

3M Canada Company
 1840 Oxford Street East, Post Office Box 5757
 London, Ontario N6A 4T1
 Medical Emergency Telephone: (519) 451-2500, Ext. 2222
 Transportation Emergency Telephone (CANUTEC): (613) 996-6666

Material Safety Data Sheet

Document id : 07-6220-3 Issue date : 2012/03/06
 Version : 10.00 Supersedes date : 2009/03/09

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Prepared by: Corporate Regulatory Services, 3M Canada Company
 Telephone: (800) 364-3577, Fax: (800) 603-7758, Web Site: www.3M.ca

1 Chemical Product and Company Identification

Tradename:

3M FT-30 QUALITATIVE FIT TEST KIT, BITTER

Product ID:

70-0707-0964-0

Intended Use of Product:

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

Kit component(s):

07-6198-1 FT-31, DENATONIUM BENZOATE SENSITIVITY SOLUTION
 07-6218-7 FT-32, DENATONIUM BENZOATE FIT TEST SOLUTION

Division:

OCCUPATIONAL HEALTH & ENVIRON. SAFETY

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Material Safety Data Sheet

Document id : 07-6198-1 Issue date : 2012/03/06
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Prepared by: Corporate Regulatory Services, 3M Canada Company
 Telephone: (800) 364-3577, Fax: (800) 603-7758, Web Site: www.3M.ca

1 Chemical Product and Company Identification

Tradename:
 FT-31, DENATONIUM BENZOATE SENSITIVITY SOLUTION
 Product ID:
 70-0707-0965-7
 Intended Use of Product:
 Testing liquid
 Sensitivity Test Solution
 Division:
 OCCUPATIONAL HEALTH & ENVIRON. SAFETY

2 Hazards Identification

Critical Hazards:
 None known.
 See Sections 7 and 11 for further information.

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3 Composition/Information on Ingredients

Ingredient Name	CAS Number	Percentage
WATER	7732-18-5	80 - 100
SODIUM CHLORIDE	7647-14-5	3 - 7
DENATONIUM BENZOATE	3734-33-6	< 0.1

NOTE:

Each percentage is expressed as the ratio of the weight of the ingredient to the weight of the controlled product.

4 First Aid Measures

Instructions for Eye Contact:

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

Instructions for Skin Contact:

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

Instructions for Inhalation:

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

Instructions for Ingestion:

No need for first aid is anticipated.

5 Fire Fighting Measures

Flash point: Not applicable

Lower Explosive Limit (%): Not applicable

Upper Explosive Limit (%): Not applicable

Autoignition temperature: Not applicable

Suitable Extinguishing Media:

No data available.

Exposure Hazards during Fire:

Material will not burn.

Combustion Products from Fire:

None known

Unusual Fire and Explosion Hazards

None known.

Fire Fighting Procedures:

Wear full protective equipment (Bunker Gear) and a self-contained breathing apparatus (SCBA).

NFPA: Health 0

NFPA: Fire 0

NFPA: Reactivity 0

NFPA: Unusual Reaction Hazard

FT-31, DENATONIUM BENZOATE SENSITIVITY SOLUTION

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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.

6 Accidental Release Measures

Personal Precautions:

No data available.

Environmental Procedures

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.

Methods for cleaning up

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.

Spill Response:

Refer to other sections of this MSDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment. Call 3M-HELPS line (1-800-364-3577) for more information on handling and managing the spill.

7 Handling and Storage

Storage Requirements:

Store under normal warehouse conditions.

Incompatible Materials:

None known.

Ventilation:

No data available.

Use Instructions:

For industrial or professional use only.

FT-31, DENATONIUM BENZOATE SENSITIVITY SOLUTION

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8 Exposure Controls/Personal Protection

Personal Protection

Eye Protection:

Avoid eye contact.

Hand Protection:

Gloves are not required.

Skin Protection:

Not applicable.

