

-MATERIAL SAFETY DATA SHEET

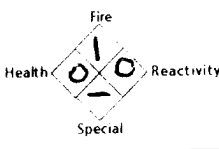
HARRY J. BOSWORTH COMPANY

7227 North Hamlin Avenue

Skokie, Illinois 60076-3999

Information Phone: 847.679.3400

Emergency Phone: 800.535.5053

HAZARD RATING		
N	4 - EXTREME	
F	3 - HIGH	
P	2 - MODERATE	
A	1 - SLIGHT	
	0 - INSIGNIFICANT	

PRODUCT: Lightliner™ Air Barrier

DATE PREPARED: 10/22/98

Hazardous Components	
INGREDIENTS: Polyester polyol	PERCENTAGE: N/A
COMMON NAMES AND SYNONYMS: N/A	CAS NUMBER: NA
PEL: N/A	UN NUMBER: N/A
TLV: N/A	

Physical/Chemical Characteristics	
BOILING POINT: NA	MELTING POINT: N/A
SPECIFIC GRAVITY: Over 1	VAPOR DENSITY: NA
VAPOR PRESSURE: NA	EVAPORATION RATE: NA
APPEARANCE/ODOR: Viscous light liquid	SOLUBILITY IN WATER: NA

Reactivity Data
STABILITY: Stable
CONDITIONS TO AVOID: None
HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide and carbon dioxide
HAZARDOUS POLYMERIZATION: Will not occur
CONDITIONS TO AVOID: None

Fire and Explosion Hazard Data	
FLASH POINT: 200°F	LIMITS: LEL: N/A UEL: N/A
EXTINGUISHING MEDIA: Foam, dry chemicals	
SPECIAL FIREFIGHTING PROCEDURES: None	
UNUSUAL FIRE AND EXPLOSION HAZARDS: None	

Health Hazard Data	
CARCINOGENICITY: None	NPT: N/A
IARC: N/A	OSHA REGULATED: N/A
Effects and Hazards of Overexposure (Acute and Chronic)	
EFFECTS AND HAZARDS OF EYE CONTACT: May cause irritation	
EFFECTS AND HAZARDS OF SKIN CONTACT: None	
EFFECTS AND HAZARDS OF INHALATION (BREATHING): None	
EFFECTS AND HAZARDS OF INGESTION (SWALLOWING): May cause discomfort	

Emergency and First Aid Procedures
TREATMENT FOR EYE CONTACT: Flush with water and contact a physician.
TREATMENT FOR SKIN CONTACT: Wash thoroughly after using.
TREATMENT FOR INHALATION (BREATHING): None, if irritation occurs, see physician
TREATMENT FOR INGESTION (SWALLOWING): None, if irritation persists, see physician
Precautions for Safe Handling and Use
STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED: NA
WASTE DISPOSAL METHOD: Collect and contain for disposal.
PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING: Protective gloves and safety glasses
OTHER PRECAUTIONS: This product is for professional use only as stated in directions. It is the responsibility of the dentist to train personnel.

Control Measures
RESPIRATORY PROTECTION: None
Ventilation
LOCAL EXHAUST VENTILATION NA
SPECIAL VENTILATION: NA
MECHANICAL (GENERAL) VENTILATION: General exhaust
OTHER VENTILATION: NA
PROTECTION GLOVES: Rubber gloves
EYE PROTECTION: Safety glasses
OTHER PROTECTIVE EQUIPMENT: None
WORK AND HYGIENIC PRACTICES: Wash thoroughly after handling

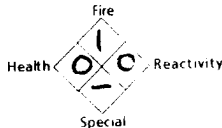
Additional Information	
This MSDS was prepared in accordance with the requirements of the OSHA Hazard Communication Standard (29CFR 1910.1200) and is to be used only for this product. The information contained in this sheet is, to the best of our knowledge, believed to be accurate	
Health Hazard Index:	Ratings:
SEVERE HAZARD	1
SERIOUS HAZARD	2
MODERATE HAZARD	3
SLIGHT HAZARD	4
MINIMUM HAZARD	5
Shipping Information	
REGULATED IATA:	
PROPER SHIPPING NAME:	
HAZARD CLASS:	
IDENTIFICATION NUMBER: N/A	
PACKAGING GROUP: NA	
LABEL: NA	

To the best of our knowledge, the information contained herein is accurate. However, The Harry J. Bosworth company does not assume any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown health hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

