

EL HENERAL EPXY
 Revision Number 1

Revision Date 08-Oct-2018
 Supersedes Date: 08-Oct-2018

Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product Identifier

Product Name EL HENERAL EPXY
Pure substance/mixture Mixture

1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended use resin.
Uses advised against No information available.

1.3. Details of the supplier of the safety data sheet

Company Name
 Bostik (Shanghai) Management Co., Ltd
 Building 1, No.968 Guanghai Road, Minhang District
 Shanghai, China
 Tel: 021-60763101
 Fax: 021-60763133

Manufacturer
 Bostik Philippines, Inc.
 35/F Raffles Corporate Center,
 F. Ortigas Jr. Road
 Ortigas Business Center,
 Pasig city, Philippines
 Tel: 632-900-5656
 Fax: 632-900-5622

See section 16 for more information.

1.4. Emergency telephone number

Emergency Telephone 0532-8388 9090 (China only)
E-mail address SDS.AP@Bostik.com

Section 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Skin corrosion/irritation	Category 2 (6.3A)
Serious eye damage/eye irritation	Category 2B (6.4A °)
Skin sensitization	Category 1 (6.5B)
Acute aquatic toxicity	Category 2 (9.1D)
Chronic aquatic toxicity	Category 2 (9.1B)

ERMA Group Not applicable

2.2. Label Elements



Signal word WARNING

Hazard statements

H315 - Causes skin irritation
 H317 - May cause an allergic skin reaction
 H320 - Causes eye irritation
 H411 - Toxic to aquatic life with long lasting effects

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Precautionary Statements - Prevention

P264 - Wash face, hands and any exposed skin thoroughly after handling
P280 - Wear protective gloves/protective clothing/eye protection/face protection
P261 - Avoid breathing dust/fume/gas/mist/vapors/spray
P272 - Contaminated work clothing should not be allowed out of the workplace
P273 - Avoid release to the environment

Precautionary Statements - Response

P321 - Specific treatment (see supplemental first aid instructions on this label)

Skin

P302 + P352 - IF ON SKIN: Wash with plenty of soap and water
P362 - Take off contaminated clothing and wash before reuse
P333 + P313 - If skin irritation or rash occurs: Get medical advice/attention

Eyes

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P337 + P313 - If eye irritation persists: Get medical advice/attention

Spill

P391 - Collect spillage

Precautionary Statements - Disposal

P501 - Dispose of contents/ container to an approved waste disposal plant

2.3. Other Hazards

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Mixture

3.2 Mixtures

Chemical Name	CAS No.	Weight-%
Bisphenol-A-Epichlorhydrin Epoxy resin <= 700 MW	25068-38-6	10 - 20

*** Any remaining ingredients are not hazardous

Section 4: FIRST AID MEASURES

4.1. Description of first aid measures

General Advice	Remove/Take off immediately all contaminated clothing. If medical advice is needed, have product container or label at hand.
Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
Skin contact	Wash off immediately with soap and plenty of water. Get medical attention if symptoms occur.
Eye contact	Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Hold eyelids apart and consult an physician.
Ingestion	If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label. If swallowed, rinse mouth with water (only if the person is conscious).
Self-Protection of the First Aider	First aider: Pay attention to self-protection!.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms	Repeated or prolonged skin contact may cause skin irritation and/or dermatitis and sensitization in susceptible persons.
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4.3. Indication of any immediate medical attention and special treatment needed

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Note to physicians None.

4.4. Reference to Other Sections

Reference to other sections Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION. Section 11: TOXICOLOGY INFORMATION.

Section 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing media

Suitable Extinguishing Media Carbon dioxide (CO₂). Extinguishing powder. Water spray or fog. Alcohol resistant foam.

Unsuitable Extinguishing Media No information available.

5.2. Special hazards arising from the substance or mixture

Specific Hazards Arising from the Chemical Thermal decomposition can lead to release of toxic/corrosive gases and vapors. Carbon monoxide. Carbon dioxide (CO₂). Nitrogen oxides (NO_x).

