



Safety Data Sheet (SDS)

SECTION 1: Identification

- **Product Identifier:**
 - Product Name: AFP ELISA Kit
 - Catalog Number: AFP-001
 - Components:
 - Assay Diluent (contains Proclin 300)
 - Color Reagent (contains Tetramethylbenzidine and N, N-Dimethylformamide)
 - Conjugate (contains ethanediol)
 - Standard (contains ethanediol)
 - Microplate
 - Stop Solution (contains Sulfuric Acid)
 - Wash Buffer Concentrate (Contains Tween 20)
- **Details of the supplier of the safety data sheet:**
 - Company: ImCare Biotech
 - Address: 3805 Old Easton Rd, Doylestown PA, 18902
 - Phone Number:
 - Emergency Phone Number:

SECTION 2: Hazard(s) Identification

- **Classification of the substance or mixture:** This product is a kit containing multiple components. The overall classification is a mixture of hazardous and non-hazardous substances.
 - Stop Solution: Corrosive.
 - Positive and Negative Controls: Acutely Toxic.
 - Other components may cause skin/eye irritation or sensitization.
- **Hazard and Precautionary statements:**
 - **Hazard statement(s):**
 - H314: Causes severe skin burns and eye damage (Stop Solution).
 - H300: Fatal if swallowed (Controls).
 - H317: May cause an allergic skin reaction (Assay Diluent).
 - H360: May damage fertility or the unborn child (Color Reagent).
 - **Precautionary statement(s):**
 - P260: Do not breathe dust/fume/gas/mist/vapors/spray.
 - P280: Wear protective gloves/protective clothing/eye protection/face protection.
 - P301+P310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
 - P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
 - P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing.

SECTION 3: Composition/Information on Ingredients

- **Mixtures:**

- **Stop Solution:** Contains Sulfuric Acid (<10%), CAS No. 7664-93-9
- **Assay Diluent:** Contains Proclin 300 (<0.1%), Mixture
- **Color Reagent:** Contains Tetramethylbenzidine (TMB) and N, N-Dimethylformamide, CAS No. 54827-17-7 and 68-12-2
- **Conjugate & Standard:** Contains Ethanediol (ethylene glycol), CAS No. 107-21-1
- **Wash Buffer Concentrate:** Contains Tween 20, CAS No. 9005-64-5 (Not classified as hazardous)
- **Microplate:** Not applicable.

SECTION 4: First-Aid Measures

- **Description of first aid measures:**

- **If inhaled:** Move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
- **In case of skin contact:** Take off immediately all contaminated clothing. Rinse skin with water/shower for at least 15 minutes. Consult a physician. For controls, wash with plenty of soap and water.
- **In case of eye contact:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.
- **If swallowed:** Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Immediately call a POISON CENTER or doctor/physician.

- **Most important symptoms and effects, both acute and delayed:** Burning sensation, corrosion, coughing, wheezing, laryngitis, shortness of breath, headache, nausea, vomiting.
- **Indication of any immediate medical attention and special treatment needed:** Treat symptomatically. For Sulfuric Acid exposure, do not use sodium bicarbonate to neutralize.

SECTION 5: Fire-Fighting Measures

- **Suitable extinguishing media:** Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- **Specific hazards arising from the chemical:** Not flammable or combustible. Some components may emit toxic fumes (carbon oxides, nitrogen oxides, sulfur oxides) under fire conditions.
- **Special protective equipment and precautions for firefighters:** Wear self-contained breathing apparatus for firefighting if necessary.

SECTION 6: Accidental Release Measures

- **Personal precautions, protective equipment and emergency procedures:** Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.
- **Environmental precautions:** Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
- **Methods and materials for containment and cleaning up:** Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal. For the controls, be mindful of the potential reaction with plumbing.