Respiratory Protection:

Not applicable.

Ingestion (Prevention):

Not applicable.

Recommended Ventilation:

Not applicable.

Ingredient Exposure Data

WATER (7732-18-5)

LD50 (rat, oral)

> 90 ml/kg

LC50 (rat, inhalation/4 hours)

No data available.

Exposure Limits

No data available.

SODIUM CHLORIDE (7647-14-5)

LD50 (rat, oral)

3000 mg/kg

LD50 (dermal, rabbit)

> 10 g/kg

LC50 (rat, inhalation/4 hours)

No data available.

Exposure Limits

No data available.

DENATONIUM BENZOATE (3734-33-6)

LD50 (rat, oral)

584 mg/kg

LC50 (rat, inhalation/4 hours)

No data available.

Exposure Limits

No data available.

9 Physical and Chemical Properties

Physical form,Color,Odour:

Liquid; Clear; with Bitter
taste;

Odourless; Freezing Point:

-4 C

Odour Threshold:

No data available.

pH:

Approximately 6.52

Boiling point/boiling range:

Not applicable

Melting point/melting range:

Not applicable

FT-31, DENATONIUM BENZOATE SENSITIVITY SOLUTION

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Vapour pressure:

Not applicable

Water Solubility:

Complete

Partition coefficient (K o/w):

Not Available

Specific gravity:

□ 1.034 Water=1

Vapour density:

Not applicable

Volatile organic compounds:

Not applicable

Evaporation rate:

Not applicable

Viscosity:

Not applicable

Percent Volatile:

Not applicable
-----10 Stability and Reactivity

Conditions to Avoid:

None known.

Materials to Avoid:

None known.

Hazardous Decomposition:

None known

Stability and Reactivity:

Stable. Hazardous polymerization will not occur.
-----11 Toxicological Information

Effects from Eye Contact:

No health effects are expected.

Effects from Skin Contact:

No health effects are expected.

Effects from 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.

Effects from Ingestion:

No health effects are expected.

Denatonium Benzoate is a very bitter chemical used in many consumer products as an aversive agent against child ingestion.

Sensitization Information:

No data available.

Carcinogenicity:

No data available.

Mutagenicity:

No data available.

Reproductive Effects:

No data available.

Component Based Information:

No data available.

Product Based 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.

12 Ecological Information

Environmental Data:

Ecotoxicity Data:

Not determined.

Ecofate Data:

Not determined.

13 Disposal Considerations

Product as Sold:

Discharge spent solutions and small quantities (less than 5 gal.(19 L)) to a wastewater treatment system.

Product Packaging:

No data available.

Potential for Recycling:

Reclaim if feasible.

Special Instructions:

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

14 Transport Information

Transportation of Dangerous Goods

TDG Classification: Non-Regulated Material

Special Information:: Contact 3M for more information.

These transportation classifications are provided as a customer service. As the shipper YOU remain responsible for complying with all applicable laws and regulations, including proper transportation classification and packaging. 3M's transportation classifications are based on product formulation, packaging, 3M policies and 3M's understanding of applicable current regulations.

FT-31, DENATONIUM BENZOATE SENSITIVITY SOLUTION

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3M does not guarantee the accuracy of this classification information. This information applies only to transportation classification and not the packaging, labeling, or marking requirements. The original 3M package is certified for Canadian ground shipment only. If you are shipping by air or ocean, the package may not meet applicable regulatory requirements.

