Material Safety Data Sheet

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SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: 3M(TM) Vetbond Tissue Adhesive 1469
MANUFACTURER: 3M
DIVISION: Medical Division

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

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

Issue Date: 07/14/2004
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Product Use:
Specific Use: Used on animals as a bandage.

SECTION 2: INGREDIENTS

Ingredient	C.A.S. No.	% by Wt
N-butyl cyanoacrylate	6606-65-1	> 98
Hydroquinone	123-31-9	< 1
Blue dye	32724-62-2	0.01

SECTION 3: HAZARDS IDENTIFICATION

3.1 EMERGENCY OVERVIEW

Specific Physical Form: Thin slightly viscous liquid
Odor, Color, Grade: Clear blue liquid with sharp characteristic odor.
General Physical Form: Liquid
Immediate health, physical, and environmental hazards: Combustible liquid and vapor. Closed containers exposed to heat from fire may build pressure and explode. Vapors may travel long distances along the ground or floor to an ignition source and flash back. Cyanoacrylate ester is an eye irritant and bonds tissues together when polymerized. Vapors cause lacrimation. May cause target organ effects. May bond tissue rapidly.

3.2 POTENTIAL HEALTH EFFECTS

Eye Contact:
Lacrimation: Signs/symptoms may include severe stinging of the eyes, redness and profuse tear discharge.

Moderate Eye Irritation: Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.

Bonds eyelids rapidly.

Skin Contact:
Moderate Skin Irritation: Signs/symptoms may include localized redness, swelling, itching, and dryness.

Bonds skin rapidly.

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

Ingestion:
May be harmful if swallowed.

Target Organ Effects:
Gastrointestinal Effects: Signs/symptoms may include stomach upset; nausea, vomiting and diarrhea.

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: Immediately flush eyes with large amounts of water for at least 15 minutes. Get immediate medical attention. DO NOT PEEL EYELIDS APART.

Skin Contact: Remove contaminated clothing and shoes. Immediately flush skin with large amounts of cold water for at least 15 minutes. Get immediate medical attention. Wash contaminated clothing and clean shoes before reuse. Soak in warm, soapy water, if necessary to remove cured product.

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

If Swallowed: Do not induce vomiting unless instructed to do so by medical personnel. Give victim two glasses of water. Never give anything by mouth to an unconscious person. Get medical attention.

SECTION 5: FIRE FIGHTING MEASURES

5.1 FLAMMABLE PROPERTIES

Autoignition temperature	*No Data Available*
Flash Point	185 ºF [*Test Method:* Closed Cup]

Flammable Limits - LEL	*No Data Available*
Flammable Limits - UEL	*No Data Available*

5.2 EXTINGUISHING MEDIA

DO NOT USE WATER 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 equipment (Bunker Gear) and a self-contained breathing apparatus (SCBA).

Unusual Fire and Explosion Hazards: Combustible liquid and vapor. Closed containers exposed to heat from fire may build pressure and explode. Vapors may travel long distances along the ground or floor to an ignition source and flash back. Vapors exceeeding the flash point will ignite when exposed to flame.

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

SECTION 6: ACCIDENTAL RELEASE MEASURES

Accidental Release Measures: 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. Ventilate the area with fresh air. Contain spill. For larger spills, cover drains and build dikes to prevent entry into sewer systems or bodies of water. Avoid contact with water. Cover with absorbent material. Collect as much of the spilled material as possible. Clean up residue with an appropriate solvent selected by a qualified and authorized person. Ventilate the area with fresh air. Read and follow safety precautions on the solvent label and MSDS. Collect the resulting residue containing solution. Place in a metal container approved for transportation by appropriate authorities. Seal the container. 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

Avoid eye contact with vapors, mists, or spray. Avoid skin contact. A no-touch technique is recommended. If skin contact occurs, wash skin with soap and water. Acrylates may penetrate commonly-used gloves. If product contacts glove, remove and discard glove, wash hands immediately with soap and water and then re-glove. Avoid breathing of vapors, mists or spray. Do not ingest. Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water. Keep away from heat, sparks, open flame, pilot lights and other sources of ignition. Avoid contact with oxidizing agents.