5.3. Advice for firefighters

Special Protective Equipment for Fire-fighters In case of fire: Wear self-contained breathing apparatus. Do not allow run-off from fire-fighting to enter drains or water courses.

Section 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Personal Precautions Use personal protection equipment. Avoid contact with skin, eyes or clothing.

6.2. Environmental precautions

Environmental Precautions Prevent entry into waterways, sewers, basements or confined areas. Do not allow to enter into soil/subsoil. See Section 12 for additional Ecological Information.

6.3. Methods and material for containment and cleaning up

Methods for Containment Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see Section 13).

Methods for cleaning up With clean shovel place material into clean, dry container and cover loosely; move containers from spill area. Take up with sand or other non-combustible absorbent material and place into containers for later disposal. Cover liquid spill with sand, earth or other non-combustible absorbent material. Cover powder spill with plastic sheet or tarp to minimize spreading.

6.4. Reference to other sections

Reference to other sections Section 7: HANDLING AND STORAGE
Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION
Section 13: DISPOSAL CONSIDERATIONS

Section 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Advice on safe handling Use only in well-ventilated areas. Avoid contact with skin, eyes or clothing. Use personal protective equipment as required. Special precautions. Please refer also to Safety Data Sheet of Part B. For application method and dose rate, refer to the technical data sheet. Important: Do not leave mixed material in the container - curing in bulk can lead to excessive heat. No special fire protection measures are necessary.

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7.2. Conditions for safe storage, including any incompatibilities

General Hygiene Considerations	Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Avoid contact with skin, eyes or clothing. Take off contaminated clothing and wash before reuse.
Storage Conditions	Keep away from food, drink and animal feeding stuffs. Keep containers tightly closed in a dry, cool and well-ventilated place.
Incompatible Materials	Exothermic reaction with Amines Alcohols

7.3. Specific end use(s)

Specific Use(s)	Resin.
Other Information	No information available.

7.4. References to Other Sections

Reference to other sections	Section 13: DISPOSAL CONSIDERATIONS. Section 10: STABILITY AND REACTIVITY.
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Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Exposure Limits

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies

Derived No Effect Level (DNEL) No information available

Predicted No Effect Concentration (PNEC) No information available

OTHER INFORMATION No information available

8.2. Exposure controls

Engineering Controls Provide local exhaust ventilation. in the case of spray application. Please refer also to Safety Data Sheet of Part B.

PPE - Personal Protection Equipment

Eye/Face Protection	Wear safety glasses with side shields (or goggles).
Skin and Body Protection	Wear suitable protective clothing. No special technical protective measures are necessary under normal conditions.
Hand Protection	Wear suitable chemical resistant gloves. The selection of suitable gloves does not only depend on the material, but also on further marks of quality and various manufacturers.
Respiratory Protection	No protective equipment is needed under normal use conditions. Respiratory protection required in insufficiently ventilated working areas and during spraying. An air-fed mask, or for short periods of work, a combination of professional filter is recommended.
General Hygiene Considerations	Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Avoid contact with skin, eyes or clothing. Take off contaminated clothing and wash before reuse.

Environmental Exposure Controls Do not allow uncontrolled discharge of product into the environment.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance viscous

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Color	Multiple Colors
Odor	Odorless
Odor Threshold	Not applicable

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	No data available	
Melting point / freezing point	No information available	
Boiling point / boiling range	No information available	
Flash Point	No information available	
Evaporation Rate	No information available	
Flammability (solid, gas)	No information available	
Flammability Limit in Air		
Upper flammability or explosive limits	No information available	
Lower flammability or explosive limits	No information available	
Vapor Pressure	No information available	
Vapor Density	No information available	
Relative Density	No information available	
Water Solubility	No information available	
Solubility in Other Solvents	No information available	
Partition coefficient	No information available	
Autoignition Temperature	No information available	
Decomposition Temperature	No information available	
Kinematic Viscosity	No information available	
Dynamic Viscosity	No information available	
Explosive Properties	No information available	
Oxidizing Properties	No information available	

