



## Material Safety Data Sheet

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**PRODUCT NAME:** 3M FT-30 Qualitative Fit Test Kit, Bitter  
**MANUFACTURER:** 3M  
**DIVISION:** Occupational Health & Environ. Safety  
**ADDRESS:** 3M Center  
St. Paul, MN 55144-1000

**EMERGENCY PHONE: 1-800-364-3577 or (651) 737-6501 (24 hours)**

**Issue Date:** 01/26/2006  
**Supersedes Date:** 03/05/2003

**Document Group:** 07-6220-3

### ID Number(s):

70-0707-0964-0

**This product is a kit or a multipart product which consists of multiple, independently packaged components. An MSDS for each of these components is included. Please do not separate the component MSDSs from this cover page. The document numbers of the MSDSs for components of this product are:**

07-6198-1, 07-6218-7

### Revision Changes:

Copyright was modified.

Page Heading: Product name was modified.

Kit: Product name was modified.

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### SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** FT-31, Denatonium Benzoate Sensitivity Solution

**MANUFACTURER:** 3M

**DIVISION:** Occupational Health & Environ. Safety

**ADDRESS:** 3M Center  
St. Paul, MN 55144-1000

**EMERGENCY PHONE:** 1-800-364-3577 or (651) 737-6501 (24 hours)

**Issue Date:** 01/26/2006

**Supersedes Date:** 01/12/2006

**Document Group:** 07-6198-1

**Product Use:**

Intended Use: Sensitivity Test Solution.

### SECTION 2: INGREDIENTS

<u>Ingredient</u>	<u>C.A.S. No.</u>	<u>% by Wt</u>
Water	7732-18-5	80 - 100
Sodium Chloride	7647-14-5	3 - 7
Denatonium Benzoate	3734-33-6	0 - 1

### SECTION 3: HAZARDS IDENTIFICATION

#### 3.1 EMERGENCY OVERVIEW

**Odor, Color, Grade:** Clear, odorless solution with a bitter taste. Freezing point = -4 degrees Centigrade

**General Physical Form:** Liquid

**Immediate health, physical, and environmental hazards:** consumer products as an aversive agent against child ingestion.

Denatonium Benzoate is a very bitter chemical used in many

#### 3.2 POTENTIAL HEALTH EFFECTS

**Eye Contact:**

No health effects are expected.

**Skin Contact:**

No health effects are expected.

**Inhalation:**

Prolonged or repeated exposure may cause:

Respiratory Tract Irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

**Ingestion:**

No health effects are expected.

## SECTION 4: FIRST AID MEASURES

### 4.1 FIRST AID PROCEDURES

The following first aid recommendations are based on an assumption that appropriate personal and industrial hygiene practices are followed.

**Eye Contact:** Flush eyes with large amounts of water. If signs/symptoms persist, get medical attention.

**Skin Contact:** Wash affected area with soap and water. If signs/symptoms develop, get medical attention.

**Inhalation:** Remove person to fresh air. If signs/symptoms develop, get medical attention.

**If Swallowed:** No need for first aid is anticipated.

## SECTION 5: FIRE FIGHTING MEASURES

### 5.1 FLAMMABLE PROPERTIES

Autoignition temperature	<i>Not Applicable</i>
Flash Point	<i>Not Applicable</i>
Flammable Limits - LEL	<i>Not Applicable</i>
Flammable Limits - UEL	<i>Not Applicable</i>
OSHA Flammability Classification:	Not Applicable

### 5.2 EXTINGUISHING MEDIA

Material will not burn.

### 5.3 PROTECTION OF FIRE FIGHTERS

**Special Fire Fighting Procedures:** Wear full protective equipment (Bunker Gear) and a self-contained breathing apparatus (SCBA).

**Unusual Fire and Explosion Hazards:** Not applicable.

**Note: See STABILITY AND REACTIVITY (SECTION 10) for hazardous combustion and thermal decomposition**

information.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

**Accidental Release Measures:** Observe precautions from other sections. Call 3M- HELPS line (1-800-364-3577) for more information on handling and managing the spill. Contain spill. Collect as much of the spilled material as possible. Clean up residue with water. Clean up residue with detergent and water. Collect the resulting residue containing solution. Place in a closed container approved for transportation by appropriate authorities. Dispose of collected material as soon as possible.

