

Material Safety Data Sheet

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PRODUCT NAME: 7510 3M(TM) ESPE(TM) VITREBOND(TM) GLASS IONOMER
 MANUFACTURER: 3M
 DIVISION: 3M ESPE Dental Products

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

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

Issue Date: 12/04/2007 **Supercedes Date:** 03/18/2004

Document Group: 11-2211-8

ID Number(s):

70-2010-0104-0, 70-2010-0407-7, 70-2010-1756-6, 70-2010-2611-2, 70-2010-2612-0, 70-2010-3756-4, 70-2010-3757-2, 70-2010-3765-5, 70-2010-5191-2, 70-2010-5192-0, 70-2010-5602-8, FH-5000-4236-8

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:

11-2209-2, 11-2210-0

Revision Changes: Copyright was modified. Kit: Component document group number(s) was modified. Kit: ID Number Heading was added. Kit: ID Number(s) was added.

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MATERIAL SAFETY DATA SHEET 7510 3M(TM) ESPE(TM) VITREBOND(TM) GLASS IONOMER 12/04/2007

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SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: 7512L 3M(TM) ESPE(TM) VITREBOND(TM) GLASS IONOMER LIQUID
 MANUFACTURER: 3M
 DIVISION: 3M ESPE Dental Products

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

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

Issue Date: 06/07/2004 Supercedes Date: 12/10/2002

Document Group: 11-2209-2

Product Use:

Limitations on Use:For use only by dental professionalsSpecific Use:Dental liner material

SECTION 2: INGREDIENTS

Ingredient	<u>C.A.S. No.</u>	<u>% by Wt</u>
COPOLYMER OF ACRYLIC AND ITACONIC ACIDS	25948-33-8	35 - 45
WATER	7732-18-5	30 - 40
2-HYDROXYETHYL METHACRYLATE	868-77-9	20 - 30

SECTION 3: HAZARDS IDENTIFICATION

3.1 EMERGENCY OVERVIEW

Specific Physical Form: LiquidOdor, Color, Grade: Clear to slightly yellow in color, slight characteristic odorGeneral Physical Form: LiquidImmediate health, physical, and environmental hazards:May cause severe eye irritation.May cause allergic skin reaction.

3.2 POTENTIAL HEALTH EFFECTS

Eye Contact:

Severe Eye Irritation: Signs/symptoms may include significant redness, swelling, pain, tearing, cloudy appearance of the cornea, and

impaired vision.

Skin Contact:

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

Allergic Skin Reaction (non-photo induced): Signs/symptoms may include redness, swelling, blistering, and itching.

Inhalation:

Prolonged or repeated exposure may cause:

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

Ingestion:

Gastrointestinal Irritation: Signs/symptoms may include abdominal pain, nausea, diarrhea and vomiting.

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.

Skin Contact: Remove contaminated clothing and shoes. Immediately flush skin with large amounts of water. Get medical attention. Wash contaminated clothing and clean shoes before reuse.

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

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

SECTION 5: FIRE FIGHTING MEASURES

5.1 FLAMMABLE PROPERTIES

Autoignition temperature Flash Point Flammable Limits - LEL Flammable Limits - UEL OSHA Flammability Classification: Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable

5.2 EXTINGUISHING MEDIA

Non-combustible. Choose material suitable for surrounding fire.

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: Not applicable.

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. Cover with absorbent material. Collect as much of the spilled material as possible. Clean up residue. Collect the resulting residue containing solution. Place in a metal container approved for use in transportation by appropriate authorities. The container must be lined with polyethylene plastic or contain a plastic drum liner made of polyethylene. Cover, but do not seal for 48 hours. 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. 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.

7.2 STORAGE

Store out of direct sunlight. Keep container in well-ventilated area.

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. The following eye protection(s) are recommended: Safety Glasses with side shields.

8.2.2 Skin Protection

Avoid skin contact. See Sect. 7.1 for more information about skin protection.

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 ingest.

8.3 EXPOSURE GUIDELINES

None Established

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Specific Physical Form:	Liquid		
Odor, Color, Grade:	Clear to slightly yellow in color, slight characteristic odor		
General Physical Form:	Liquid		
Autoignition temperature	Not Applicable		
Flash Point	Not Applicable		
Flammable Limits - LEL	Not Applicable		
Flammable Limits - UEL	Not Applicable		
Boiling point	>= 212 °F		
Density	No Data Available		
Vapor Density	No Data Available		
Vapor Pressure	<=16 psia [@ 131 °F]		
Specific Gravity	1.200 [<i>Ref Std:</i> WATER=1]		
pH	2.50 - 3.00		
Melting point	Not Applicable		
Solubility in Water	Complete		
Evaporation rate	No Data Available		
Volatile Organic Compounds	No Data Available		
Percent volatile	No Data Available		
VOC Less H2O & Exempt Solvents	No Data Available		
-			

SECTION 10: STABILITY AND REACTIVITY

Stability: Stable.

