



17 Shepard Street • Lawrence, MA 01843 USA  
+1.978.683.9411

[www.keypolymer.com](http://www.keypolymer.com)

Issue Date 02-Jun-2015

Revision Date 20-Jul-2015

Version 4

## 1. Identification of the Substance/Preparation and of the Company/Undertaking

### Product Identifier

Product name KEY FP100A

### Other Means of Identification

Product Code FP100A  
Product Technology Epoxy A side  
Document Crack Filler A

None

Epoxy A side. FOR INDUSTRIAL USE ONLY.

Restrictions on use: Do not use this product for any use other than intended

### Manufacturer Address

Key Polymer Corporation  
17 Shepard Street  
Lawrence, MA 01843, USA

Company Phone Number 978-683-9411 (8AM - 5PM EST) (M-F)

Emergency Telephone Chemtrec 1-800-424-9300 (24 Hours)

Chemtrec International Phone +1 703 527-3887

## 2. Hazards Identification

### Classification

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS). This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2
Skin sensitization	Category 1
Reproductive Toxicity	Category 1B

## EMERGENCY OVERVIEW

### DANGER

#### Hazard Statements

Causes skin irritation

Causes serious eye irritation

May cause an allergic skin reaction

May damage fertility or the unborn child



**Appearance** Viscous Grey
**Physical State** Paste
**Odor** Solvent

**Precautionary Statements - Prevention**

Obtain special instructions before use  
 Do not handle until all safety precautions have been read and understood  
 Use personal protective equipment as required  
 Wash face, hands and any exposed skin thoroughly after handling  
 Avoid breathing dust, fumes, or vapors  
 Contaminated work clothing should not be allowed out of the workplace  
 Wear protective gloves, protective clothing, eye protection, face protection

**Precautionary Statements - Response**

IF exposed or concerned: Get medical advice/attention  
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
 If eye irritation persists: Get medical advice/attention  
 IF ON SKIN: Wash with plenty of soap and water  
 Take off contaminated clothing and wash before reuse  
 If skin irritation or rash occurs: Get medical advice/attention

**Precautionary Statements - Storage**

Store locked up  
 Store in a well-ventilated place. Keep container tightly closed

**Precautionary Statements - Disposal**

Dispose of contents/container in accordance with local/regional/international regulations

**Hazards Not Otherwise Classified (HNOC)**

**Other Information**

Toxic to aquatic life with long lasting effects  
 13.04703991% of the mixture consists of ingredient(s) of unknown toxicity

**3. Composition/Information on Ingredients**

**Chemical Family** Epoxy A Side  
**Chemical nature** Epoxy resin mixture.

Chemical Name	CAS No	Weight-%	Trade secret
Bisphenol A diglycidyl ether resin	25068-38-6	50 - 85	*
Calcium carbonate	1317-65-3	5 - 15	*
2-Butanone	78-93-3	1 - 5	*
1-Methyl-2-pyrrolidinone	872-50-4	0.1 - 0.9	*

Calcium carbonate, when encapsulated in a polymer, is not expected to pose a respirable health hazard when processed under normal conditions of use.

\* The exact percentage (concentration) of composition may have been withheld as a trade secret.

**4. First Aid Measures**

**FIRST AID MEASURES**

<b>General Advice</b>	Use first aid treatment according to the nature of the injury. For further assistance, contact your local Poison Control Center. In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).
<b>Eye Contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If eye irritation persists: Get medical advice/attention.
<b>Skin Contact</b>	Wash off immediately with plenty of water for at least 15 minutes. Get medical attention if irritation develops and persists.
<b>Inhalation</b>	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
<b>Ingestion</b>	Not an expected route of exposure. If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.
<b>Self-Protection of the First Aider</b>	First Aider: Pay attention to self-protection. Use personal protective equipment as required.

**Most Important Symptoms and Effects, Both Acute and Delayed**

**Symptoms** No information available.

**Indication of Any Immediate Medical Attention and Special Treatment Needed**

**Note to Physicians** Treat symptomatically.

**5. Fire-Fighting Measures****Suitable Extinguishing Media**

Use CO<sub>2</sub>, dry chemical, or foam

**Unsuitable Extinguishing Media** Caution: Use of water spray when fighting fire may be inefficient.

**Specific Hazards Arising From the Chemical**

Cool closed containers exposed to fire with water spray. Do not allow run-off from fire fighting to enter drains or water ways. Dike for water control.