**In the event of a release of this material, the user should determine if the release qualifies as reportable according to local, state, and federal regulations.**

## SECTION 7: HANDLING AND STORAGE

### 7.1 HANDLING

For industrial or professional use only.

### 7.2 STORAGE

Store under normal warehouse conditions.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 ENGINEERING CONTROLS

Not applicable.

### 8.2 PERSONAL PROTECTIVE EQUIPMENT (PPE)

#### 8.2.1 Eye/Face Protection

Avoid eye contact.

#### 8.2.2 Skin Protection

Gloves are not required.

#### 8.2.3 Respiratory Protection

Not applicable.

#### 8.2.4 Prevention of Swallowing

Not applicable.

### 8.3 EXPOSURE GUIDELINES

None Established

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

<b>Odor, Color, Grade:</b>	Clear, odorless solution with a bitter taste. Freezing point = -4 degrees Centigrade
<b>General Physical Form:</b>	Liquid
<b>Autoignition temperature</b>	<i>Not Applicable</i>
<b>Flash Point</b>	<i>Not Applicable</i>
<b>Flammable Limits - LEL</b>	<i>Not Applicable</i>
<b>Flammable Limits - UEL</b>	<i>Not Applicable</i>
<b>Boiling point</b>	<i>Not Applicable</i>
<b>Vapor Density</b>	<i>Not Applicable</i>
<b>Vapor Pressure</b>	<i>Not Applicable</i>
<b>Specific Gravity</b>	1.034 [ <i>Ref Std: WATER=1</i> ]
<b>pH</b>	Approximately 6.52 Units not avail. or not appl.
<b>Melting point</b>	<i>Not Applicable</i>
<b>Solubility in Water</b>	Complete
<b>Evaporation rate</b>	<i>Not Applicable</i>
<b>Volatile Organic Compounds</b>	<i>Not Applicable</i>
<b>Percent volatile</b>	<i>Not Applicable</i>
<b>VOC Less H2O &amp; Exempt Solvents</b>	<i>Not Applicable</i>
<b>Viscosity</b>	<i>Not Applicable</i>

## SECTION 10: STABILITY AND REACTIVITY

**Stability:** Stable.

**Materials and Conditions to Avoid:** None known

**Hazardous Polymerization:** Hazardous polymerization will not occur.

### Hazardous Decomposition or By-Products

**Substance**

None known.

**Condition**

Not Specified

## SECTION 11: TOXICOLOGICAL INFORMATION

### Product-Based Toxicology Information:

A Draize Primary Eye Irritation Test (OECD Guideline 405) using this material produced scores of zero at all time points (1, 24, 48, 72 hrs post exposure).

A Guinea Pig Maximization Test (OECD Guideline 406) using this material showed a reaction in one animal, erythema, at the 24-hour observation post challenge. Therefore, the material has a weak sensitizing potential (% responding >0% - <8%).

An Assessment of Acute Inhalatory Toxicity, with a 4-hour exposure (OECD Guideline 403) with this material produced no changes in gross motor skills and no changes in respiratory tract histology. At the maximum airborne concentration of material, statistically significant changes in physical breathing parameters such as expiratory time, retention time, expiratory flow, and enhanced pause were

observed. These effects are thought to be indicative of non-specific, irritant action.

## SECTION 12: ECOLOGICAL INFORMATION

### ECOTOXICOLOGICAL INFORMATION

Not determined.

### CHEMICAL FATE INFORMATION

Not determined.

## SECTION 13: DISPOSAL CONSIDERATIONS

**Waste Disposal Method:** Reclaim if feasible. Discharge spent solutions and small quantities (less than 5 gal.(19 L)) to a wastewater treatment system.

**EPA Hazardous Waste Number (RCRA):** Not regulated

Since regulations vary, consult applicable regulations or authorities before disposal.

## SECTION 14: TRANSPORT INFORMATION

**ID Number(s):**  
70-0707-0965-7

Please contact the emergency numbers listed on the first page of the MSDS for Transportation Information for this material.

## SECTION 15: REGULATORY INFORMATION

### US FEDERAL REGULATIONS

Contact 3M for more information.

### 311/312 Hazard Categories:

Fire Hazard - No    Pressure Hazard - No    Reactivity Hazard - No    Immediate Hazard - No    Delayed Hazard - No

### STATE REGULATIONS

Contact 3M for more information.

## CHEMICAL INVENTORIES

The components of this product are in compliance with the chemical notification requirements of TSCA.

