

Material Safety Data Sheet

Copyright, 2003, 3M 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 written 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.

This material safety data sheet (MSDS) is provided as a courtesy in response to a customer request. This product is not regulated under, and a MSDS is not required for this product by the OSHA Hazard Communication Standard (29 CFR 1910.1200) because, when used as recommended or under ordinary conditions, it should not present a health and safety hazard. However, use or processing of the product not in accordance with the product's recommendations or not under ordinary conditions may affect the performance of the product and may present potential health and safety hazards.

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: 3M(TM) Red Dot(TM) ECG Monitoring Electrodes - Models 2238, 2239, 2245, 2248, 2249, 2255, and 9641

MANUFACTURER: 3M DIVISION: Medical-Surgical Division

ADDRESS: 3M Center

St. Paul, MN 55144-1000

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

Issue Date: 09/29/2003 **Supercedes Date:** 02/10/2003

Document Group: 18-4066-9

Product Use:

Specific Use:

Electrocardio monitoring electrodes.

SECTION 2: INGREDIENTS

| Ingredient | <u>C.A.S. No.</u> | <u>% by Wt</u> |
|-------------------------------|-------------------|----------------|
| Adhesive Contains: | None | 0 |
| ACRYLATE POLYMER | Trade Secret | 100 |
| *********** | ********* | 0 |
| 2-3% Conductive Gel Contains: | None | 0 |
| WATER | 7732-18-5 | 80 - 90 |
| PROPYLENE GLYCOL | 57-55-6 | 10 - 20 |
| POTASSIUM CHLORIDE | 7447-40-7 | 2 - 5 |
| HYDROXYPROPYL GUAR GUM | 39421-75-5 | 1 - 3 |

Polymer backing, paper liners, Ag/AgCl eyelet, stainless steel/conductive plastic stud, synthetic rubber based adhesive, and abrader pad*.

3M MATERIAL SAFETY DATA SHEET 3M(TM) Red Dot(TM) ECG Monitoring Electrodes - Models 2238, 2239, 2245, 2248, 2249, 2255, and 9641 09/29/2003

*Abrader pads are on only 2249 and 2255.

SECTION 3: HAZARDS IDENTIFICATION

3.1 EMERGENCY OVERVIEW

Odor, Color, Grade: Circular red and white front label, slight odor General Physical Form: Solid

Immediate health, physical, and environmental hazards: The environmental properties of this product present a low environmental hazard. This product, when used under reasonable conditions and in accordance with the 3M directions for use, should not present a health hazard. However, use or processing of the product in a manner not in accordance with the product's directions for use may affect the performance of the product and may present potential health and safety hazards.

3.2 POTENTIAL HEALTH EFFECTS

Eye Contact: No health effects are expected.

Skin Contact: No health effects are expected.

Inhalation: No health effects are expected.

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: 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.

SECTION 5: FIRE FIGHTING MEASURES

5.1 FLAMMABLE PROPERTIES

Autoignition temperature Flash Point Flammable Limits - LEL Flammable Limits - UEL No Data Available Not Applicable Not Applicable Not Applicable

5.2 EXTINGUISHING MEDIA

Use fire extinguishers with class B extinguishing agents (e.g., dry chemical, carbon dioxide).

5.3 PROTECTION OF FIRE FIGHTERS

Special Fire Fighting Procedures: Wear full protective clothing, including helmet, self-contained, positive pressure or pressure demand breathing apparatus, bunker coat and pants, bands around arms, waist and legs, face mask, and protective covering for exposed areas of the head.

Unusual Fire and Explosion Hazards: No unusual fire or explosion hazards are anticipated.

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

SECTION 6: ACCIDENTAL RELEASE MEASURES

Accidental Release Measures: Not applicable.

SECTION 7: HANDLING AND STORAGE

7.1 HANDLING

This product is considered to be an article which does not release or otherwise result in exposure to a hazardous chemical under normal use conditions. Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water.

7.2 STORAGE

Not applicable.

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

Not applicable.

8.2.3 Respiratory Protection

Under normal use conditions, airborne exposures are not expected to be significant enough to require respiratory protection.

8.2.4 Prevention of Swallowing

Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water.

8.3 EXPOSURE GUIDELINES

| Ingredient | <u>Authority</u> | Type | <u>Limit</u> | Additional Information |
|------------------|------------------|----------------------|--------------|------------------------|
| PROPYLENE GLYCOL | AIHA | TWA - | 10 mg/m3 | as aerosol |
| PROPYLENE GLYCOL | AIHA | specific form TWA | 50 ppm | total |

SOURCE OF EXPOSURE LIMIT DATA: ACGIH: American Conference of Governmental Industrial Hygienists CMRG: Chemical Manufacturer Recommended Guideline OSHA: Occupational Safety and Health Administration AIHA: American Industrial Hygiene Association Workplace Environmental Exposure Level (WEEL)

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

| Odor, Color, Grade: General Physical Form: Autoignition temperature Flash Point Flammable Limits - LEL Flammable Limits - UEL Boiling point Density Vapor Density Vapor Density | Circular red and white front label, slight odor Solid No Data Available Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable |
|--|---|
| Vapor Pressure | Not Applicable |
| Specific Gravity | Not Applicable |
| pH | Not Applicable |
| Melting point | No Data Available |
| Solubility in Water | Nil |

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

Condition

Carbon monoxide Carbon dioxide Oxides of Nitrogen During Combustion During Combustion Oxidation, heat or reaction

SECTION 11: TOXICOLOGICAL INFORMATION

Please contact the address listed on the first page of the MSDS for Toxicological Information on this material and/or its components.

SECTION 12: ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION

Not applicable.

CHEMICAL FATE INFORMATION

Not applicable.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal Method: Dispose of waste product in a sanitary landfill. Incinerate in an industrial or commercial facility in the presence of a combustible material.

EPA Hazardous Waste Number (RCRA): Not regulated

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

SECTION 14:TRANSPORT INFORMATION

3M MATERIAL SAFETY DATA SHEET 3M(TM) Red Dot(TM) ECG Monitoring Electrodes - Models 2238, 2239, 2245, 2248, 2249, 2255, and 9641 09/29/2003

ID Number(s):

70-2004-7653-2, 70-2004-7938-7, 70-2004-7942-9, 70-2005-9585-1, 70-2006-0092-5, 70-2006-0161-8, 70-2006-1667-3, 70-2006-1669-9, 70-2006-1709-3, 70-2006-1711-9, 70-2006-3014-6

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

This product is an article as defined by TSCA regulations, and is exempt from TSCA Inventory listing requirements.

This material contains one or more substances not listed on the TSCA Inventory. Commercial use of this material is regulated by the FDA.

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: 1 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.

Revision Changes:

Section 8: Exposure guidelines ingredient information was modified. Section 1: Initial issue message was modified.

DISCLAIMER: 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.

3M MSDSs are available at www.3M.com