

POLYONE CORPORATION**MATERIAL SAFETY DATA SHEET****RX-32004-B EPOXY HARDENER**Version Number 1.3
Revision Date 02/09/2012Page 1 of 7
Print Date 2/10/2012**1. PRODUCT AND COMPANY IDENTIFICATION****POLYONE CORPORATION**
8155 Cobb Center Drive, Kennesaw, GA 30152Telephone : 1 (440) 930-1000 or 1 (866) POLYONE
Emergency telephone : CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure or accident).Product name : RX-32004-B EPOXY HARDENER
Product code : FO00008697
Chemical Name : Mixture
CAS-No. : Mixture
Product Use : Industrial Applications**2. COMPOSITION/INFORMATION ON REGULATED INGREDIENTS**

Components	CAS-No.	Weight percent
Triethylenetetramine	112-24-3	10 - 30
Kaolin	1332-58-7	1 - 5
Silica, amorphous, fumed, crystal-free	112945-52-5	5 - 10

3. HAZARDS IDENTIFICATION**EMERGENCY OVERVIEW**

This mixture has not been evaluated as a whole for health effects. Information provided on health effects of this product is based on the individual components. However, some vapors or contaminants may be released upon heating and the end-user (fabricator) must take the necessary precautions (mechanical ventilation, respiratory protection, etc.) to protect employees from exposure. See sections 8 and 11 for special precautions.

POTENTIAL HEALTH EFFECTS**Routes of Exposure:** : Eyes, Skin contact, Inhalation, Ingestion**Acute exposure**Inhalation : Excessive inhalation of product vapors, especially during heating or processing, may be irritating to respiratory system.
Ingestion : May be harmful if swallowed.
Eyes : Mild eye irritation
Skin : Prolonged or repeated skin contact can cause de-fatting and drying of the skin which may result in skin irritation and dermatitis (rash).

POLYONE CORPORATION

MATERIAL SAFETY DATA SHEET

RX-32004-B EPOXY HARDENER

Version Number 1.3
Revision Date 02/09/2012

Page 2 of 7
Print Date 2/10/2012

Chronic exposure : Refer to Section 11 for Toxicological Information.
Medical Conditions Aggravated by Exposure: : None known.

4. FIRST AID MEASURES

Inhalation : Move to fresh air in case of accidental inhalation of vapors or fumes from overheating or combustion. When symptoms persist or in all cases of doubt seek medical advice.
Ingestion : Drink 1 or 2 glasses of water. Induce vomiting immediately and call a physician. Never give anything by mouth to an unconscious person.
Eyes : Immediately flush eye(s) with plenty of water. Seek medical attention if necessary.
Skin : Wash off immediately with soap and plenty of water. If skin irritation persists seek medical attention.

5. FIRE-FIGHTING MEASURES

Flash point : Greater than 200 °F (93 °C)
Flammable Limits
Upper explosion limit : no data available
Lower explosion limit : no data available
Autoignition temperature : no data available
Suitable extinguishing media : Carbon dioxide (CO₂), Dry chemical, Water spray, Alcohol-resistant foam.
Special Fire Fighting Procedures : Fullface self-contained breathing apparatus (SCBA) used in positive pressure mode should be worn to prevent inhalation of airborne contaminants.
Unusual Fire/Explosion Hazards : Carbon dioxide (CO₂), carbon monoxide (CO), oxides of nitrogen (NO_x), other hazardous materials, and smoke are all possible.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions : Wear appropriate personal protection during cleanup, such as impervious gloves, boots and coveralls. Material can create slippery conditions.
Environmental precautions : The product should not be allowed to enter drains, water courses or the soil. Should not be released into the environment.
Methods for cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Package all material in

POLYONE CORPORATION

MATERIAL SAFETY DATA SHEET

RX-32004-B EPOXY HARDENER

Version Number 1.3
Revision Date 02/09/2012

Page 3 of 7
Print Date 2/10/2012

appropriate container for disposal. Refer to Section 13 of this MSDS for proper disposal methods.

7. HANDLING AND STORAGE

- Handling : Heat only in areas with appropriate exhaust ventilation.
- Storage : Keep containers dry and tightly closed to avoid moisture absorption and contamination. Store in a cool dry place. Product is hygroscopic. Protect from moisture. Keep drums tightly closed to prevent contamination.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

- Respiratory protection : Under normal handling conditions a respirator may not be required.
- Eye/Face Protection : Safety glasses with side-shields
- Hand protection : Protective gloves
- Skin and body protection : Long sleeved shirts and long pants are adequate for normal handling. Where operations present a splash or spill potential, employees should wear chemically resistant clothing, boots, apron, gloves, and eye/face protection.
- Additional Protective Measures : Safety shoes
- General Hygiene Considerations : Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.
- Engineering measures : Heat only in areas with appropriate exhaust ventilation. Provide appropriate exhaust ventilation at machinery.