All applicable chemical ingredients in this material are listed on the European Inventory of Existing Chemical Substances (EINECS), or are exempt polymers whose monomers are listed on EINECS.

Contact 3M for more information.

## INTERNATIONAL REGULATIONS

Contact 3M for more information.

**This MSDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.**

## SECTION 16: OTHER INFORMATION

### NFPA Hazard Classification

**Health:** 0 **Flammability:** 0 **Reactivity:** 0 **Special Hazards:** None

National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response personnel to address the hazards that are presented by short-term, acute exposure to a material under conditions of fire, spill, or similar emergencies. Hazard ratings are primarily based on the inherent physical and toxic properties of the material but also include the toxic properties of combustion or decomposition products that are known to be generated in significant quantities.

**Reason for Reissue:** The MSDS has been revised because 3M has adopted the 16-section ANSI/ISO format. The potential hazards of the product have not changed. We encourage you to reread the MSDS and review the information.

### Revision Changes:

Section 6: Release measures information was modified.

Section 13: Waste disposal method information was modified.

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### SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** FT-32, Denatonium Benzoate Fit Test Solution

**MANUFACTURER:** 3M

**DIVISION:** Occupational Health & Environ. Safety

**ADDRESS:** 3M Center  
St. Paul, MN 55144-1000

EMERGENCY PHONE: 1-800-364-3577 or (651) 737-6501 (24 hours)

**Issue Date:** 01/26/2006

**Supersedes Date:** 12/13/2005

**Document Group:** 07-6218-7

**Product Use:**

Intended Use: Fit Test Solution.

### SECTION 2: INGREDIENTS

<u>Ingredient</u>	<u>C.A.S. No.</u>	<u>% by Wt</u>
Water	7732-18-5	80 - 100
Sodium Chloride	7647-14-5	3 - 7
Denatonium Benzoate	3734-33-6	0 - 1

### SECTION 3: HAZARDS IDENTIFICATION

#### 3.1 EMERGENCY OVERVIEW

**Odor, Color, Grade:** Clear, odorless solution with a bitter taste. Freezing point = -4 degrees Centigrade.

**General Physical Form:** Liquid

**Immediate health, physical, and environmental hazards:** consumer products as an aversive agent against child ingestion.

Denatonium Benzoate is a very bitter chemical used in many

#### 3.2 POTENTIAL HEALTH EFFECTS

**Eye Contact:**

No health effects are expected.

**Skin Contact:**

No health effects are expected.

**Inhalation:**

Prolonged or repeated exposure may cause:

Respiratory Tract Irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

**Ingestion:**

No health effects are expected.

**SECTION 4: FIRST AID MEASURES**

**4.1 FIRST AID PROCEDURES**

The following first aid recommendations are based on an assumption that appropriate personal and industrial hygiene practices are followed.

**Eye Contact:** Flush eyes with large amounts of water. If signs/symptoms persist, get medical attention.

**Skin Contact:** Wash affected area with soap and water. If signs/symptoms develop, get medical attention.

**Inhalation:** Remove person to fresh air. If signs/symptoms develop, get medical attention.

**If Swallowed:** No need for first aid is anticipated.

**SECTION 5: FIRE FIGHTING MEASURES**

**5.1 FLAMMABLE PROPERTIES**

Autoignition temperature	<i>Not Applicable</i>
Flash Point	<i>Not Applicable</i>
Flammable Limits - LEL	<i>Not Applicable</i>
Flammable Limits - UEL	<i>Not Applicable</i>
OSHA Flammability Classification:	Not Applicable

**5.2 EXTINGUISHING MEDIA**

Material will not burn.

**5.3 PROTECTION OF FIRE FIGHTERS**

**Special Fire Fighting Procedures:** Wear full protective equipment (Bunker Gear) and a self-contained breathing apparatus (SCBA).

**Unusual Fire and Explosion Hazards:** Not applicable.

**Note: See STABILITY AND REACTIVITY (SECTION 10) for hazardous combustion and thermal decomposition**

information.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

**Accidental Release Measures:** Observe precautions from other sections. Call 3M- HELPS line (1-800-364-3577) for more information on handling and managing the spill. Contain spill. Collect as much of the spilled material as possible. Clean up residue with water. Collect the resulting residue containing solution. Place in a closed container approved for transportation by appropriate authorities. Dispose of collected material as soon as possible.

