YATES & BIRD/MOTLOID COMPANY 300 North Oakley Blvd. Chicago, IL 60612 312-226-2412 or 312-226-2454 IN EMERGENCY CONTACT: INFOTRAC: 800-535-5053 Outside USA: 352-323-3500

SECTION I PRODUCT IDENTIFICATION PRODUCT NAME: Tin Plating Solution

GENERIC NAME: Sulfuric Acid, Stannous Sulfate

DOT NAME: Corrosive Liquid, NOS

HMIS: Health=2 Reactivity=1 Flammability=0 Personal Protection=B

SECTION II HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

Sulfuric Acid ( $H_2SO_4$ ) CAS #: 7664-93-9 %: 10 EXPOSURE LIMITS: TWA = 1 mg./M<sup>3</sup> Stannous Sulfate (SnSO<sub>4</sub>) CAS#: 7488-55-3 %: 3.75 EXPOSURE LIMITS: TWA = 2 mg./M<sup>3</sup> Techni Matte Tin 89T Makeup None listed EXPOSURE LIMITS: Not Established

Proprietary surfactant blend

SECTION III PHYSICAL DATA

VAPOR DENSITY, AIR=1: NA BOILING POINT: not distinguished

VAPOR PRESSURE, mm Hg at 20°C: NA MELTING POINT: NA SOLUBILITY IN WATER: Very soluble SPECIFIC GRAVITY: not known

EVAPORATION RATE, butyl acetate=1:NA

APPEARANCE AND ODOR: clear liquid, slight sulfur odor

pH: Acidic

**SECTION IV** FIRE, EXPLOSION AND REACTIVITY INFORMATION

FLASH POINT (AND TEST) NA EXTINGUISHING MEDIA: Water Spray

SPECIAL FIREFIGHTING PROCEDURES: Wear a NIOSH/MSHA approved, self-contained breathing apparatus and full protective gear, if fully involved in a fire.

UNUSUAL FIRE/EXPLOSION HAZARDS: None

AUTOIGNITION TEMPERATURE, °F:NA HAZARDOUS POLYMERIZATION: Will not occur.

STABILITY: Stable INCOMPATIBILITY (CONDITIONS TO AVOID): None HAZARDOUS DECOMPOSITION (including combustion) PRODUCTS: Sulfur Dioxide and sulfur trioxide in a fire.

FLAMMABLE LIMITS IN AIR, VOLUME %: Lower: NA. Upper: NA

INCOMPATIBILITY (MATERIALS TO AVOID): Do not mix with strong acids.

**SECTION V** HEALTH HAZARD INFORMATION

SYMPTOMS OF OVEREXPOSURE Inhaled: Iritation to burn injury of respiratory tract tissue; Skin or eye contact: Severe irritation to eye tissue;. Absorbed through skin: Corrosive to skin; Swallowed: May cause severe injury or death. HEALTH EFFECTS OR RISKS FROM OVEREXPOSURE Acute: Local: Repeated contact may cause dermatitis. If the concentration goes higher, there is more chance of tissue destruction; Systemic: Irritating and corrosive to tissue. Chronic: Local: Repeated contact may cause skin irritation (dermatitis). Repeated inhalation may cause inflammation of the upper and lower respiratory tract; Systemic: No systemic effects, except those secondary to tissue damage.

EMERGENCY AND FIRST AID PROCEDURES Eyes: Flush eyes with water, 15 minutes or longer. Call physician, Lift lids occasionally to ensure proper flushing of the eye surface; Skin: Wash with copious amounts of water followed by soap and water. Remove contaminated clothing. Call physician. Treat burns as thermal, Launder clothes before reuse; Inhaled: Remove to fresh air. If breathing difficulties develop or persist, maintain respiration and call physician; Swallowed: Drink large amounts of water to dilute. Do not induce vomiting Call physician and Poison Control Center immediately.

SUSPECTED CANCER AGENT: No

SECTION VI REACTIVITY DATA

Stability: Stable

Conditions to avoid: Excessive Heat

SECTION VII ENVIRONMENTAL PROTECTION INFORMATION

IF MATERIAL IS RELEASED OR SPILLED: Neutralize spill with sodium carbonate and absorb on clay or sawdust and place in non-metal containers for disposal at a proper waste site. Flush spill area with water.

WASTE DISPOSAL METHOD: Dispose of all wastes in accordance with Federal, State and Local regulations.

SECTION VIII SPECIAL PRECAUTIONS

Ventilation and engineering controls: Use local exhaust.

Respiratory: NIOSH/MSHA approved dust and mist respirator in a spill.

Eyes: Chemical goggles or face shield. Gloves: Rubber gloves. Other clothing and equipment: Clothing (rubber) suitable to prevent skin contact in a spill.

Work/hygienic practices: Wash thoroughly after handling.

Other handling and storage: Store in cool dry, ventilated area. Temperature = 55-85° F. Keep container closed.