MATERIAL SAFETY DATA SHEET

(MSDS Sheet is in compliance with 29CFR 1910. 1200)

Manufacturer:

IMEB INC. Date Prepared: 09/02/1998

170 Vallecitos De Oro, Suite A CAT #: BFS-32; BFS-100;

San Marcos, CA 92069 Chemtrec: 800-424-9300

Product Trade name: Bouin's Fixative Substitute **Product Description:** Biological Tissue Fixative

Section I Hazardous Composition Information

| Hazardous Components | CAS No. | OSHA PEL | ACGIH / TLV |
|-----------------------------|------------|----------|-------------|
| Chloroplatinic Acid | 16941-12-1 | n/a | 0.002mg/m3 |
| Formaldehyde | 50-00-0 | 0.75ppm | 2ppm |
| Acetic Acid, Glacial | 64-19-7 | 10ppm | 10ppm |

Section II Physical and Chemical Characteristics

Specific Gravity: 0.89 @ 77 F Solubility in Water: Soluble SP. Gravity of Vapor: n/a

Evaporation Rate (n-Bu Acetate = 1): n/a

Vapor Pressure: n/a Viscosity: 1.2 @ 77 F Boiling Point: n/a

Color: Slight Yellow **Odor:** Strong aromatic aldehyde odor **State:** Liquid

Section III Stability and Reactivity

Stability: Stable.

Conditions to Avoid: Do not allow solution to dry.

Hazardous Polymerization: n/a

Incompatible Materials: Strong acids, Alkalines and Chlorine by-products. **Hazardous Decomposition Products:** Decomposition into formic acid.

Section IV Fire and Explosion Data

Flashpoint: n/a

Flammable Limits: LEL: n/a UEL: n/a

Autoignition Temperature: 640 F

Extinguishing Media: Foam, Dry Chemical, Water,

Special Fire Fighting Procedure: Fight fire from safe distance. Product is combustible. **Decomposition Products Under Fire Conditions:** Produces acrid smoke and fumes.

Section V Health Hazard Data

Acute Health Effects:

Eye Contact: May cause blindness. **Skin Contact:** May cause skin irritation.

Inhalation: May cause coughing and irritation of sinus, trachea and lungs.

1 of 2 Bouin's Fixative Substitute MSDS BFS-32 or BFS-100 -12/98

Ingestion: May be fatal if ingested.

Chronic Health Effects:

Eye Contact: Prolonged contact may cause blindness.

Skin Contact: Prolonged contact may cause chemical burns to skin.

Inhalation: Formaldehyde is a known Carcinogen and may cause cancer by repeated inhalation.

Ingestion: May be fatal if ingested.

Carcinogen: IARC: Yes NTP: Yes OSHA: Yes

Medical Conditions Aggravated by Exposure: This product contains: Formaldehyde, known to be a Carcinogen by OSHA, NTP and IARC and the State of California. Accumulation by absorption or inhalation may cause cancer and deterioration of health.

Section VI Emergency First Aid Procedures

Eye Contact: Flush eye with copious amounts of water or saline solution. Seek Medical Attention. **Skin Contact:** Wash contact area with soap and water. Seek medical attention if symptoms persist. **Inhalation:** Remove victim to well ventilated area. Seek medical attention if symptoms persist.

Ingestion: Seek immediate medical assistance.

Section VII Spill, Disposal and Storage Methods

Accidental Spill: Immediately inform employees. Wear gloves, goggles, and approved respirator. Dike area with sand or absorbent material. Absorb spill with absorbent and neutralize spill with Formalin and Acid Neutralizers. Discard waste. Clean area with soap and water.

Waste Disposal: All waste must be disposed in accordance to local, state, and federal regulations.

Storage: Store in original container or LDPP, HDPE or any plastic container except PolyCarbonate. Do not store in metal containers. Product is light sensitive. Avoid prolonged contact with light. Do not store in temperatures above 100 F for prolonged periods of time. Product is combustible. Do not store near fire, flame or heating devices.

Section VIII Personal Protection and Handling

Ventilation: Use mechanical fume hood.

Respiratory Protection: Use MIOSH or NIOSH approved organic respirators.

Eye Protection: Wear goggles or splash shield.

Protective Gloves: Wear latex gloves or impermeable protective gloves.

Other Protective Clothing or Equipment: Wear lab apron. Hygienic Practices: Wash hands before meals or breaks.

State and Federal Regulations: This product contains a chemical known to the State of California to cause cancer and

birth defects: Formaldehyde.

THIS INFORMATION RELATES TO THE SPECIFIC TRADE NAME PRODUCT DESIGNATED ON THIS MSDS SHEET. INFORMATION IS TO THE BEST OF OUR KNOWLEDGE AND BELIEF, ACCURATE AND RELIABLE AS OF THE DATE COMPILED. NO REPRESENTATION, WARRANTY OR GUARANTEE IS MADE AS TO ITS ACCURACY, RELIABILITY OR COMPLETENESS. WE DO NOT ACCEPT LIABILITY FOR ANY LOSS OR DAMAGE THAT MAY OCCUR FROM THE USE OF THIS INFORMATION

2 of 2 Bouin's Fixative Substitute MSDS BFS-32 or BFS-100 -12/98