MATERIAL SAFETY DATA SHEET

SECTION 1 – CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: Eli-Bond FR166 / FR166A

Product Use/Class: Epoxy Adhesive Supersedes Previous Revision: Revised February 2015

SECTION 2 – COMPOSITION / INFORMATION ON INGREDIENTS

Resin

Chemical Name	CAS No.	Wt % Less than	Exposure Guidelines					
			AC	GIH	OSF	ΗA		
			TWA	STEL	TWA	Ceil	Units	Skin
Bisphenol A	25068-38-6	< 60%	50	75	50	N.E.	ppm	

Hardener

Chemical Name	CAS No.	Wt % Less than	Exposure Guidelines					
			AC	GIH	OSF	ΗA		
			TWA	STEL	TWA	Ceil	Units	Skin
Aromatic Amine	103-83-3	60%				N.E.		

^{*}Proprietary

N.E. = Not Established S = Skin C = Ceiling

SECTION 3 – HAZARDOUS IDENTIFICATION

EMERGENCY OVERVIEW: Resin: Translucent Paste with no odour. Non-flammable putty. Supplied with a hardener non-flammable putty and no vapour. Hardener: Paste contains aromatic amines. May cause allergic respiratory reaction. May cause skin and eye irritation.

EFFECTS OF OVER-EXPOSURE

Eye Contact: Causes eye irritation.

Skin Contact: May cause skin sensitisation. May cause dermatitis.

Inhalation: Possible irritation of the respiratory system can occur causing a variety of symptoms such as dryness of the throat, tightness of the chest, and shortness of breath.

Ingestion: Harmful if swallowed. Ingestion is not an expected route of entry in industrial or commercial uses.

Chronic Hazards: Repeated or prolonged skin contact may cause dermatitis.

SECTION 4 - FIRST AID MEASURES

FIRST AID

Eye contact: Flush eyes immediately with large amounts of water for at least 15 minutes holding eyelids open while flushing. Get prompt medical attention.

Skin Contact: Flush contaminated skin with large amounts of water while removing contaminated clothing. Wash affected skin areas with soap and water. Get medical attention if symptoms occur.

Inhalation: Move person to fresh air. Restore and support continued breathing. If breathing is difficult, give oxygen. Get immediate medical attention.

Ingestion: If swallowed, do not induce vomiting. Give one or two glasses of water or milk. Call a physician or poison control centre immediately for further instructions. Never give anything by mouth to an unconscious person.

SECTION 5 – FIRE FIGHTING MEASURES

Resin FR166

Flash Point (Setaflash closed cup)	>145°C		
OSHA Flammability Classification	Non-Flammable Epoxy Compound		
Extinguishing Media	CO ₂ Dry Chemical Foam Water Fog		

Hardener FR166

Flash Point (Setaflash closed cup)	> 150°C
OSHA Flammability Classification	Non-Flammable
Extinguishing Media	CO ₂ Dry Chemical Foam Water Fog

UNUSUAL FIRE AND EXPLOSION HAZARDS: Resin non-flammable. Keep containers tightly closed. Isolate from heat, open flame and other sources of ignition. Closed containers may rupture when exposed to extreme heat. Use water spray to keep fire exposed containers cool.

SPECIAL FIREFIGHTING PROCEDURES: Wear full fire fighting protective clothing, including self-contained breathing apparatus (SCBA). Water spray may be ineffective. If water is used, fog nozzles are preferable. During a fire, irritating and/or toxic gases and particulate may be generated by thermal decomposition or combustion.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Keep non-essential personnel a safe distance away from the spill area. Notify appropriate authorities if necessary. Contain and remove with inert absorbent material. Do not empty into drains.

SECTION 7 - HANDLING AND STORAGE

HANDLING: Keep closure tight and container upright to prevent leakage. Avoid skin and eye contact. Wash thoroughly after handling. Use with adequate ventilation.

STORAGE: Do not store or use near heat, sparks, or open flame. Store only in well-ventilated areas. Do not puncture, drag or slide container. Keep container closed when not in use.

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS: Sufficient ventilation in pattern and volume should be provided in order to maintain air contaminate levels below recommended exposure limits.

RESPIRATORY PROTECTION: No specific recommendations made. If the cured resin is later machined, then an appropriate dust respirator must be worn.

SKIN PROTECTION: Use neoprene, nitrile, or rubber gloves to prevent skin contact. Use long sleeves.

EYE PROTECTION: Use safety eye-wear including safety glasses with side shields and chemical goggles where splashing may occur.

OTHER PROTECTIVE EQUIPMENT: Use disposable or impervious clothing if work clothing contamination is likely. Remove and wash contaminated clothing before re-use.

HYGIENIC PRACTICES: Wash hands thoroughly before eating, smoking or using the toilet facility. Do not smoke in any chemical handling or storage area. Food or beverages should not be consumed anywhere this product is handled or stored. Wash thoroughly after handling.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Resin FR166

Flash Point (DIN 51755)	150°C
Appearance	Translucent
Physical State	Paste
Odour	None
Solubility in H	Insoluble
Vapour Pressure	Low
Vapour Density	Is heavier than air
Specific Gravity	105 g/cm³
PH	N.A.

Hardener FR166

Flash Point (DIN 51755)	> 150°C
Appearance	Translucent
Physical State	Paste
Odour	None
Solubility in H	Insoluble
Specific Gravity	1,05 g/cm

(See Section 16 for abbreviation of legend).

SECTION 10 - STABILITY AND REACTIVITY

CONDITIONS TO AVOID: High temperatures. Sources of ignition.

HAZAROUS DECOMPOSITION PRODUCTS: No hazardous decomposition when stored and handled correctly. Carbon dioxide, carbon monoxide may be products of thermal decomposition.

HAZAROUS POLYMERIZATION: Will not occur under normal conditions.

STABILITY: This product is stable under normal storage conditions.

SECTION 11 – TOXICOLOGICAL PROPERTIES

Product is sensitising on skin and eyes.

SECTION 12 – ECOLOGICAL INFORMATION

Do not allow to escape into water supply or soil.

SECTION 13 – DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Disposal should be carried out in accordance with Federal (40CFR Part 261), state and local environmental control regulations. If waste is determined to be hazardous, use licensed hazardous waste transporter and disposal facility.

SECTION 14 – TRANSPORTATION INFORMATION

Resin FR166

DOT Proper Shipping Name	Bisphenol-A Epoxy Resin
DOT Hazard Class	8
DOT UN/NA Number	UN 1760
Emergency Response Guide Number	26
Packing Group	III

Hardener FR166 (if shipped separately)

DOT Proper Shipping Name	Amines, Liquid
DOT Hazard Class	8
DOT UN/NA Number	UN 1760
Emergency Response Guide Number	26
Packing Group	III

SECTION 15 – REGULATORY INFORMATION

Label for supply: Resin: Irritant, Hardener: Corrosive, Harmful

SECTION 16 - OTHER INFORMATION

The product is intended for use by skilled or experienced personnel for the intended application as recommended by us.

The information contained herein is based on data available to us and is believed to be correct. Since this information may have been obtained in part from independent laboratories or other sources not under our direct supervision, no representation is made that the information is accurate, reliable, complete or representative and the Buyer may rely thereon only at the Buyer's risk. We make no guarantee that the health and safety precautions we have suggested will be adequate for all individuals and/or situations involving its handling and use.

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