Exposure limit(s)

POLYONE CORPORATION

MATERIAL SAFETY DATA SHEET

RX-32004-B EPOXY HARDENER

Version Number 1.3
Revision Date 02/09/2012

Page 4 of 7
Print Date 2/10/2012

Components	Value	Exposure time	Exposure type	List:
Kaolin	2 mg/m3	Time Weighted Average (TWA):	Respirable fraction.	ACGIH
	10 mg/m3	Time Weighted Average (TWA):		MX OEL
	20 mg/m3	Short Term Exposure Limit (STEL):		MX OEL
	5 mg/m3	PEL:	Respirable fraction.	OSHA Z1
	15 mg/m3	PEL:	Total dust.	OSHA Z1
Silica, amorphous, fumed, crystal-free	0.8 mg/m3	Time Weighted Average (TWA):		Z3
	10 mg/m3	Time Weighted Average (TWA):	Inhalable particulate.	MX OEL
	3 mg/m3	Time Weighted Average (TWA):	Respirable dust.	MX OEL

9. PHYSICAL AND CHEMICAL PROPERTIES

Form	: liquid	Evaporation rate	: negligible
Appearance	: viscous	Specific Gravity	: > 1
Colour	: YELLOW	Bulk density	: not applicable
Odour	: mild	Vapour pressure	: <0.04 mm Hg @ 20°C
Melting point/range	: no data available	Vapour density	: Heavier than air.
Boiling Point:	: Not established	pH	: no data available
Water solubility	: slightly soluble		

10. STABILITY AND REACTIVITY

Stability	: Stable
Hazardous Polymerization	: Will not occur.
Conditions to avoid	: Heating the product above 212 °F (100 °C) in the presence of air may result in the formation of aldehydes. Product reacts exothermically with isocyanates.
Incompatible Materials	: Strong acids and strong bases
Hazardous decomposition products	: Carbon dioxide (CO ₂), carbon monoxide (CO), oxides of nitrogen (NO _x), other hazardous materials, and smoke are all possible.

11. TOXICOLOGICAL INFORMATION

This mixture has not been evaluated as a whole for health effects. Exposure effects listed are based on existing health data for the individual components which comprise the mixture.

Toxicity Overview

This product contains the following components which in their pure form have the following characteristics:

POLYONE CORPORATION

MATERIAL SAFETY DATA SHEET

RX-32004-B EPOXY HARDENER

Version Number 1.3

Revision Date 02/09/2012

Page 5 of 7

Print Date 2/10/2012

CAS-No.	Chemical Name	Effect	Target Organ
112-24-3	Triethylenetetramine	Corrosive	Skin.
		Toxic	Refer to LC50 / LD50 Data on MSDS..
1332-58-7	Kaolin	Systemic effects	Respiratory system, digestive system.
112945-52-5	Silica, amorphous, fumed, crystal-free	Irritant	Eyes, Respiratory system.

LC50 / LD50

This product contains the following components which, in their pure form, have the following toxicity data:

CAS-No.	Chemical Name	Route	Value	Species
112-24-3	Triethylenetetramine	Oral LD50	1,600 mg/kg	rabbit
		Dermal LD50	805 mg/kg	rabbit
1332-58-7	Kaolin	Oral LD50	5,000 mg/kg	rat
		Dermal LD50	5,000 mg/kg	rat
112945-52-5	Silica, amorphous, fumed, crystal-free	Oral LD50	3,160 mg/kg	rat

12. ECOLOGICAL INFORMATION

Persistence and degradability : no data available

Environmental Toxicity : no data available

Bioaccumulation Potential : Does not bioaccumulate.

Additional advice : no data available

13. DISPOSAL CONSIDERATIONS

Product : Where possible recycling is preferred to disposal or incineration. The generator of waste material has the responsibility for proper waste classification, transportation and disposal in accordance with applicable federal, state/provincial and local regulations.

Contaminated packaging : Recycling is preferred when possible. The generator of waste material has the responsibility for proper waste classification, transportation and disposal in accordance with applicable federal, state/provincial and local regulations.

14. TRANSPORT INFORMATION

U.S. DOT Classification : Refer to specific regulation.

ICAO/IATA : Refer to specific regulation.

IMO/IMDG (maritime) : Refer to specific regulation.

POLYONE CORPORATION

MATERIAL SAFETY DATA SHEET

RX-32004-B EPOXY HARDENER

Version Number 1.3
Revision Date 02/09/2012

Page 6 of 7
Print Date 2/10/2012

15. REGULATORY INFORMATION

US Regulations:

OSHA Status : Classified as hazardous based on components.
TSCA Status : All components of this product are listed on or exempt from the TSCA Inventory.

US. EPA CERCLA Hazardous Substances (40 CFR 302)

not applicable

California Proposition : Not applicable
65

SARA Title III Section 302 Extremely Hazardous Substance

Unless specific chemicals are identified under this section, this product is Not Applicable under this regulation

SARA Title III Section 313 Toxic Chemicals:

Unless specific chemicals are identified under this section, this product is Not Applicable under this regulation

Canadian Regulations:

National Pollutant Release Inventory (NPRI)

not applicable

WHMIS Classification : D1B

WHMIS Ingredient Disclosure List

CAS-No.
112-24-3

DSL : All components of this product are on the Canadian Domestic Substances List (DSL) or are exempt.

National Inventories:

Australia AICS : Not determined

POLYONE CORPORATION

MATERIAL SAFETY DATA SHEET

RX-32004-B EPOXY HARDENER

Version Number 1.3

Revision Date 02/09/2012

Page 7 of 7

Print Date 2/10/2012

China IECS : Not determined
Europe EINECS : Not determined
Japan ENCS : Not determined
Korea KECI : Not determined
Philippines PICCS : Not determined

16. OTHER INFORMATION

The information provided in this 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.