMERGENCIES MARINE GROUP EAST HEALTH/SPILLS.....: 800-548-0489 **36 PINE STREET** CHEMTREC ASSISTANCE: 800-424-9300 CHEMTREC OUTSIDE US: 703-527-3887 ROCKAWAY NJ 07866 CANUTEC..... 613-996-6666 KOP-COAT, INC PRODUCT INFORMATION: 800-221-4466 OUTSIDE USA....: 973-625-3100 1 PRODUCT IDENTIFICATION PRODUCT NAME: Pettit Marine Vivid Antifouling Paint 1861 Black PRODUCT USE.: Antifouling bottom paint APPEARANCE..: Black liquid with typical hydrocarbon odor CAS NUMBER..: Mixture SYNONYMS....: None REVISION...: 1 DATE..... 4/29/04 MSDS NUMBER: 1186100 2 HAZARDOUS INGREDIENTS <u>HAZARDOUS COMPONENT _____ REG AGENCY ____ PPM ____ NOTES ____MG/M3 ____NOTES _</u> Epoxy Ester (None established.) CAS NUMBER:REICH-TR SECRET PERCENT BY WGT: 1 TO 5 ACGIH STEL 543 Ethvl Benzene 125 CAS NUMBER:100-41-4 ACGIH-TWA 100 434 PERCENT BY WGT: < 1 NIOSH 100 435 NIOSH STEL 125 545 OSHA STEL 545 125 OSHA TWA 100 435 Cuprous Thiocyanate ACGIH TLV-TWA 1.0 19 ACGIH-TWA CAS NUMBER:1111-67-7 FUM 0.2 PERCENT BY WGT: 25 TO 30 OSHA PEL-TWA 1.0 19 Zinc oxide (as dust) ACGIH-TWA 2.0 CAS NUMBER:1314-13-2 OSHA TWA -15 1 PERCENT BY WGT: 25 TO 30 OSHA-TWA 5 2 Iron Oxide Black (None established.) CAS NUMBER:1317-61-9 PERCENT BY WGT: 5 TO 10

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2 HAZARDOUS INGREDIENTS HAZARDOUS COMPONENT REG AGENCY PPM NOTES MG/M3 NOTES Xylene ACGIH STEL 150 651 CAS NUMBER:1330-20-7 ACGIH-TWA 100 PERCENT BY WGT: 1 TO 5 NIOSH 100 435 NIOSH STEL 150 655 OSHA STEL 150 655 OSHA TWA 100 435 ACGIH-TWA 3.5 Carbon black -CAS NUMBER:1333-86-4 NIOSH -(+) 3.5 8 (+) PERCENT BY WGT: 1 TO 5 OSHA TWA 3.5 Zinc pyrithione MANF REC 0.35 22 CAS NUMBER:13463-41-7 PERCENT BY WGT: 1 TO 5 Trimethyl benzene ACGIH TLV 25 123 CAS NUMBER:25551-13-7 OSHA TWA 25 125 PERCENT BY WGT: 1 TO 5 Petroleum distillates OSHA PEL 100 CAS NUMBER: 64742-94-5 PERCENT BY WGT: 10 TO 15 5 Dibutyl Phthalate ACGIH TWA CAS NUMBER:84-74-2 NIOSH 5 PERCENT BY WGT: 1 TO 5 OSHA-TWA 5 NOTES: 1) Total dust 2) Respirable fraction 8) 0.1 mg/m3 in presence of polycyclic aromatic hydrocarbons 19) Exposure limits reported as Cu dusts and mists 22) Manufacturer's recommended exposure limits (+)) NIOSH Occupational Carcinogen FUM) as a fume. **3 HAZARDS IDENTIFICATION** _____ EYES: Direct contact with liquid or vapor may cause moderate eye irritation, characterized by stinging, redness, and tearing of eyes.

SKIN: CORROSIVE: Prolonged or repeated contact causes burns. Prolonged or repeated contact can result in defatting and drying of the skin characterized by redness, cracking, blistering, irritation and dermatitis. May be absorbed through the skin resulting in systemic effects. PRODUCT NAME: Pettit Marine Vivid Antifouling Paint 1861 Black PAGE 3 OF 5

3 HAZARDS IDENTIFICATION

INHALATION: Exposure to vapors or mist can cause irritation to the respiratory tract (nose, throat, and lungs). Prolonged or repeated exposure may cause headaches, dizziness, drowsiness, or other central nervous system effects. Exposure to high concentrations could result in severe respiratory irritation, liver and kidney damage, and even death. Prolonged or repeated inhalation of fumes of this product may lead to a temporary, reversible, flu-like condition known as metal fume fever. Metal fume fever may cause fever, chills, nausea, and shortness of breath that occur 4-24 hours post-exposure and last 24-48 hours and resolve without further complications.