9.2. Other information

Softening Point	No information available
Molecular Weight	No information available
Solvent content (%)	No information available
Solid content (%)	No information available
Density	No information available
Bulk Density	No information available
VOC (volatile organic compound)	

Section 10: STABILITY AND REACTIVITY

10.1. Reactivity

Reactivity	None under normal use conditions.
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10.2. Chemical stability

Stability	Stable under normal conditions
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10.3. Possibility of hazardous reactions

Possibility of Hazardous Reactions	After mixing the two components, the curing reaction starts. In bulk this reaction can be vigorous.
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Hazardous Polymerization	None under normal processing.
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10.4. Conditions to avoid

Conditions to avoid	None known based on information supplied.
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10.5. Incompatible materials

Incompatible Materials	Exothermic reaction with. Amines. Alcohols.
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10.6. Hazardous decomposition products

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Hazardous decomposition products None under normal use conditions.

Section 11: TOXICOLOGY INFORMATION

11.1. Information on toxicological effects

Acute Toxicity

Product Information Product does not present an acute toxicity hazard based on known or supplied information.

Inhalation No data available.
Eye contact No data available.
Skin contact No data available.
Ingestion No data available.

Numerical measures of toxicity

Unknown acute toxicity

- 1.98E-06 % of the mixture consists of ingredient(s) of unknown acute oral toxicity
- 58.62573198 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity
- 1.98E-06 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)
- 1.98E-06 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)
- 1.98E-06 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Bisphenol-A-Epichlorhydrin Epoxy resin <= 700 MW 25068-38-6	LD50 (rat) > 2000 mg/kg OECD 420	>2000 mg/Kg (rat)	-

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

Skin corrosion/irritation Irritant effect on the skin.
Serious eye damage/eye irritation Irritant effect on the eyes.
Sensitization May cause sensitization by skin contact. People who suffer from skin sensitization problems, asthma, allergies, chronic or recurring respiratory illnesses should not be deployed in any process using this preparation.

Germ Cell Mutagenicity No information available.
Reproductive Toxicity No information available.
STOT - single exposure No information available.
STOT - repeated exposure No information available.
Target Organ Effects Central Vascular System (CVS), Eyes, Respiratory system, Skin.
Aspiration hazard Not applicable.
Carcinogenicity No information available.

IARC (International Agency for Research on Cancer) *Group 2B - Possibly Carcinogenic to Humans Group 3 - Not Classifiable as to Carcinogenicity in Humans*

Section 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Ecotoxicity

Product Information

Toxic to aquatic life with long lasting effects.

Component Information

Data obtained on the component(s) include

Chemical Name	Algae/aquatic plants	Fish	Crustacea
Bisphenol-A-Epichlorhydrin Epoxy resin <= 700 MW	EC50 (72h) = 9.4 mg/L (Scenedesmus capricornutum)	1.2 mg/l 96Hr (Oncorhynchus mykiss)	2.7 mg/l 48hr Daphia Magna

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25068-38-6	EPA-660/3-75-009		
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12.2. Persistence and degradability

No information available.

12.3. Bioaccumulative potential

No information available.

12.4. Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

Chemical Name	PBT and vPvB assessment
Bisphenol-A-Epichlorhydrin Epoxy resin <= 700 MW	The substance is not PBT / vPvB

12.6. Other adverse effects

No information available.

Endocrine Disruptor Information

Chemical Name	EU - Endocrine Disruptors Candidate List	EU - Endocrine Disruptors - Evaluated Substances	Endocrine disrupting potential
Bisphenol-A-Epichlorhydrin Epoxy resin <= 700 MW	Group III Chemical	-	-

Section 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste from Residues/Unused Products Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated Packaging Handle contaminated packages in the same way as the product itself.