7.2 STORAGE

Keep container tightly closed. Store away from areas where product may come into contact with food or pharmaceuticals. Store away from acids. Store away from heat. Store out of direct sunlight. Store away from oxidizing agents.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 ENGINEERING CONTROLS

Use in a well-ventilated area. Local exhaust is required for operations using large amounts of material.

8.2 PERSONAL PROTECTIVE EQUIPMENT (PPE)

8.2.1 Eye/Face Protection

Avoid eye contact with vapors, mists, or spray.
The following eye protection(s) are recommended: Indirect Vented Goggles.

8.2.2 Skin Protection

Avoid skin contact. Product will polymerize with body fluids and mucous and may bond tissues together.

Select and use gloves and/or protective clothing to prevent skin contact based on the results of an exposure assessment. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible materials.
Gloves made from the following material(s) are recommended: Neoprene, Nitrile Rubber, Polyvinyl Chloride.

8.2.3 Respiratory Protection

Avoid breathing of vapors, mists or spray.

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	Authority	Type	Limit	Additional Information
Hydroquinone	ACGIH	TWA	2 mg/m3	Table A3
Hydroquinone	CMRG	STEL	4 mg/m3	
Hydroquinone	OSHA	TWA	2 mg/m3	Table Z-1

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

Specific Physical Form:	Thin slightly viscous liquid
Odor, Color, Grade:	Clear blue liquid with sharp characteristic odor.
General Physical Form:	Liquid
Autoignition temperature	*No Data Available*
Flash Point	185 ºF [*Test Method:* Closed Cup]
Flammable Limits - LEL	*No Data Available*
Flammable Limits - UEL	*No Data Available*
Boiling point	>=300 ºF
Density	1.09 g/ml
Vapor Density	3 [*Details:* Air=1]
Vapor Pressure	<=0.2 mmHg [@ 20 ºC]
Specific Gravity	1.09
pH	*Not Applicable*

Solubility in Water	Negligible
Evaporation rate	*No Data Available*
Volatile Organic Compounds	*No Data Available*
Percent volatile	*No Data Available*
VOC Less H2O & Exempt Solvents	*No Data Available*
Viscosity	4.3 centipoise

SECTION 10: STABILITY AND REACTIVITY

Stability: Stable.

Materials and Conditions to Avoid: AlcoholsPolymerized by contact with water, alcohols, amines, and alkalis Additional Information: Water, moisture, mild exothermic reaction is possible.

Hazardous Polymerization: Hazardous polymerization will not occur.

Hazardous Decomposition or By-Products

Substance	Condition
Hydrocarbons	Heat

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 determined.

CHEMICAL FATE INFORMATION

Not determined.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal Method: Dispose of waste product in a facility permitted to accept chemical waste. As a disposal alternative, 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

ID Number(s):
70-2007-2892-4, 70-2007-4252-9

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 - Yes Delayed Hazard - No

STATE REGULATIONS
Contact 3M for more information.

CHEMICAL INVENTORIES
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: 2 **Flammability:** 2 **Reactivity:** 2 **Special Hazards:** Reacts with Water

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 16: NFPA hazard classification heading was modified.
Section 3: Other potential health effects heading was modified.
Section 1: Division name was modified.
Section 8: Exposure guidelines data source legend was modified.
Section 15: 311/312 hazard categories heading was modified.
Section 15: International regulations information was modified.
Section 15: State regulations information was modified.
Section 15: US federal regulations information was modified.
Section 10: Hazardous polymerization heading was modified.
Section 2: Ingredient table was modified.
Section 3: Other health effects information was modified.
Section 16: NFPA explanation was modified.
Section 15: Inventories information was modified.
Section 12: Ecotoxicological information heading was modified.
Section 12: Chemical fate information heading was modified.
Section 5: Flash point information was modified.
Section 16: NFPA hazard classification for special hazards was modified.
Section 9: Flash point information was modified.
Section 12: Ecotoxicological phrase was modified.
Section 12: Chemical Fate phrase was modified.
Section 2: Ingredient phrase was added.
Section 15: EPCRA 313 information was deleted.
Section 15: EPCRA 313 text was deleted.

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