**Hazardous Combustion Products** Irritating or toxic substances may be emitted upon burning, combustion or decomposition. See Section 10 Hazardous Decomposition Products for additional information.

**Explosion Data**

**Sensitivity to Mechanical Impact** None.  
**Sensitivity to Static Discharge** None.

**Protective Equipment and Precautions for Firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

**6. Accidental Release Measures****Personal Precautions, Protective Equipment and Emergency Procedures**

**Personal Precautions** Ventilate affected area. Extremely slippery when spilled.

**Other Information** Use personal protective equipment as required.

**For Emergency Responders** Use personal protective equipment as required.

**Environmental Precautions**

**Environmental Precautions** See Section 12 for additional Ecological Information. Do not allow into any sewer, on the ground or into any body of water.

**Methods and Material for Containment and Cleaning Up**

**Methods for Containment** Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up** Pick up and transfer to properly labeled containers.

**7. Handling and Storage**

**Precautions for Safe Handling**

**Advice on Safe Handling** Handle in accordance with good industrial hygiene and safety practice.

**Conditions for Safe Storage, Including any Incompatibilities**

**Storage Conditions** Keep containers tightly closed in a dry, cool and well-ventilated place. Store and handle away from heat, flames and oxidizing materials.

**Incompatible Materials** Strong oxidizing agents. Strong acids. Strong bases.

**8. Exposure Controls/Personal Protection**

**Control Parameters**

**Exposure Guidelines**

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Calcium carbonate 1317-65-3	-	TWA: 15 mg/m <sup>3</sup> total dust TWA: 5 mg/m <sup>3</sup> respirable fraction (vacated) TWA: 15 mg/m <sup>3</sup> total dust (vacated) TWA: 5 mg/m <sup>3</sup> respirable fraction	TWA: 10 mg/m <sup>3</sup> total dust TWA: 5 mg/m <sup>3</sup> respirable dust
2-Butanone 78-93-3	STEL: 300 ppm TWA: 200 ppm	TWA: 200 ppm TWA: 590 mg/m <sup>3</sup> (vacated) TWA: 200 ppm (vacated) TWA: 590 mg/m <sup>3</sup> (vacated) STEL: 300 ppm (vacated) STEL: 885 mg/m <sup>3</sup>	IDLH: 3000 ppm TWA: 200 ppm TWA: 590 mg/m <sup>3</sup> STEL: 300 ppm STEL: 885 mg/m <sup>3</sup>

**Appropriate Engineering Controls**

**Engineering Controls** Showers  
Eyewash stations  
Ventilation systems

**Individual Protection Measures, Such As Personal Protective Equipment**

**Eye/Face Protection** Splash Goggles.

**Skin and Body Protection** Wear protective gloves and protective clothing.

**Respiratory Protection** If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

**General Hygiene Considerations** Handle in accordance with good industrial hygiene and safety practice.

## 9. Physical and Chemical Properties

### Information on Basic Physical and Chemical Properties

<b>Physical State</b>	Paste	<b>Odor</b>	Solvent
<b>Appearance</b>	Viscous	<b>Odor Threshold</b>	No information available
<b>Color</b>	Grey		

Property	Values	Remarks • Method
pH	No information available	
Melting Point/Freezing Point	No information available	
Boiling Point/Boiling Range	> 148 °C	
Flash Point	77.5 °C	Setaflash Closed Tester
Evaporation Rate	No information available	
Flammability (Solid, Gas)	No information available	
Flammability Limits in Air		
Upper Flammability Limits	No information available	
Lower Flammability Limit	No information available	
Vapor Pressure	No information available	
Vapor Density	Hevier than air	
Specific Gravity	1.2	
Water Solubility	Negligible	
Solubility in Other Solvents	No information available	
Partition Coefficient	No information available	
Autoignition Temperature	No information available	
Decomposition Temperature	No information available	
Kinematic Viscosity	100000 cSt	
Dynamic Viscosity	120000 cps @ 25° C	
Explosive Properties	Not an explosive	
Oxidizing Properties	No information available	

### Other Information

<b>Softening Point</b>	No information available
<b>Molecular Weight</b>	No information available
<b>VOC Content (%)</b>	No information available
<b>Density</b>	10.0 pounds/gallon
<b>Bulk Density</b>	No information available

## 10. Stability and Reactivity

### Reactivity

No data available

### Chemical Stability

Stable under recommended storage conditions.

