1. IDENTIFICATION AND GENERAL INFORMATION
   P/N#: 2041-12K
   Nomenclature: Bitrex Fit Test Solution # 2
   Company Name: Allegro Industries
   Address: 7221 Orangewood Avenue
   Garden Grove, CA 92841
   714-899-9855
   Chemtrac: 800-424-9300
   NFPA Code: H 1
   F 1
   R 1
   O None

2. COMPOSITION
   Chemical Name: Ammonium Benzoate
   Chemical Family: Carboxylic Acids
   Synonyms: Benzenemethanamium, Bittering Agent
   Molecular Weight: 446.57
   Molecular Formula: C$_{28}$H$_{34}$N$_2$O$_3$
   Ingredient: Benzoate
   CAS Number: 3734-33-6
   Sodium Chloride
   CAS Number: 7647-14-5
   Water
   CAS Number: N/A
   Percent: 0.16850% 4.99160% 94.83990%

3. HAZARDS IDENTIFICATION
   Physical Dangers: Stable
   Chemical Dangers: Stable. Materials/conditions to avoid: None known
   Routes of Exposure: Ingestion, Inhalation, absorption
   Target Organs: No significant target effect reported.
   Health Hazards:
   Inhalation: No adverse health effects are expected. Avoid prolonged breathing of mist
   Skin Contact: No need for first aid anticipated
   Eye Contact: No need for first aid anticipated
   Ingestion: Profuse bad taste. Taste Antidote: Chocolate (Do not ingest)
   Chronic Exposure: No information available.
   Acute Exposure: Unknown
   Aggravation of Pre-Ex. Cond: None Known. Denatonium Benzoate is a very bitter chemical used in many consumer products as an aversive agent against child ingestion

4. FIRST AID MEASURES
   Inhalation: N/A. No adverse health effects are expected
   Skin Contact: The affected area should be thoroughly washed with soap and water.
   Eye Contact: Flush immediately with cold water.
   Ingestion: Administer water or milk to dilute.

5. FIRE FIGHTING MEASURES
   Fire Hazards: No fire hazard
   Fire Extinguisher: N/A
   Explosion: May liberate CO NOx.
   Flash Point: N/A
   Volatile (% by volume): N/A
   Exp. Limits (Vol % in air): N/A
   Auto Ignition Temperature: N/A

6. ACCIDENTAL RELEASE MEASURES
   Procedure for spill/leak: Absorb spills with vermiculite or other suitable absorbent material and remove to an approved disposal container.
   Waste Disposal: Keep out of water supplies and sewers. Dispose of in accordance with current laws and regulations.

7. HANDLING AND STORAGE
   Storage: Store in tight containers in a cool dry place away from light and heat. (Room temperature)
   Self Life: 2 Years
   PPE: N/A
   Notes: None
MATERIAL SAFETY DATA SHEET

8. EXPOSURE CONTROLS
   Inhalation: Respiratory protection is normally not required. No adverse health effects are expected from inhalation exposure
   Skin: No adverse health effects are expected.
   Eye: No adverse health effects are expected.
   Ingestion: Do not ingest.
   Ventilation: Ventilation meeting ACGIH standard should be employed.
   Engineering Controls: N/A
   Work/Hygienic Practices: Use good personal hygiene practices. Wash after any contact.
   Exposure Limits: N/A
   Chemical: 
     Benzoate 
     Sodium Chloride
     TLV (ACGIH TLV): None Established  None listed
     PEL (OSHA PEL): None Established  None listed
     IDLH: None Established  None listed
   Control Parameter: Wash after any contact. Thoroughly wash any contaminated clothing or shoes before reuse.

9. PHYSICAL AND CHEMICAL PROPERTIES
   Color/Appearance/Odor: Clear odorless liquid, extreme bitter taste.
   Boiling Point: N/A
   Melting Point: 163 - 170 ºC
   Specific Gravity (H₂O=1): N/A
   Refractive Index: N/A
   Relative Density: N/A
   Evaporative Rate: N/A
   Water Content: 95%
   Vapor Density( Air-1): N/A
   Vapor Pressure: N/A
   Solubility in Water: 1:20

10. STABILITY AND REACTIVITY
    Conditions to avoid: This material presents no significant reactivity hazard. Hazardous polymerization will not occur and it will not react violently with water. Stable at normal temperature and pressure.
    Materials to avoid: Contact with highly reactive chemical oxidants should be avoided.

11. TOXICOLOGICAL INFORMATION
    Health effects: No information available on significant adverse effects.
    Oral LD50: 612 mg/kg/ (rat)
    Dermal LD50: N/A
    Human Lethal Dose: N/A
    Notes: Carcinogenicity not listed.

12. ECOLOGICAL INFORMATION
    No Information available.

13. DISPOSAL CONSIDERATIONS
    No Information available.

14. TRANSPORT INFORMATION
    Proper shipping name: Denatonium Benzoate
    Transport Emergency Card: N/A
    Packing Group: N/A
    UN Number: N/A
    Reportable Quantity: N/A
    Notes: None

15. REGULATORY INFORMATION
    TSCA Registered: TSCA 12 (b) Export notification - Not Listed.
    CAS# 7647-145 is listed on the TSCA inventory
    RTECS: N/A
    EC Number (EINECS): 223-095-2
    FDA Approved: N
    California Proposition 65: N
    ICSC: N/A

16. OTHER INFORMATION
    No other information available.

DISCLAIMER: THE INFORMATION FURNISHED HEREIN IS BELIEVED TO BE ACCURATE AND REPRESENTS THE BEST DATA CURRENTLY AVAILABLE TO US. NO WARRANTY, EXPRESSED OR IMPLIED IS MADE AND ALLEGRO INDUSTRIES ASSUMES NO LEGAL RESPONSIBILITY OR LIABILITY RESULTING FROM ITS USE.