15 Regulatory Information

WHMIS Classification: Not Controlled

NOTE:

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

Product Certifications:

The product on this MSDS, or all its components, is included on the following countries' chemical inventories, as noted:

AICS - Australian Inventory of Chemical Substances

DSL - Domestic Substances List (Canada)

EINECS - European Inventory of Existing Commercial Chemical Substances

TSCA - Toxic Substances Control Act (USA)

16 Other Information

Reason for Reissue:

The following Sections and topics have been updated or revised:
Section 6 - Accidental Release Measures;

The information in this Material Safety Data Sheet (MSDS) is believed

to be correct as of the date issued. 3M MAKES NO WARRANTIES, EXPRESSED OR IMPLIED, STATUTORY OR OTHERWISE, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OR CONDITION OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR COURSE OF PERFORMANCE OR USAGE OF TRADE. User is responsible for determining whether the 3M product is fit for a particular purpose and suitable for user's method of use or application. Given the variety of factors that can affect the use and application of a 3M product, some of which are uniquely within the user's knowledge and control, it is essential that the user evaluate the 3M product to determine whether it is fit for a particular purpose and suitable for user's method of use or application.

---End---

FT-31, DENATONIUM BENZOATE SENSITIVITY SOLUTION

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=====
 Material Safety Data Sheet
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Document id : 07-6218-7 Issue date : 2012/03/06
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Prepared by: Corporate Regulatory Services, 3M Canada Company
 Telephone: (800) 364-3577, Fax: (800) 603-7758, Web Site: www.3M.ca

 1 Chemical Product and Company Identification

Tradename:
 FT-32, DENATONIUM BENZOATE FIT TEST SOLUTION
 Product ID:

70-0707-0966-5
 Intended Use of Product:
 Fit Test Solution
 Division:
 OCCUPATIONAL HEALTH & ENVIRON. SAFETY

2 Hazards Identification

Critical Hazards:
 None known.
 See Sections 7 and 11 for further information.

3 Composition/Information on Ingredients

Ingredient Name	CAS Number	Percentage
WATER	7732-18-5	80 - 100
SODIUM CHLORIDE	7647-14-5	3 - 7
DENATONIUM BENZOATE	3734-33-6	0.1 - 1.0

NOTE:

FT-32, DENATONIUM BENZOATE FIT TEST SOLUTION

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Each percentage is expressed as the ratio of the weight of the ingredient to the weight of the controlled product.

4 First Aid Measures

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

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

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

Instructions for Ingestion:
 No need for first aid is anticipated.

5 Fire Fighting Measures

Flash point:	Not applicable
Lower Explosive Limit (%):	Not applicable
Upper Explosive Limit (%):	Not applicable
Autoignition temperature:	Not applicable

Suitable Extinguishing Media:
 No data available.

Exposure Hazards during Fire:
 Material will not burn.

Combustion Products from Fire:

None known

Unusual Fire and Explosion Hazards

None known.

Fire Fighting Procedures:

Wear full protective equipment (Bunker Gear) and a self-contained breathing apparatus (SCBA).

NFPA: Health 0

NFPA: Fire 0

NFPA: Reactivity 0

NFPA: Unusual Reaction Hazard

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.

FT-32, DENATONIUM BENZOATE FIT TEST SOLUTION

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6 Accidental Release Measures

Personal Precautions:

Ventilate the area with fresh air. For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust vapors, in accordance with good industrial hygiene practice. Warning! A motor could be an ignition source and could cause flammable gases or vapors in the spill area to burn or explode.

Environmental Procedures

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.

Methods for cleaning up

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.

Spill Response:

Refer to other sections of this MSDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment. Call 3M-HELPS line (1-800-364-3577) for more information on handling and managing the spill.

7 Handling and Storage

Storage Requirements:

Store under normal warehouse conditions.

Incompatible Materials:

None known.

Ventilation:

No data available.

Use Instructions:

For industrial or professional use only.

8 Exposure Controls/Personal Protection

Personal Protection

Eye Protection:

Avoid eye contact.

Hand Protection:

Gloves are not required.

Skin Protection:

Not applicable.

FT-32, DENATONIUM BENZOATE FIT TEST SOLUTION

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Respiratory Protection:

Not applicable.

Ingestion (Prevention):

Not applicable.

Recommended Ventilation:

Not applicable.

