

194

MATERIAL SAFETY
DATA SHEET3M
3M Center
St. Paul, Minnesota
55144-1000
1-800-364-3577 or (651) 737-6501 (24 hours)

Copyright, 1999, Minnesota Mining and Manufacturing Company.
All rights reserved. Copying and/or downloading of this
information for the purpose of properly utilizing 3M products
is allowed provided that:

- 1) the information is copied in full with no changes unless
prior agreement is obtained from 3M, and
- 2) neither the copy nor the original is resold or otherwise
distributed with the intention of earning a profit thereon.

DIVISION: OCCUPATIONAL HEALTH & ENVIRON. SAFETY

TRADE NAME:

3M F30 Qualitative Fit Test Kit, Bitter

ID NUMBER/U.P.C.:

70-0707-0964-0 00-51138-54203-0

ISSUED: September 28, 1999

SUPERSEDED: April 16, 1997

DOCUMENT: 07-6220-3

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

Abbreviations: N/D - Not Determined N/A - Not Applicable CA - Approximately

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, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY 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.

3M provides information in electronic form as a service to its customers.
Due to the remote possibility that electronic transfer may have resulted
in errors, omissions or alterations in this information, 3M makes no
representations as to its completeness or accuracy. In addition,
information obtained from a database may not be as current as the
information in the MSDS available directly from 3M.

**MATERIAL SAFETY
DATA SHEET**

3M
3M Center
St. Paul, Minnesota
55144-1000
1-800-364-3577 or (651) 737-6501 (24 hours)

Copyright, 1999, Minnesota Mining and Manufacturing Company.
All rights reserved. Copying and/or downloading of this
information for the purpose of properly utilizing 3M products
is allowed provided that:

- 1) the information is copied in full with no changes unless
prior agreement is obtained from 3M, and
- 2) neither the copy nor the original is resold or otherwise
distributed with the intention of earning a profit thereon.

DIVISION: OCCUPATIONAL HEALTH & ENVIRON. SAFETY

TRADE NAME:

FT-31, Denatonium Benzoate Sensitivity Solution

ID NUMBER/U.P.C.:

70-0707-0965-7 +H-44446-9965N-0 78-8113-5577-1 - - -

ISSUED: June 21, 1999

SUPERSEDES: April 09, 1997

DOCUMENT: 07-6198-1

1. INGREDIENT	C.A.S. NO.	PERCENT
Water.....	7732-18-5	80 - 100
Sodium Chloride.....	7647-14-5	3 - 7
Denatonium Benzoate.....	3734-33-6	0 - 1

2. PHYSICAL DATA

BOILING POINT:..... N/A
VAPOR PRESSURE:..... N/A
VAPOR DENSITY:..... N/A
EVAPORATION RATE:..... N/A
SOLUBILITY IN WATER:..... complete
SPECIFIC GRAVITY:..... 1.034 Water=1
PERCENT VOLATILE:..... N/A
pH:..... ca. 6.52
VISCOSITY:..... N/A
MELTING POINT:..... N/A

APPEARANCE AND ODOR:

Liquid, Clear, odorless solution with a bitter taste. Freezing point
= -4 degrees Centigrade

MSDS: FT-31, Denatonium Benzoate Sensitivity Solution
June 21, 1999

PAGE 2

3. FIRE AND EXPLOSION HAZARD DATA

FLASH POINT:..... N/A
FLAMMABLE LIMITS - LEL:..... N/A
FLAMMABLE LIMITS - UEL:..... N/A
AUTOIGNITION TEMPERATURE:..... N/A

EXTINGUISHING MEDIA:
Not applicable

SPECIAL FIRE FIGHTING PROCEDURES:
Not applicable

UNUSUAL FIRE AND EXPLOSION HAZARDS:
None known.

NFPA HAZARD CODES: HEALTH: 0 FIRE: 0 REACTIVITY: 0
UNUSUAL REACTION HAZARD: none

OSHA FIRE HAZARD CLASS: Not applicable

4. REACTIVITY DATA

STABILITY: Stable

INCOMPATIBILITY - MATERIALS/CONDITIONS TO AVOID:
None known.