Viscosity

Materials and Conditions to Avoid: None known

Hazardous Polymerization: Hazardous polymerization will not occur.

Hazardous Decomposition or By-Products

Substance Carbon monoxide Carbon dioxide <u>Condition</u> During Combustion During Combustion

Approximately 300 centipoise

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: Incinerate in an industrial or commercial facility in the presence of a combustible material. As a disposal alternative, dispose of waste product in a facility permitted to accept chemical waste.

EPA Hazardous Waste Number (RCRA): Not regulated

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

SECTION 14:TRANSPORT INFORMATION

ID Number(s):

LE-FSFD-4209-5, 70-2010-0105-7, 70-2010-1332-6, 70-2010-1757-4, FH-5000-4209-5

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

All applicable chemical ingredients in this material are listed on the European Inventory of Existing Chemical Substances (EINECS), or are exempt polymers whose monomers are listed on EINECS.

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: 1 Flammability: 0 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 1: Product name was modified.

Section 16: NFPA hazard classification heading was modified.

Copyright was modified.

Section 5: Fire fighting procedures information 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 16: NFPA explanation was modified.

Page Heading: Product name was modified.

Section 15: Inventories information was modified.

Section 12: Ecotoxicological information heading was modified.

Section 12: Chemical fate information heading was modified.

Section 16: NFPA hazard classification for special hazards was modified.

Section 8: Exposure guidelines information - none - was modified. Section 12: Ecotoxicological phrase was modified. Section 12: Chemical Fate phrase was modified. Section 2: Ingredient phrase was added.

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SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: 7512P 3M(TM) ESPE(TM) VITREBOND(TM) GLASS IONOMER POWDER
 MANUFACTURER: 3M
 DIVISION: 3M ESPE Dental Products

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

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

Issue Date: 01/22/2003 **Supercedes Date:** 08/15/2001

Document Group: 11-2210-0

Product Use:

Limitations on Use:For use only by dental professionalsSpecific Use:Liner material

SECTION 2: INGREDIENTS

Ingredient GLASS POWDER DIPHENYLIODONIUM CHLORIDE <u>C.A.S. No.</u> 65997-17-3 1483-72-3 <u>% by Wt</u> >95 <2

SECTION 3: HAZARDS IDENTIFICATION

3.1 EMERGENCY OVERVIEW

Specific Physical Form: Powder
Odor, Color, Grade: White, odorless
General Physical Form: Solid
Immediate health, physical, and environmental hazards: No immediate health, physical, or environmental hazards are anticipated.

3.2 POTENTIAL HEALTH EFFECTS

Eye Contact:

Mechanical eye irritation: Signs/symptoms may include pain, redness, tearing and corneal abrasion.

Skin Contact:

Mechanical Skin irritation: Signs/symptoms may include abrasion, redness, pain, and itching.

Inhalation:

Prolonged or repeated exposure, above recommended guidelines, may cause:

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

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

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

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

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 Not Applicable Not Applicable Not Applicable Not Applicable

5.2 EXTINGUISHING MEDIA

Non-combustible. Choose material suitable for surrounding fire.

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: Not applicable.

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

SECTION 6: ACCIDENTAL RELEASE MEASURES

Accidental Release Measures: Observe precautions from other sections. Call 3M- HELPS line (1-800-364-3577) for more information on handling and managing the spill. Collect as much of the spilled material as possible. Clean up residue. 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. Clean up as a nuisance dust.

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. Avoid prolonged or repeated skin contact.

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. The following eye protection(s) are recommended: Safety Glasses with side shields.

8.2.2 Skin Protection

Avoid prolonged or repeated skin contact. Gloves not normally required.

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 ingest.

8.3 EXPOSURE GUIDELINES

Ingredient	<u>Authority</u>	Type	<u>Limit</u>	Additional Information
GLASS POWDER	3M	TWA - as dust	10 mg/m3	

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:
Odor, Color, Grade:
General Physical Form:
Autoignition temperature
Flash Point
Flammable Limits - LEL
Flammable Limits - UEL
Boiling point

Vapor Density

Vapor Pressure

Specific Gravity pH Melting point

Solubility in Water Evaporation rate Volatile Organic Compounds Percent volatile VOC Less H2O & Exempt Solvents Viscosity Powder White, odorless Solid Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable

Not Applicable

Not Applicable

3.200 [*Ref Std:* WATER=1] *Not Applicable No Data Available*

Nil Not Applicable Not Applicable Not Applicable Not Applicable

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 None known. <u>Condition</u> During Combustion

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.

EPA Hazardous Waste Number (RCRA): Not regulated

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

SECTION 14:TRANSPORT INFORMATION

ID Number(s):

70-2010-0106-5, 70-2010-1758-2

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

All applicable chemical ingredients in this material are listed on the European Inventory of Existing Chemical Substances (EINECS), or are exempt polymers whose monomers are listed on EINECS.

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

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INTERNATIONAL REGULATIONS

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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: 1 Flammability: 0 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.

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