INGESTION: May cause gastrointestinal disturbances such as nausea, vomiting, diarrhea, and effects similar to those described under INHALATION. Aspiration of this product into the lung may cause chemical pneumonitits, which can be fatal.

CHRONIC EXPOSURE: Reports have associated repeated or prolonged occupational exposure to solvents with permanent brain or nervous system damage. Repeated and prolonged exposure to iron oxide dust or fume may cause a benign pneumoconiosis called siderosis. The TLV is set to protect against siderosis.

Medical Conditions Aggravated by Exposure: Individuals with pre-existing disease in or a history of ailments involving the muscular or nervous system, skin, respiratory tract, liver, or kidney are at a greater risk of developing adverse effects when exposed to this material.

4 FIRST AID MEASURES

EYE CONTACT: Hold eye open and rinse slowly and gently with water for 15–20 minutes. Remove contact lenses, if present, after the first five minutes, then continue rinsing the eye.

SKIN CONTACT: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15–20 minutes. Call a poison control center or doctor for treatment advice. Wash contaminated clothing before reuse.

INHALATION: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artifical respiration, preferably mouth-to-mouth. Call a poison control center or doctor for further treatment advice.

INGESTION: Immediately call a poison control center or doctor. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give any liquid to the person. Do not give anything by mouth to an unconscious person.

NOTE TO PHYSICIAN: There is no specific antidote for effects from overexposure to this material. Treatment should be directed at the control of symptoms and the clinical condition. PRODUCT NAME: Pettit Marine Vivid Antifouling Paint 1861 Black PAGE 4 OF 5

5 FIRE FIGHTING MEASURES

FLASH POINT: 110 F/45C

EXTINGUISHING MEDIA: Use dry chemical, carbon dioxide, water spray or foam.

FIRE FIGHTING PROCEDURES: As in any fire, wear complete fire service protective equipment, including full-face MSHA/NIOSH approved or equivalent self-contained breathing apparatus. Use water to cool fire-exposed container/structure/protect personnel.

FIRE AND EXPLOSION HAZARDS: Can release vapors that form explosive mixtures. Vapors can travel to a source of ignition and flash back. Closed containers may explode when exposed to extreme heat (fire). Irritating vapors of acetic acid may be given off in a fire.

6 SPILL AND LEAK PROCEDURES

Stop spill/leak if no risk involved. Avoid breathing vapors. Eliminate ALL sources of ignition such as flares, flames (including pilot lights), and elctrical sparks. Ventilate area. Take up carefully to avoid heat and sparks. Use an inert absorbent to complete a clean-up. This material reacts with oxidizing materials. Dispose of contaminated absorbent, container and unused contents in accordance with local, state and federal regulations.

7 HANDLING AND STORAGE

HANDLING: Avoid breathing of vapors, mists or fumes. Do not get on skin, in eyes or on clothing. Spray paint in accordance with OSHA 29 CFR 1910.107. Use with adequate ventilation. Wash thoroughly after handling.

STORAGE: Store in areas/buildings designed to comply with OSHA 1910.106. Keep in a closed, labeled container within a cool (well-shaded), dry, ventilated area. Protect from physical damage. Keep containers closed when material is not in use. Maintain good housekeeping.

OTHER: Keep away from heat and open flame. If post application/use processing of this product generates dust or if spray application is made, "Exposure Limits " in Section 2 apply. Do not use until manufacturer's precautions have been read/understood. Containers of this material may be hazardous when empty. Since emptied containers retain product residues (vapor, liquid), all hazard precautions given in the data sheet must be observed. All five gallon pails and larger containers, should be grounded and/or bonded when material is transferred.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

PRODUCT NAME: Pettit Marine Vivid Antifouling Paint 1861 Black PAGE 5 OF 5

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: Ventilation is normally required when handling or using this product to keep exposure to airborne contaminants below the exposure limit. Facilities storing or utilizing this product should be equipped with an eyewash facility.

RESPIRATORS: Ensure fresh air entry during application and drying. If you experience eye watering, headache or dizziness or if air monitoring demonstrates vapor levels are above applicable limits, wear an appropriate, properly fitted respirator (NIOSH/MSHA approved or equivalent) during and after application. Follow respirator manufacturer's directions for respirator use. Close container after each use. A repiratory protection program that meets OSHA 1910.134 and NIOSH 42 CFR 84 requirements must be followed whenever workplace conditions warrant a respirator's use.

