



MATERIAL SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NUMBER
800064

HMIS CODES
Health 1
Flammability 2
Reactivity 0
PPE X

PRODUCT NAME
AD-40 PRSM Red

PRODUCT DESCRIPTION
Solder Mask Additive

MANUFACTURER'S NAME
TAIYO AMERICA, INC.
2675 Antler Drive
Carson City, NV 89701 U.S.A.

EMERGENCY CONTACT and PHONE
Phillip Harrison
775-885-9959

2. HAZARDS IDENTIFICATION

POTENTIAL HEALTH EFFECTS

EYES: May cause irritation of the eyes.

SKIN: May cause skin irritation. May cause skin sensitization, an allergic reaction, which becomes evident on re-exposure to this material.

INGESTION: Harmful if swallowed.

INHALATION: May cause respiratory tract irritation. High vapor concentrations may cause headaches, dizziness and nausea.

SUBCHRONIC/CHRONIC TOXICITY

CHRONIC: Prolonged or repeated contact can result in drying of the skin which may result in skin irritation and dermatitis (rash).

CARCINOGENICITY: NTP, IARC, and OSHA sources checked: Not listed.

3. COMPOSITION/INFORMATION ON INGREDIENTS

<u>% by WT</u>	<u>CAS No.</u>	<u>INGREDIENT / OSHA PEL</u>
16 - 18%	25068-38-6	Bisphenol A Type Epoxy Resin

10 - 12%

34590-94-8

Dipropylene Glycol Monomethyl Ether
100 ppm (600 mg/m3) TWA (skin)

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4. FIRST AID MEASURES

EYES: Immediately flush eyes with plenty of water for 15 minutes. Get medical attention if irritation persists.

SKIN: Wash skin with soap and plenty of water.

INGESTION: Do not induce vomiting. Give milk or water. Get medical attention.

INHALATION: If breathing becomes difficult, remove to fresh air. If symptoms persist, give oxygen and seek medical attention.

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5. FIRE FIGHTING MEASURES

FLASH POINT: 172 F / 78 C **FLASH POINT METHOD:** SETA Flash CC

GENERAL HAZARD: Product may contain combustible liquids or various organic resins. If burning, this material may produce hazardous fumes or hazardous decomposition products.

EXTINGUISHING MEDIA: Use carbon dioxide, foam, dry chemical or water spray when fighting fires involving this material.

HAZARDOUS DECOMPOSITION PRODUCTS: Combustion products may be toxic. May produce various carbon oxides and hydrocarbons.

EXPLOSION HAZARDS: Sealed containers may build up pressure and rupture when exposed to high heat (fire).

FIRE FIGHTING PROCEDURES: Remove sealed containers from the vicinity of the fire. Use normal fire fighting procedures for burning combustible liquids.

FIRE FIGHTING EQUIPMENT: Use self-contained breathing apparatus with full facepiece operated in the positive pressure demand mode with appropriate turn-out gear.

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6. ACCIDENTAL RELEASE MEASURES

SMALL SPILL: Absorb the spilled material with inert material. Scrub the area with detergent and water.

WATER SPILL: Contain, minimize dispersion and collect as soon as possible.

LAND SPILL: Prevent from entering drain, sewer, stream or other bodies of water. Transfer absorbent, soil and other contaminated materials to containers for disposal.

SPECIAL PROTECTIVE EQUIPMENT: Protective eyewear, impervious gloves, air purifying respirator recommended.

7. HANDLING RELEASE MEASURES

HANDLING: Avoid contact with skin, eyes, and clothing. Use only with adequate ventilation.

STORAGE: Store in a cool place in original sealed containers away from sunlight and heat. Consult the technical data sheet to determine storage conditions related to warranty period (shelf life).

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS:

Good general mechanical ventilation recommended.

PERSONAL PROTECTION

EYES and FACE: Wear safety glasses with side shields, goggles or face shield to prevent splashes into the eyes.

SKIN: Avoid skin contact. Wear impervious gloves.

RESPIRATORY: Generally not necessary for adequately ventilated work area.

PROTECTIVE CLOTHING: As necessary to prevent skin contact.

WORK HYGENIC PRACTICES: Wash hands with soap and water after using material. Do not use solvent to remove this material from skin.

OTHER USE PRECAUTIONS: This product contains inorganic fillers. In normal use as a liquid soldermask the fillers are not hazardous. Dust from sanding, drilling or routing of the cured soldermask may pose an inhalation hazard.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL APPEARANCE: Viscous Liquid

COLOR: Red

ODOR: Slight Mild Odor

SPECIFIC GRAVITY: 1.446

VOLATILES: 10.7 % by wt.

EVAPORATION RATE: Less than 0.04 (n-Butyl Acetate=1)

VAPOR DENSITY: ~ 4.7 - 6.1 (Air=1)

VOLATILE ORGANIC COMPOUNDS (VOC): 155 g/l 1.29 lb/gal

10. STABILITY AND REACTIVITY

STABLE: Yes

HAZARDOUS POLYMERIZATION: No

CONDITIONS TO AVOID: Avoid high temperatures, sunlight and ultraviolet light.

HAZARDOUS DECOMPOSITION: Normal combustion products.

INCOMPATIBLE MATERIALS: Oxidizers, peroxides, strong acids and bases, amines and epoxy curing agents.

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11. TOXICOLOGICAL INFORMATION

No specific toxicological data is available for this product.

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12. ECOLOGICAL INFORMATION

No specific environmental data is available for this product.

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13. DISPOSAL CONSIDERATIONS

PRODUCT DISPOSAL: Dispose of in accordance with all Federal, State and Local regulations. Keep out of sewers and waterways.

RCRA/USPA WASTE INFORMATION: Waste material is not RCRA regulated

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14. TRANSPORT INFORMATION

U.S.D.O.T. Not regulated

IATA Not regulated

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15. REGULATORY INFORMATION

SARA 313:

<u>CAS No.</u>	<u>Name</u>
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None

TSCA (Toxic Substances Control Act): This product complies with all applicable rules and orders under TSCA.

CANADA

Canadian Environmental Protection Act:

This product contains substances not included on the DSL or NDSL, in the following concentrations in % wt.:

None.

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16. OTHER INFORMATION

SUPPLEMENTAL NOTES: This product contains no environmentally restricted substances as listed in Sony Technical Standard SS-00259.

DISCLAIMER:

The information contained herein is based on data considered accurate. However, no warranty is expressed or implied regarding the accuracy of the data or the results to be obtained from the use thereof.