



# Material SAFETY DATA SHEET

## Keyfix E - Hardener

### 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name: **Keyfix E - Hardener**

Description: Hardener component of two parts epoxy anchoring system

Manufacturer: **Ayla Lebanon**  
Port, Jamarek Street (Face Port Pharmacy), Rbeiz Bldg  
Beirut, Lebanon  
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MSDS Number: DCP/03/04/15-H

### 2: COMPOSITION / INFORMATION ON INGREDIENTS

Composition: Epoxy curing agent, diluent, inert filler and pigment.

Hazardous Ingredient(s)	Symbol	Risk Phrases	CAS No.	%
Epoxy curing agent	C	34, 43, 51/53	2855-13-2	40

Refer to Section 8 for Occupational Exposure Limits.

### 3: HAZARDS IDENTIFICATION

Hazard Information: Causes burns.  
May cause sensitization by skin contact.  
Toxic to aquatic organisms, may cause long-term affects in the aquatic environment.

Classification: C. R34, 43, 51/53

### 4: FIRST AID MEASURES

Eyes: Irrigate immediately with copious quantities of water for 15 minutes. Obtain medical attention urgently.

Skin: Wash immediately with soap and water or suitable skin cleanser. Obtain medical advice if skin disorders develop.

Inhalation: Remove from exposure, rest and keep warm and obtain medical attention urgently.

Ingestion: Wash out mouth with water. DO NOT induce vomiting. Beware of aspiration if vomiting occurs. Obtain medical attention urgently.



## 5: FIRE FIGHTING MEASURES

Extinguishing Media:	Carbon dioxide, powder, foam or water.
Special Exposure Hazards:	Nitrogen compound, in some fire circumstances.
Personal Protective Equipment:	Self-contained breathing apparatus and full protective clothing.

## 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions:	Wear suitable protective clothing, gloves and eye/face protection.
Environmental Precautions:	Prevent entry into drains, sewers and water courses.
Decontamination Procedures:	Soak up with inert absorbent and remove by best available means. Gather into containers. Dispose off as waste.

## 7: HANDLING AND STORAGE

Handling:	Avoid breathing vapors. Maintain good standards of personal hygiene. Avoid skin and eye contact. Do not eat, drink or smoke whilst using this product.
Storage:	Keep containers dry and tightly closed. Never leave a container unsealed. Keep away from foodstuffs and food containers.

## 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

Ingestion:	Prevent eating, drinking or smoking in the area of product use.
Eye Contact:	Safety glasses/goggles.
Skin Contact:	Impervious gloves (e.g. PVC). Plastic apron and overalls.
Engineering Controls:	Use only in well ventilated areas.
Exposure Guidelines:	None assigned.



## 9: PHYSICAL AND CHEMICAL PROPERTIES

Form:	Paste
Colour:	Red
Odour:	Sharp/amine
pH (concentrate):	Not applicable
Boiling Point (°C):	Not applicable
Flash Point (closed cup) (°C):	> 130
Autoflammability (°C):	Not determined
Vapor Pressure (KPa at 20°C):	0.02
Relative Density (@25°C):	1.27
Water Solubility:	Not soluble

## 10: STABILITY AND REACTIVITY

Stability:	Stable if used as directed.
Conditions to Avoid:	Temperature below 5°C.
Chemical Incompatibility:	Strong acids. Strong oxidizing agents.
Hazardous Decomposition Products:	Thermal decomposition yields oxides of carbon, nitrogen compounds, in some fire circumstances hydrogen cyanide.

## 11: TOXICOLOGICAL INFORMATION

The following toxicological assessment is based on knowledge of the toxicity of the product's components. Expected oral LD50, rat > 1000 mg/kg.

### Health Effects

On Eyes:	Causes irreversible damage to eye tissue if not removed promptly.
On Skin:	Corrosive- causes burns. May Cause sensitization.
By Inhalation:	May Cause respiratory irritation.
By Ingestion:	Corrosive –causes severe damage to mouth, throat and digestive tract.
Chronic:	Repeated and prolonged skin contact can result in chemical burns.
Other:	p-tertiarybutyl phenol can cause a cosmetic effect known as 'occupational vitilgo'or leucaderma. It is believed that repeated contact with this substance can lead to this depigmentation of the skin in sensitive individuals.

## 12: ECOLOGICAL INFORMATION

Environmental Assessment:	When used and disposed off as intended, no adverse environmental affects are foreseen.
Mobility:	Thixotropic liquid, partially soluble in water.
Degradability:	Not readily biodegradable.
Bioaccumulation:	Not Determined.
Acute Fish Toxicity:	Expected to be ecotoxic to fish/daphnia/algae.

## 13: DISPOSAL CONSIDERATION

Disposal must be in accordance with local and national legislation.

Unused Product:	Classified as special waste. May be reacted with base component to give an inert polymeric material.
Used/ Contaminated Product:	Classified as special waste, dispose off through an authorized waste contractor to licensed site.
Packaging:	Must be disposed off through an authorized waste contractor.

## 14: TRANSPORT INFORMATION



UN Number:	1760
Transport Name:	Corrosive liquids, n.o.s.

Transport Type:		Class:	Pack Group:	Marine Pollutant
At Sea	IMO	8	III	No
Air Transport	IATA/ICAO	8	III	
At land	RID/ADR	8	III	

## 15: REGULATORY INFORMATION

**Hazard Label Data:**

C



**Corrosive**

Named Ingredients: Epoxy curing agent

UN Number: 1760

**Risk Phrases:**

R34 Causes burns.  
R43 May cause sensitization by skin contact.  
R51/53 Toxic to aquatic organisms, may cause long-term adverse in the aquatic environment.

**Safety Phrases:**

S28 After contact with skin, wash immediately with plenty of water and soap suds.  
S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
S37/39 Wear suitable gloves and eye/face protection.

## 16: OTHER INFORMATION

Issue Date: 01/09/2008

Revised Date:

Disclaimer: The information contained herein is derived from the best available sources and is believed to be accurate. However, no guarantee is expressed or implied regarding the accuracy of the data given in the use of this product.