MATERIAL SAFETY DATA SHEET

HARRY J. BOSWORTH COMPANY

7227 North Hamlin Avenue
Skokie, Illinois 60076-3999
Information Phone: 847.679.3400
Emergency Phone: 800.535.5053

N F P A	HAZARD RATING	
	4 - EXTREME	
	3 - HIGH	
	2 - MODERATE	
	1 - SLIGHT	
	0 - INSIGNIFICANT	

PRODUCT: LightLiner™ Hard Liquid/Powder

DATE PREPARED: 11/9/98

Hazardous Components		Physical/Chemical Characteristics	
INGREDIENTS: Liquid Methacrylic Acid Butyl Ester Powder - Ethyl Methacrylate Polymer (Non-hazardous component)	PERCENTAGE: 1. N/A	BOILING POINT: 292°C	Melting Point: N/A
COMMON NAMES AND SYNONYMS: 1. N/A	CAS NUMBER: N/A	VISCOSITY: 1.005	VAPOR DENSITY: 1
PEL: N/A	UN NUMBER: N/A	VAPOR PRESSURE: 7 @ 160°C	EVAPORATION RATE: N/A
TLV: N/A		APPEARANCE/ODOR: Clear, pale, yellow liquid: mild odor. Translucent pink fibred powder.	SOLUBILITY IN WATER: Negligible

Reactivity Data	
STABILITY: Stable	
CONDITIONS TO AVOID: Heat and ignition sources.	
HAZARDOUS DECOMPOSITION PRODUCTS: Carbon Monoxide, Carbon Dioxide, Smoke	
HAZARDOUS POLYMERIZATION: May occur.	
CONDITIONS TO AVOID: Reducing and oxidizing agents. Material has strong solvent action and can soften paint and rubber. Excessive heat - No hazard when stored according to directions.	

Fire and Explosion Hazard Data	
FLASH POINT: 230°F (110°C)	LIMITS: LEL: N/A UEL: N/A
EXTINGUISHING MEDIA: Carbon dioxide, dry chemical foam, water fog	
SPECIAL FIREFIGHTING PROCEDURES: Fight fire from safe distance. Cool exposed material with cold water spray. Vapors are heavier than air and may travel to ignition source.	
UNUSUAL FIRE AND EXPLOSION HAZARDS: Sealed containers exposed to elevated temperatures may rupture explosively due to polymerization	

Health Hazard Data

CARCINOGENICITY: Not known	NPT: NO
IARC: NO	OSHA REGULATED: NO

Effects and Hazards of Overexposure (Acute and Chronic)

EFFECTS AND HAZARDS OF EYE CONTACT:
May cause irritation

EFFECTS AND HAZARDS OF SKIN CONTACT:
May cause skin irritation or rash.

EFFECTS AND HAZARDS OF INHALATION (BREATHING):
May cause nausea

EFFECTS AND HAZARDS OF INGESTION (SWALLOWING):
May cause nausea

Emergency and First Aid Procedures

TREATMENT FOR EYE CONTACT:
Wash eyes with stream of water for at least 15 minutes

TREATMENT FOR SKIN CONTACT:
Wash skin with soap and water.

TREATMENT FOR INHALATION (BREATHING):
Move to fresh air, administer oxygen or artificial respiration if necessary. Call physician.

TREATMENT FOR INGESTION (SWALLOWING):
Induce vomiting and call a physician

Precautions for Safe Handling and Use

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:
For high vapor concentration, evacuate area, eliminate ignition sources. Absorb spills with inert material and transfer to suitable container for disposal

WASTE DISPOSAL METHOD:
Do not allow to drain into water system. Incinerate liquid in proper equipment. Dispose of in accordance with federal, state, and local regulations.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING:
Store in cool, dark place. Keep away from ignition sources.

OTHER PRECAUTIONS:
This product is for professional use only as stated in directions. It is the responsibility of thist to train personnel

Control Measures

RESPIRATORY PROTECTION:
When vapors exceed 100ppm, self-contained breathing apparatus.

Ventilation

LOCAL EXHAUST VENTILATION

Recommended to keep vapor under 100ppm

SPECIAL VENTILATION:
None needed

MECHANICAL (GENERAL) VENTILATION:
Recommended

OTHER VENTILATION:
None needed

PROTECTION GLOVES:
Impervious, neoprene-type

EYE PROTECTION:
Chemical/safety goggles

OTHER PROTECTIVE EQUIPMENT:
Eyewash

WORK AND HYGIENIC PRACTICES:
Use good personal hygiene

Additional Information

This MSDS was prepared in accordance with the requirements of the OSHA Hazard Communication Standard (29CFR 1910.1200) and is to be used only for this product. The information contained in this sheet is, to the best of our knowledge, believed to be accurate

Health Hazard Index:	Ratings:
SEVERE HAZARD	1
SERIOUS HAZARD	2
MODERATE HAZARD	3
SLIGHT HAZARD	4
MINIMUM HAZARD	⑤

Shipping Information

REGULATED IATA:

PROPER SHIPPING NAME:

HAZARD CLASS:

IDENTIFICATION NUMBER:

PACKAGING GROUP:

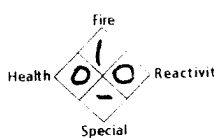
LABEL:

To the best of our knowledge, the information contained herein is accurate. However, The Harry J. Bosworth company does not assume any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown health hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