Section 14: TRANSPORT INFORMATION

IMDG

UN Number UN3077
Proper Shipping Name Environmentally hazardous substance, solid, n.o.s. (Bisphenol-A-Epichlorhydrin Epoxy resin <= 700 MW), Marine Pollutant
Transport hazard class(es) 9
Packing Group III
Marine Pollutant P
EmS-No. F-A, S-F
Special Provisions 274, 335, 966, 967, 969
Limited Quantity (LQ) 5 kg
Description UN3077, Environmentally hazardous substance, solid, n.o.s. (Bisphenol-A-Epichlorhydrin Epoxy resin <= 700 MW), 9, III, Marine Pollutant

IATA

UN Number UN3077
Proper Shipping Name Environmentally hazardous substance, solid, n.o.s. (Bisphenol-A-Epichlorhydrin Epoxy resin <= 700 MW)
Transport hazard class(es) 9
Packing Group III
ERG Code 9L
Limited Quantity (LQ) 30 kg G
Special Provisions A158, A179, A97, A197

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Description UN3077, Environmentally hazardous substance, solid, n.o.s.
(Bisphenol-A-Epichlorhydrin Epoxy resin <= 700 MW), 9, III

ADR

UN Number UN3077
Proper Shipping Name Environmentally hazardous substance, solid, n.o.s. (Bisphenol-A-Epichlorhydrin Epoxy resin <= 700 MW)
Transport hazard class(es) 9
Labels 9
Packing Group III
Description UN3077, Environmentally hazardous substance, solid, n.o.s.
(Bisphenol-A-Epichlorhydrin Epoxy resin <= 700 MW), 9, III
Environmental hazards Yes
Limited Quantity (LQ) 5 kg
Special Provisions 274, 335, 601, 375
Classification Code M7

Section 15: REGULATORY INFORMATION

X - Present

National Regulations

China

Not applicable

Japan

Not applicable

Korea

Chemicals Control Act (CCA)

This product contains the following substance(s)

Chemical Name	Weight-%	Toxic substance	Prohibited substance	Restricted substance	Chemicals Control Act (CCA) - Accident Precaution Chemicals	Existing substances subject to registration
Bisphenol-A-Epichlorhydrin Epoxy resin <= 700 MW 25068-38-6	10 - 20					X

Industrial Safety and Health Law

Not applicable

Safety Control of Dangerous Substances Act

Not applicable

Korea - MOE - Waste Control Act - Hazardous Substances in Controlled Waste

Not applicable

International Regulations

Europe

Restrictions of Use of Hazardous Substances (RoHS) Directive 2011/65/EU

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This product does not contain Lead (7439-92-1), Cadmium (7440-43-9), Mercury (7439-97-6), Hexavalent chromium (7440-47-3), Polybrominated biphenyls (PBB), and Polybrominated diphenyl ethers (PBDE) above the regulated limit mentioned in this regulation

EU-REACH (1907/2006) - Candidate List of Substances of Very High Concern (SVHC) for Authorization in accordance with Article 59

This product does not contain candidate substances of very high concern at a concentration $\geq 0.1\%$ (Regulation (EC) No. 1907/2006 (REACH), Article 59)

Section 16: OTHER INFORMATION

Local Contacts

Bostik Korea, Ltd.
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Jakarta Indonesia 12920
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Enconomic Development Zone
Jiangsu Province 215536
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Fax: 0086-512-52266020

Bostik Findley (China) Adhesive Ltd
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Tel: 020-8297 5266
Fax: 020-8297 5277

ABN: 79 003 893 838

Bostik New Zealand Limited
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Lower Hutt, New Zealand
Tel: 04-567 5119
Fax: 04-567 5412

Chronic Hazard Star Legend

** = Chronic Health Hazard*

Key or legend to abbreviations and acronyms used in the safety data sheet

TWA (time-weighted average)
STEL (Short Term Exposure Limit)
LD50 (lethal dose)
EC50 (effective concentration)

Key Literature References and Sources for Data

No information available

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Prepared By	Product Safety & Regulatory Affairs
Revision Date	08-Oct-2018
Revision Note	Not applicable.
Training Advice	When working with hazardous materials, regular training of operators is required by law

Disclaimer

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.

End of Safety Data Sheet