PERSONAL PROTECTIVE EQUIPMENT: Industrial safety glasses at a minimum. As necessary for work area conditions: use side shields, goggles, or faceshield. Chemical resistant flexible-type gloves (heavy duty neoprene or equal). Wear industrial-type work clothing and safety footwear. Depending on working conditions, i.e., contact potential, wear resistant protective garments such as head/neck cover, aprons, jackets, pants, coveralls, boots, etc.

9 PHYSICAL AND CHEMICAL PROPERTIES Weight Per Gallon (lbs): 15.500 % VOL by Weight.: Not determined Vapor Density.: (air=1)<1 Boiling Point...: Not determined Vapor Pressure: Not determined Evaporation Rate: (ether=1)>1 pH.....: Not determined Specific Gravity: > 1 Solubility In Water: Negligible Viscosity.....: Not determined VOC Content.....: 330 g/L Max 10 STABILITY AND REACTIVITY DATA STABILITY: This material is stable. HAZARDOUS POLYMERIZATION: None

HAZARDOUS POLYMERIZATION: None INCOMPATIBILITY: Avoid acids, reducing agents, oxidizing agents, heat, sparks and open flame. HAZARDOUS DECOMPOSITION PRODUCT(S): Carbon monoxide, carbon dioxide upon thermal decomposition, and irritating vapors of acetic acid during fires.

11 TOXICOLOGICAL INFORMATION

Certain components of this product have been shown to cause fetotoixc effects in laboratory animal studies. Relevance to humans is uncertain.

PRODUCT NAME: Pettit Marine Vivid Antifouling Paint 1861 Black 6 OF PAGE 5 _____ 11 TOXICOLOGICAL INFORMATION Xylene: Laboratory animals exposed to high levels of xylene showed evidence of effects on the liver, kidneys, spleen and hearing loss. Zinc Pyrithione: Animal studies have found skeletal muscle atrophy and peripheral nerve damage characterized by general muscle weakness. These effects have not been observed in primates, which suggests the effects would not occur in humans. Cuprous Thiocyanate: Chronic copper poisoning causes hepatic cirrhosis, brain damage and demylenation, kidney defects, and copper deposition in the cornea. It may lead to hemolytic anemia and it accelerates arteriosclerosis. 12 ECOLOGICAL INFORMATION -----Contact Kop-Coat for data. 13 DISPOSAL CONSIDERATIONS This product as supplied is a USEPA defined ignitable hazardous waste. Dispose of unusable product as a hazardous waste (D001) in accordance with local, state and federal regulations. 14 TRANSPORTATION INFORMATION DEPARTMENT OF TRANSPORTATION REPORTABLE QUANTITIES REPORTABLE QTY (LBS) HAZARDOUS SUBSTANCE 100 Xylene 10 Dibutyl Phthalate 100 Naphthalene DOT PROPER SHIPPING NAME: Consumer commodity DOT HAZARD CLASS: ORM-D LABEL: None DOT IDENTIFICATION NUMBER: None DOT information for domestic ground transportation. 15 REGULATORY INFORMATION _____

SARA TITLE III SECTION 313 CHEMICALS
Ethyl Benzene

PRODUCT NAME: Pettit Marine Vivid Antifouling Paint 1861 Black 7 OF PAGE 5 15 REGULATORY INFORMATION Zinc oxide (as dust) Xylene Dibutyl Phthalate WARNING: THIS PRODUCT CONTAINS CHEMICALS KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER. WARNING: THIS PRODUCT CONTAINS A CHEMICAL KNOWN TO THE STATE OF CALIFORNIA TO CAUSE BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM. EPA Registration Number 60061–116. 16 OTHER INFORMATION

Ethylbenzene is considered a Group 2B carcinogen (possibly carcinogenic to humans). This category generally includes agents for which there is limited evidence in humans in the absence of sufficient evidence in experimental animals.

IARC Monograph Vol. 65 reports carbon black is widely used in rubber tires, hoses, gaskets and coated fabrics; smaller amounts are used in printing inks, paints and plastics. Although one cohort study on carbon black production workers showed slight excesses of lung cancer, the totality of the epidemiological studies both in the carbon black production industry and in some user industries suggested that there is inadequate evidence for the carcinogenicity in humans of carbon black. Carbon black was thus evaluated as possibly carcinogenic to humans (Group 2B).

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PREPARED BY: Manager of Health, Safety and Environmental Affairs

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