-MATERIAL SAFETY DATA SHEET

HARRY J. BOSWORTH COMPANY

7227 North Hamlin Avenue
Skokie, Illinois 60076-3999
Information Phone: 847.679.3400
Emergency Phone: 800.535.5053

N F P A	HAZARD RATING	
	4 - EXTREME	
	3 - HIGH	
	2 - MODERATE	
	1 - SLIGHT	
	0 - INSIGNIFICANT	

PRODUCT: LightLiner™ Soft Liquid/Powder

DATE PREPARED: 11/9/98

Hazardous Components		Physical/Chemical Characteristics	
INGREDIENTS: Liquid -Organic Ester Powder - Ethyl Methacrylate Polymer (Non-hazardous component)	PERCENTAGE: 1. N/A	BOILING POINT: 138°C 10mm	Melting Point:
COMMON NAMES AND SYNONYMS: 1. N/A	CAS NUMBER: N/A	VISCOSITY: 0.991	VAPOR DENSITY: 7.9
PEL: N/A	UN NUMBER: N/A	VAPOR PRESSURE: 15mm @ 150°C	EVAPORATION RATE: 1
TLV: N/A		APPEARANCE/ODOR: Clear, oily liquid Translucent pink fibered powder	SOLUBILITY IN WATER: 0.01% @ 23°C

Reactivity Data	Fire and Explosion Hazard Data	
STABILITY: Stable	FLASH POINT: 230°F SECC (110°C)	LIMITS: LEL: UEL:
CONDITIONS TO AVOID: Heat and ignition sources.	EXTINGUISHING MEDIA: Carbon dioxide, dry chemical, foam	
HAZARDOUS DECOMPOSITION PRODUCTS: None known	SPECIAL FIREFIGHTING PROCEDURES: None known. However, firefighters should wear self-contained breathing apparatus to prevent inhalation of smoke vapors.	
HAZARDOUS POLYMERIZATION: Will not occur	UNUSUAL FIRE AND EXPLOSION HAZARDS: None known	
CONDITIONS TO AVOID: Reducing and oxidizing agents. Material has strong solvent action and can soften paint and rubber. Excessive heat.		

Health Hazard Data	
CARCINOGENICITY: Not known	NPT: NO
IARC: NO	OSHA REGULATED: NO
Effects and Hazards of Overexposure (Acute and Chronic)	
EFFECTS AND HAZARDS OF EYE CONTACT: May cause irritation	
EFFECTS AND HAZARDS OF SKIN CONTACT: May cause skin irritation or rash.	
EFFECTS AND HAZARDS OF INHALATION (BREATHING): May cause irritation of mucous membranes, nausea, diarrhea.	
EFFECTS AND HAZARDS OF INGESTION (SWALLOWING): May cause irritation of mucous membranes, nausea, diarrhea.	

Emergency and First Aid Procedures
TREATMENT FOR EYE CONTACT: Wash eyes with stream of water for at least 15 minutes
TREATMENT FOR SKIN CONTACT: Wash skin with soap and water at first opportunity.
TREATMENT FOR INHALATION (BREATHING): Move to fresh air
TREATMENT FOR INGESTION (SWALLOWING): Induce vomiting and call a physician
Precautions for Safe Handling and Use
STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED: Ventilate area. Spread absorbant material and place absorbed material in a closed container. Wear protective equipment during cleanup.
WASTE DISPOSAL METHOD: Incinerate in an approved incinerator or dispose of in a chemical dump in accordance with federal, state, and local regulations.
PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING: Avoid prolonged use or repeated inhalation of heated vapors or spray mists. Avoid prolonged or repeated skin contact.
OTHER PRECAUTIONS: This product is for professional use only as stated in directions. It is the responsibility of thist to train personnel

Control Measures
RESPIRATORY PROTECTION: Respirator or face mask should be worn to avoid inhalation of heated vapors or mists.
Ventilation
LOCAL EXHAUST VENTILATION
Recommended
SPECIAL VENTILATION: None needed
MECHANICAL (GENERAL) VENTILATION: Recommended
OTHER VENTILATION: None needed
PROTECTION GLOVES: Chemical resistant plastic or rubber
EYE PROTECTION: Chemical/safety goggles
OTHER PROTECTIVE EQUIPMENT: As required to prevent wetting of skin or clothing.
WORK AND HYGIENIC PRACTICES: Use safety glasses and wash hands frequently with soap/water

Additional Information	
This MSDS was prepared in accordance with the requirements of the OSHA Hazard Communication Standard (29CFR 1910.1200) and is to be used only for this product. The information contained in this sheet is , to the best of our knowledge, believed to be accurate	
Health Hazard Index:	Ratings:
SEVERE HAZARD	1
SERIOUS HAZARD	2
MODERATE HAZARD	3
SLIGHT HAZARD	4
MINIMUM HAZARD	⑤
Shipping Information	
REGULATED IATA:	
PROPER SHIPPING NAME:	
HAZARD CLASS:	
IDENTIFICATION NUMBER: N/A	
PACKAGING GROUP: N/A	
LABEL: N/A	

To the best of our knowledge, the information contained herein is accurate. However, The Harry J. Bosworth company does not assume any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown health hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.