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

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## Material Safety Data Sheet

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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

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## 1 Product Identification

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Tradename:

FT-32, DENATONIUM BENZOATE FIT TEST SOLUTION

Product ID:

70-0707-0966-5 78-8113-5576-3

Intended Use of Product:

Testing liquid

Division:

OCCUPATIONAL HEALTH & ENVIRON. SAFETY

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## 2 Composition/Information on Ingredients

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

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

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3 Hazards Identification

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Critical Hazards:

None known.

See Sections 7 and 11 for further information.

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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
Instructions for Ingestion:
  No need for first aid is anticipated.
______
5 Fire Fighting Measures
______
Flash point:
                                    Not applicable
                                   Not applicable
Lower Explosive Limit (%):
Upper Explosive Limit (%):
                                   Not applicable
Autoignition temperature:
                                   Not applicable
Suitable Extinguishing Media:
  Not applicable
Exposure Hazards during Fire:
  Material will not burn.
Combustion Products from Fire:
  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
NFPA: Unusual Reaction Hazard
                                   none
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6 Accidental Release Measures
Personal Precautions:
  Observe precautions from other sections. Call 3M- HELPS line
  (1-800-364-3577) for more information on handling and managing the
  spill.
Spill Response:
  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.
7 Handling and Storage
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Storage Requirements:
  Store under normal warehouse conditions.
Incompatible Materials:
  None known.
Ventilation:
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No data available.
Use Instructions:
  For industrial or professional use only.
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8 Exposure Controls/Personal Protection
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Personal Protection
______
Eye Protection:
  Avoid eye contact.
Hand Protection:
  Gloves are not required.
Skin Protection:
 No data available.
Respiratory Protection:
  Not applicable.
Ingestion (Prevention):
  Not applicable.
Recommended Ventilation:
  Not applicable.
Ingredient Exposure Data
 WATER (7732-18-5)
  LD50 (rat, oral)
                                  > 90 \text{ ml/kg}
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   LC50 (rat, inhalation/4 hours) No data available.
   Exposure Limits
    No data available.
 SODIUM CHLORIDE (7647-14-5)
                                  3000 mg/kg
   LD50 (rat, oral)
   LD50 (dermal, rabbit)
                                 > 10 \text{ 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; Odourless;
                                  with Bitter taste;
                                 Freezing Point: -4 C
Odour Threshold:
                                 No data available.
                                 Approx 6.52
Boiling point/boiling range:
                                 Not applicable
Melting point/melting range:
                                Not applicable
Vapour pressure:
                                 Not applicable
Water Solubility:
                                  Complete
Specific gravity:
                                   1.034 Water=1
Vapour density:
                                  Not applicable
Volatile organic compounds:
                                  Not applicable
Evaporation rate:
                                  Not applicable
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Not applicable
Viscosity:
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.
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                                                Page 5 of 7
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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,
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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.

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FT-32, DENATONIUM BENZOATE FIT TEST SOLUTION
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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.
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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 Transportation Information
Transportation of Dangerous Goods
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TDG Classification:
                                Non-Regulated Material
Special Information:
  Contact 3M for more information.
International Dangerous Goods Classification
______
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
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  following countries' chemical inventories, as noted:
   AICS - Australian Inventory of Chemical Substances
   DSL - Domestic Substances List (Canada)
   EINECS - European Inventory of Existing Commercial Chemical
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Substances
TSCA - Toxic Substances Control Act (USA)

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16 Other Information

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Reason for Reissue:

The following Sections and topics have been updated or revised: Update Tradename

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.

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