### Possibility of Hazardous Reactions

Hazardous polymerization does not occur.

<b>hazardous polymerization</b>	None under normal processing.
---------------------------------	-------------------------------

### Conditions to Avoid

Keep out of reach of children. Extremes of temperature and direct sunlight. Heat, flames and sparks. Mixture with or exposure to incompatible materials.

### Incompatible Materials

Strong oxidizing agents. Strong acids. Strong bases.

### Hazardous Decomposition Products

Carbon monoxide. Carbon Dioxide (CO<sub>2</sub>). Aldehydes. Aromatic hydrocarbons. May emit toxic fumes under fire conditions. Nitrogen oxides (NO<sub>x</sub>).

**11. Toxicological Information**

**Information on Likely Routes of Exposure**

**Product Information** The product has not been tested

**Inhalation** Remove to fresh air.

**Eye Contact** Vapor may cause irritation. Avoid contact with eyes. May cause serious eye damage.

**Skin Contact** Avoid contact with skin. Causes skin irritation. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons.

**Ingestion** Not an expected route of exposure. May be harmful if swallowed.

Chemical Name	Oral LD50 (Rat)	Dermal LD50 (Rabbit)	Inhalation LC50
Bisphenol A diglycidyl ether resin 25068-38-6	= 11400 mg/kg ( Rat )	-	-
2-Butanone 78-93-3	= 2483 mg/kg ( Rat ) = 2737 mg/kg ( Rat )	= 6480 mg/kg ( Rabbit ) = 5000 mg/kg ( Rabbit )	= 11700 ppm ( Rat ) 4 h
1-Methyl-2-pyrrolidinone 872-50-4	= 3598 mg/kg ( Rat )	= 8 g/kg ( Rabbit )	= 3.1 mg/L ( Rat ) 4 h

**Information on toxicological effects**

No information available.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Skin corrosion/irritation** Irritating to skin. Repeated or prolonged contact may cause skin irritation and dermatitis.

**Serious eye damage/eye irritation** Irritating to eyes.

**Irritation** Irritating to eyes and skin.

**Sensitization** May cause sensitization of susceptible persons. Repeated or prolonged contact may cause allergic reactions in very susceptible persons.

**Germ Cell Mutagenicity** No information available.

**Carcinogenicity** This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.

**Reproductive Toxicity** Product is or contains a chemical which is a known or suspected reproductive hazard. May cause harm to the unborn child. May impair fertility.

**STOT - Single Exposure** No information available.

**STOT - Repeated Exposure** Pre-existing diseases of the liver may result in increased susceptibility to the toxicity of excessive exposure.

**Chronic Toxicity** Repeated contact may cause allergic reactions in very susceptible persons.

**Target Organ Effects** Liver.

**Aspiration Hazard** No information available.

**Numerical Measures of Toxicity - Product Information**

**Unknown Acute Toxicity** 13.04703991% of the mixture consists of ingredient(s) of unknown toxicity

**The following values are calculated based on chapter 3.1 of the GHS document**

**ATEmix (oral)** 10785 mg/kg

**ATEmix (dermal)** 255054 mg/kg

**ATEmix (inhalation-vapor)** 596826 mg/l

**12. Ecological Information**

**Ecotoxicity**

No information available

13.63921% of the mixture consists of components(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Fish	Toxicity to	Crustacea

		<b>Microorganisms</b>	
2-Butanone 78-93-3		3130 - 3320: 96 h Pimephales promelas mg/L LC50 flow-through	520: 48 h Daphnia magna mg/L EC50 5091: 48 h Daphnia magna mg/L EC50 4025 - 6440: 48 h Daphnia magna mg/L EC50 Static
1-Methyl-2-pyrrolidinone 872-50-4	500: 72 h Desmodemus subspicatus mg/L EC50	832: 96 h Lepomis macrochirus mg/L LC50 static 1072: 96 h Pimephales promelas mg/L LC50 static 1400: 96 h Poecilia reticulata mg/L LC50 static 4000: 96 h Leuciscus idus mg/L LC50 static	4897: 48 h Daphnia magna mg/L EC50

**Persistence and Degradability**

No information available

<b>Chemical Name</b>	<b>Partition Coefficient</b>
2-Butanone 78-93-3	0.29
1-Methyl-2-pyrrolidinone 872-50-4	-0.46

**Other Adverse Effects**

No information available

**13. Disposal Considerations**

**Waste Treatment Methods**

**Disposal of Wastes**

Disposal should be in accordance with applicable regional, national and local laws and regulations.