HAZARDOUS POLYMERIZATION: Hazardous polymerization will not occur.

HAZARDOUS DECOMPOSITION PRODUCTS:
None known.

5. ENVIRONMENTAL INFORMATION

SPILL RESPONSE:

Observe precautions from other sections. Contain spill. Cover with absorbent material. Collect spilled material. Clean up residue with water. Place in a closed container.

RECOMMENDED DISPOSAL:

Small quantities (less than 5 gal.(19 L)) may be discharged to a wastewater treatment system. For larger quantities: Incinerate in an industrial or commercial facility in the presence of a combustible material.

Abbreviations: N/D - Not Determined N/A - Not Applicable CA - Approximately

MSDS: FT-31, Denatonium Benzoate Sensitivity Solution
June 21, 1999

PAGE 3

5. ENVIRONMENTAL INFORMATION (continued)

ENVIRONMENTAL DATA:

Not determined.

REGULATORY INFORMATION:

Volatile Organic Compounds: N/A.

VOC Less H2O & Exempt Solvents: N/A.

Since regulations vary, consult applicable regulations or authorities before disposal. U.S. EPA Hazardous Waste Number = None (Not U.S. EPA Hazardous).

EPCRA HAZARD CLASS:

FIRE HAZARD: No PRESSURE: No REACTIVITY: No ACUTE: No CHRONIC: No

6. SUGGESTED FIRST AID

EYE CONTACT:

No need for first aid is anticipated.

SKIN CONTACT:

No need for first aid is anticipated.

INHALATION:

No need for first aid is anticipated.

IF SWALLOWED:

No need for first aid is anticipated.

7. PRECAUTIONARY INFORMATION

EYE PROTECTION:

Not applicable.

SKIN PROTECTION:

Not applicable.

RECOMMENDED VENTILATION:

Not applicable.

RESPIRATORY PROTECTION:

Avoid prolonged breathing of spray or mists.

PREVENTION OF ACCIDENTAL INGESTION:

Do not ingest.

Abbreviations: N/D - Not Determined N/A - Not Applicable CA - Approximately

MSDS: FT-31, Denatonium Benzoate Sensitivity Solution
June 21, 1999

PAGE 4

7. PRECAUTIONARY INFORMATION (continued)

RECOMMENDED STORAGE:

Store at room temperature. Keep out of the reach of children.

FIRE AND EXPLOSION AVOIDANCE:

Not applicable.

EXPOSURE LIMITS

INGREDIENT	VALUE	UNIT	TYPE	AUTH	SKIN*
Water.....	NONE	NONE	NONE	NONE	
Sodium Chloride.....	NONE	NONE	NONE	NONE	
Denatonium Benzoate.....	NONE	NONE	NONE	NONE	

* SKIN NOTATION: Listed substances indicated with 'Y' under SKIN refer to the potential contribution to the overall exposure by the cutaneous route including mucous membrane and eye, either by airborne or, more particularly, by direct contact with the substance. Vehicles can alter skin absorption.

SOURCE OF EXPOSURE LIMIT DATA:

- NONE: None Established

8. HEALTH HAZARD DATA

EYE CONTACT:

No adverse health effects are expected from eye contact.

SKIN CONTACT:

No adverse health effects are expected from skin contact.

INHALATION:

No adverse health effects are expected from inhalation exposure.

IF SWALLOWED:

No adverse health effects are expected from swallowing.

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

SECTION CHANGE DATES

INGREDIENTS

SECTION CHANGED SINCE April 09, 1997

ISSUE

Abbreviations: N/D - Not Determined N/A - Not Applicable CA - Approximately

MSDS: FT-31, Denatonium Benzoate Sensitivity Solution
June 21, 1999

PAGE 5

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, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY 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.

3M provides information in electronic form as a service to its customers. Due to the remote possibility that electronic transfer may have resulted in errors, omissions or alterations in this information, 3M makes no representations as to its completeness or accuracy. In addition, information obtained from a database may not be as current as the information in the MSDS available directly from 3M.