



MATERIAL SAFETY DATA SHEET

SECTION 1 – CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: FR1011
Product Use/Class: Epoxy Resin 27.08.2016
Supersedes Previous Revision: New

SECTION 2 – COMPOSITION / INFORMATION ON INGREDIENTS

Resin

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

Hardener

Chemical Name	CAS No.	Wt % Less than	Exposure Guidelines					
			ACGIH		OSHA		Units	Skin
			TWA	STEL	TWA	Ceil		
Aromatic Amine	112-24-3	60%				N.E.		

*Proprietary

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

SECTION 3 – HAZARDOUS IDENTIFICATION

EMERGENCY OVERVIEW: Resin : White low viscosity paste with no odour. Non-flammable. Supplied with a clear / greenish liquid hardener non-flammable and with no vapour. Hardener 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.

PRIMARY ROUTE(S) OF ENTRY: Skin contact, inhalation, ingestion, eye contact.

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 FR1011

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

Hardener FR1011

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 FR1011

Flash Point (DIN 51755)	150°C
Appearance	White substance
Physical State	Low viscosity pourable / brushable paste
Odour	None
Solubility in H ₂ O	Insoluble
Vapour Pressure	Low
Vapour Density	Is heavier than air
Specific Gravity	1,85 g/cm ³
PH	N.A.

Hardener FR1011

Flash Point (DIN 51755)	> 150°C
Appearance	Clear / Greenish liquid
Physical State	Free flowing liquid
Odour	None
Solubility in H ₂ O	Insoluble
Specific Gravity	1,05 g/cm ³
PH	N.A.

(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 FR1011

DOT Proper Shipping Name	Environmentally Hazardous Substance Liquid n.o.s
DOT Hazard Class	9 (Miscellaneous)
DOT UN/NA Number	UN 3082
Emergency Response Guide Number	26
Packing Group	III

Hardener FR1011 (if shipped separately)

DOT Proper Shipping Name	Amines, Liquids, Corrosive n.o.s
DOT Hazard Class	8
DOT UN/NA Number	UN 2735
Emergency Response Guide Number	26
Packing Group	II

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.

Last Revision : 27-08-2016