Ingredient Exposure Data

WATER (7732-18-5)

LD50 (rat, oral)

> 90 ml/kg

LC50 (rat, inhalation/4 hours)

No data available.

Exposure Limits

No data available.

SODIUM CHLORIDE (7647-14-5)

LD50 (rat, oral)

3000 mg/kg

LD50 (dermal, rabbit)

> 10 g/kg

LC50 (rat, inhalation/4 hours)

No data available.

Exposure Limits

No data available.

DENATONIUM BENZOATE (3734-33-6)

LD50 (rat, oral)

584 mg/kg

LC50 (rat, inhalation/4 hours)

No data available.

Exposure Limits

No data available.

9 Physical and Chemical Properties

Physical form, Color, Odour:

Liquid; Clear; with Bitter
taste;

Freezing Point: -4 C

Odourless;

Odour Threshold:

No data available.

pH:

Approximately 6.52

Boiling point/boiling range:	Not applicable
Melting point/melting range:	Not applicable
Vapour pressure:	Not applicable
Water Solubility:	Complete
Partition coefficient (K o/w):	Not Available
Specific gravity:	□ 1.034 Water=1
Vapour density:	Not applicable
Volatile organic compounds:	Not applicable
Evaporation rate:	Not applicable
Viscosity:	Not applicable
Percent Volatile:	Not applicable

FT-32, DENATONIUM BENZOATE FIT TEST SOLUTION

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10 Stability and Reactivity

Conditions to Avoid:

None known.

Materials to Avoid:

None known.

Hazardous Decomposition:

None known

Stability and Reactivity:

Stable. Hazardous polymerization will not occur.

11 Toxicological Information

Effects from Eye Contact:

No health effects are expected.

Effects from Skin Contact:

No health effects are expected.

Effects from 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.

Effects from Ingestion:

No health effects are expected.

Denatonium Benzoate is a very bitter chemical used in many consumer products as an aversive agent against child ingestion.

Sensitization Information:

No data available.

Carcinogenicity:

No data available.

Mutagenicity:

No data available.

Reproductive Effects:

No data available.

Component Based Information:

No data available.

Product Based 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

FT-32, DENATONIUM BENZOATE FIT TEST SOLUTION

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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.

12 Ecological Information

Environmental Data:

Ecotoxicity Data:

Not determined.

Ecofate Data:

Not determined.

Special statements for 2001/58/EC:

A conservative assessment indicates this product presents a low environmental risk. Components released to the environment through use and disposal are expected to have minimal environmental impact.

13 Disposal Considerations

Product as Sold:

Discharge small quantities of less than 5 gallons (20 liters) to a municipal or industrial waste water treatment system.

Product Packaging:

No data available.

Potential for Recycling:

Reclaim if feasible.

Special Instructions:

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

14 Transport Information

Transportation of Dangerous Goods

TDG Classification:

Non-Regulated Material

Special Information:: Contact 3M for more information.

These transportation classifications are provided as a customer service. As the shipper YOU remain responsible for complying with all applicable laws and regulations, including proper transportation classification and packaging. 3M's transportation classifications are based on product formulation, packaging, 3M

policies and 3M's understanding of applicable current regulations. 3M does not guarantee the accuracy of this classification information. This information applies only to transportation classification and not the packaging, labeling, or marking requirements. The original 3M package is certified for Canadian ground shipment only. If you are shipping by air or ocean, the

FT-32, DENATONIUM BENZOATE FIT TEST SOLUTION

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package may not meet applicable regulatory requirements.

15 Regulatory Information

WHMIS Classification: Not Controlled

NOTE:

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Product Certifications:

The product on this MSDS, or all its components, is included on the following countries' chemical inventories, as noted:

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EINECS - European Inventory of Existing Commercial Chemical Substances

TSCA - Toxic Substances Control Act (USA)

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Reason for Reissue:

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Section 6 - Accidental Release Measures;

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---End---