**In the event of a release of this material, the user should determine if the release qualifies as reportable according to local, state, and federal regulations.**

## SECTION 7: HANDLING AND STORAGE

### 7.1 HANDLING

For industrial or professional use only.

### 7.2 STORAGE

Store under normal warehouse conditions.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 ENGINEERING CONTROLS

Not applicable.

### 8.2 PERSONAL PROTECTIVE EQUIPMENT (PPE)

#### 8.2.1 Eye/Face Protection

Avoid eye contact.

#### 8.2.2 Skin Protection

Gloves are not required.

#### 8.2.3 Respiratory Protection

Not applicable.

#### 8.2.4 Prevention of Swallowing

Not applicable.

### 8.3 EXPOSURE GUIDELINES

None Established

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

<b>Odor, Color, Grade:</b>	Clear, odorless solution with a bitter taste. Freezing point = -4 degrees Centigrade.
<b>General Physical Form:</b>	Liquid
<b>Autoignition temperature</b>	<i>Not Applicable</i>
<b>Flash Point</b>	<i>Not Applicable</i>
<b>Flammable Limits - LEL</b>	<i>Not Applicable</i>
<b>Flammable Limits - UEL</b>	<i>Not Applicable</i>
<b>Boiling point</b>	<i>Not Applicable</i>
<b>Vapor Density</b>	<i>Not Applicable</i>
<b>Vapor Pressure</b>	<i>Not Applicable</i>
<b>Specific Gravity</b>	1.034 [ <i>Ref Std: WATER=1</i> ]
<b>pH</b>	Approximately 6.52 Units not avail. or not appl.
<b>Melting point</b>	<i>Not Applicable</i>
<b>Solubility in Water</b>	Complete
<b>Evaporation rate</b>	<i>Not Applicable</i>
<b>Volatile Organic Compounds</b>	<i>Not Applicable</i>
<b>Percent volatile</b>	<i>Not Applicable</i>
<b>VOC Less H2O &amp; Exempt Solvents</b>	<i>Not Applicable</i>
<b>Viscosity</b>	<i>Not Applicable</i>

## SECTION 10: STABILITY AND REACTIVITY

**Stability:** Stable.

**Materials and Conditions to Avoid:** None known

**Hazardous Polymerization:** Hazardous polymerization will not occur.

### Hazardous Decomposition or By-Products

**Substance**

None known.

**Condition**

Not Specified

## SECTION 11: TOXICOLOGICAL INFORMATION

### Product-Based Toxicology Information:

A Draize Primary Eye Irritation Test (OECD Guideline 405) using this material produced scores of zero at all time points (1, 24, 48, 72 hrs post exposure).

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observed. These effects are thought to be indicative of non-specific, irritant action.

## SECTION 12: ECOLOGICAL INFORMATION

### ECOTOXICOLOGICAL INFORMATION

Not determined.

### CHEMICAL FATE INFORMATION

Not determined.

## SECTION 13: DISPOSAL CONSIDERATIONS

**Waste Disposal Method:** Reclaim if feasible. Discharge small quantities of less than 5 gallons (20 liters) to a municipal or industrial waste water treatment system.

**EPA Hazardous Waste Number (RCRA):** Not regulated

Since regulations vary, consult applicable regulations or authorities before disposal.

## SECTION 14: TRANSPORT INFORMATION

**ID Number(s):**  
70-0707-0966-5

Please contact the emergency numbers listed on the first page of the MSDS for Transportation Information for this material.

## SECTION 15: REGULATORY INFORMATION

### US FEDERAL REGULATIONS

Contact 3M for more information.

### 311/312 Hazard Categories:

Fire Hazard - No    Pressure Hazard - No    Reactivity Hazard - No    Immediate Hazard - No    Delayed Hazard - No

### STATE REGULATIONS

Contact 3M for more information.

## CHEMICAL INVENTORIES

The components of this product are in compliance with the chemical notification requirements of TSCA.

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## INTERNATIONAL REGULATIONS

Contact 3M for more information.

**This MSDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.**

## SECTION 16: OTHER INFORMATION

### NFPA Hazard Classification

**Health:** 0 **Flammability:** 0 **Reactivity:** 0 **Special Hazards:** None

National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response personnel to address the hazards that are presented by short-term, acute exposure to a material under conditions of fire, spill, or similar emergencies. Hazard ratings are primarily based on the inherent physical and toxic properties of the material but also include the toxic properties of combustion or decomposition products that are known to be generated in significant quantities.

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