**Contaminated Packaging**

Do not reuse container.

<b>Chemical Name</b>	<b>RCRA</b>	<b>RCRA - Basis for Listing</b>	<b>RCRA - D Series Wastes</b>	<b>RCRA - U Series Wastes</b>
2-Butanone 78-93-3	U159	Included in waste streams: F005, F039	200.0 mg/L regulatory level	U159

**14. Transport Information**

**DOT**

Not regulated

**ICAO (air)**

**Proper Shipping Name**  
**Hazard Class**  
**Packing group**  
**Special Provisions**

Environmentally Hazardous Substance Liquid N.O.S. (Bisphenol A epoxy resin)  
9  
III  
A197 - Not restricted provided that the net quantity in any receptacle does not exceed 5 Kg or 5 L and the packaging meets defined standards.

**IATA**

**Proper Shipping Name**  
**Hazard Class**  
**Packing group**  
**Special Provisions**

Environmentally Hazardous substance Liquid N.O.S. (Bisphenol A epoxy resin)  
9  
III  
A197 - Not restricted provided that the net quantity in any receptacle does not exceed 5 Kg or 5 L and the packaging meets defined standards.

**IMDG**

<b>Proper Shipping Name</b>	Environmentally Hazardous Substance Liquid N.O.S. (Bisphenol A epoxy resin)
<b>Hazard Class</b>	9
<b>Packing group</b>	III
<b>Special Provisions</b>	A197 - Not restricted provided that the net quantity in any receptacle does not exceed 5 Kg or 5 L and the packaging meets defined standards.
<b>Marine pollutant</b>	This material meets the definition of a marine pollutant

**15. Regulatory Information**

**International Inventories**

**TSCA** All components of this product are either exempt or included on the TSCA Inventory in compliance with the Toxic Substances Control Act.

**Legend:**

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory  
 DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

**US Federal Regulations**

**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical Name	CAS No	Weight-%	SARA 313 - Threshold Values %
1-Methyl-2-pyrrolidinone - 872-50-4	872-50-4	0.1 - 0.9	1.0

**SARA 311/312 Hazard Categories**

<b>Acute Health Hazard</b>	Yes
<b>Chronic Health Hazard</b>	Yes
<b>Fire Hazard</b>	No
<b>Sudden Release of Pressure Hazard</b>	No
<b>Reactive Hazard</b>	No

**CWA (Clean Water Act)**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

**CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
2-Butanone 78-93-3	5000 lb		RQ 5000 lb final RQ RQ 2270 kg final RQ

**US State Regulations**

The following chemicals may be contained in this product in de minimis amounts not required for listing in section 3. However, these chemicals do appear on some state Right-to-Know (RTK) and/or other hazardous substance lists. Please check your state's listings for more information.

**California Proposition 65**

This product contains the following Proposition 65 chemicals

Chemical Name	California Proposition 65
1-Methyl-2-pyrrolidinone - 872-50-4	Developmental

Silicon dioxide - 14808-60-7	Carcinogen
Glycidyl phenyl ether - 122-60-1	Carcinogen Male Reproductive

**U.S. State Right-to-Know Regulations**

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Calcium carbonate 1317-65-3	X	X	X
2-Butanone 78-93-3	X	X	X
1-Methyl-2-pyrrolidinone 872-50-4	X	X	X

**U.S. EPA Label Information**

EPA Pesticide Registration Number Not applicable

**16. Other Information**

**HMIS**                      **Health Hazards 2**                      **Flammability 1**                      **Physical Hazards 0**                      **Personal Protection X**

**Prepared by**                      Key Polymer Corp Compliance  
**Issue Date**                      02-Jun-2015  
**Revision Date**                      20-Jul-2015

**Revision note**

No information available

**Disclaimer**

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**End of Safety Data Sheet**