SECTION 7: Handling and Storage

- **Precautions for safe handling:** Avoid contact with skin and eyes. Avoid inhalation of vapor or mist. Wear appropriate personal protective equipment.
- **Conditions for safe storage, including any incompatibilities:** Store at 2-8°C. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

SECTION 8: Exposure Controls/Personal Protection

- **Control parameters:** Components with workplace control parameters (e.g., OSHA PEL, ACGH TLV) include Sulfuric Acid, Sodium Azide, N,N-Dimethylformamide, and Ethanediol. Consult specific regulations for exposure limits.
- **Appropriate engineering controls:** Handle in accordance with good industrial hygiene and safety practice. Use a chemical fume hood when handling the Stop Solution and Color Reagent. Eyewash stations and safety showers should be available.
- **Individual protection measures, such as personal protective equipment (PPE):**
 - **Eye/face protection:** Safety glasses with side-shields conforming to EN166 or face shield.
 - **Skin protection:** Handle with chemical-resistant gloves (e.g., nitrile rubber).
 - **Body Protection:** Complete suit protecting against chemicals, the type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
 - **Respiratory protection:** Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges.
 - **General hygiene considerations:** Wash hands before breaks and at the end of the workday.

SECTION 9: Physical and Chemical Properties

- **Information on basic physical and chemical properties:**
 - **Appearance:** Various, mostly liquids.
 - **Odor:** Odorless or slight.
 - **pH:** Varies by component. Stop solution is highly acidic.
 - **Solubility(ies):** Water soluble.
 - *(Note: Physical and chemical properties are component specific. Refer to individual component SDS for detailed information if needed.)*

SECTION 10: Stability and Reactivity

- **Reactivity:** No data available for the kit as a whole.
- **Chemical stability:** Stable under recommended storage conditions.
- **Possibility of hazardous reactions:** No data available.
- **Conditions to avoid:** Incompatible materials, heat, and moisture.
- **Incompatible materials:** Strong oxidizing agents, strong bases, metals.
- **Hazardous decomposition products:** Under fire conditions: Carbon oxides, Nitrogen oxides (NOx), Sulphur oxides.

SECTION 11: Toxicological Information

- **Information on toxicological effects:**
 - **Acute toxicity:**
 - **Sodium Azide:** LD50 Oral - Rat - 27 mg/kg. LD50 Dermal - Rabbit - 20 mg/kg.

- **Sulfuric Acid:** LD50 Oral - Rat - 2,140 mg/kg. LC50 Inhalation - Rat - 2 h - 510 mg/m3.
- **Skin corrosion/irritation:** Sulfuric acid causes severe skin burns.
- **Serious eye damage/eye irritation:** Sulfuric acid causes severe eye damage.
- **Respiratory or skin sensitization:** Proclin 300 may cause an allergic skin reaction.
- **Carcinogenicity:** No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC, ACGIH, NTP, or OSHA.
- **Reproductive toxicity:** N, N-Dimethylformamide may damage fertility or harm the unborn child.

SECTION 12: Ecological Information

- **Toxicity:** Harmful to aquatic life. Do not let product enter drains.
- **Persistence and degradability:** No data available.
- **Bioaccumulative potential:** No data available.
- **Mobility in soil:** No data available.

SECTION 13: Disposal Considerations

- **Waste treatment methods:** Dispose of in accordance with local, state, and federal regulations. The generation of waste should be avoided or minimized wherever possible.

SECTION 14: Transport Information

- **DOT (US), IMDG, IATA:** Not regulated as a hazardous material for transport, provided the quantity of hazardous material per component does not exceed regulatory limits. The Stop Solution may be classified as UN2796, Sulfuric Acid, 8, PG II if shipped alone in sufficient quantity.

SECTION 15: Regulatory Information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture:**
 - **SARA 302 Components:** Sulfuric Acid
 - **SARA 313 Components:** Sulfuric Acid, N,N-Dimethylformamide
 - **Massachusetts Right To Know Components:** Sulfuric Acid, N,N-Dimethylformamide, Ethanediol
 - **Pennsylvania Right To Know Components:** Sulfuric Acid, N,N-Dimethylformamide, Ethanediol
 - **New Jersey Right To Know Components:** Sulfuric Acid, N,N-Dimethylformamide, Ethanediol
 - **California Prop. 65 Components:** WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm (N,N-Dimethylformamide).

SECTION 16: Other Information

- **Date of preparation or last revision:** August 26, 2025
- **Disclaimer:** The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification.