

Safety Data Sheet

acc. to OSHA HCS

Printing date 03/04/2013

Reviewed on 03/04/2013

1 Identification of the substance/mixture and of the company/undertaking

- **Product identifier**

- **Trade name:** EP21LVMed (Part-A)

- **Article number:** Epoxy resin

- **Relevant identified uses of the substance or mixture and uses advised against**

Recommended use - Adhesives, Sealants, Coatings

- **Details of the supplier of the safety data sheet**

- **Manufacturer/Supplier:**

Master Bond Inc.

154 Hobart Street

USA-Hackensack, NJ 07601

Phone: 201-343-8983

- **Information department:**

Product safety department

Emergency phone number : (CHEMTREC)

(North America) : 800-424-9300

(International) : 703-527-3887



2 Hazards identification

- **Classification of the substance or mixture**

Skin Irrit. 2 H315 Causes skin irritation.

Skin Sens. 1A H317 May cause an allergic skin reaction.

STOT SE 3 H335 May cause respiratory irritation.

Eye Irrit. 2B H320 Causes eye irritation.

- **Label elements**

- **GHS label elements** The product is classified and labelled according to the Globally Harmonized System (GHS).

- **Hazard pictograms**



GHS07

- **Signal word** Warning

- **Hazard statements**

Causes skin irritation.

Causes eye irritation.

May cause an allergic skin reaction.

May cause respiratory irritation.

- **Precautionary statements**

Do not breathe dust/fume/gas/mist/vapours/spray.

Wear protective gloves/protective clothing/eye protection/face protection.

Do not get in eyes, on skin, or on clothing.

Wash thoroughly after handling.

Use only outdoors or in a well-ventilated area.

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Trade name: EP21LVMed (Part-A)

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· **Classification system:**· **NFPA ratings (scale 0 - 4)**· **HMIS-ratings (scale 0 - 4)**

HEALTH	2	Health = *2
FIRE	1	Fire = 1
REACTIVITY	0	Reactivity = 0

3 Composition/information on ingredients

· **Chemical characterization: Mixtures**· **Description:** Mixture of the substances listed below with nonhazardous additions.· **Hazardous components:**

Epoxy resin (CAS no. 25068-38-6)	50-100%
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· **Main Components:**

Epoxy resin (CAS no. 25068-38-6)	50-100%
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4 First aid measures

· **Description of first aid measures**· **After inhalation:**

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

· **After skin contact:** Immediately wash with water and soap and rinse thoroughly.· **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.· **After swallowing:** Do not induce vomiting; immediately call for medical help.

5 Firefighting measures

· **Extinguishing media**· **Suitable extinguishing agents:** Use fire fighting measures that suit the environment.· **Advice for firefighters**· **Protective equipment:** Wear personal protective equipments.

6 Accidental release measures

· **Personal precautions, protective equipment and emergency procedures** Wear protective equipment.· **Environmental precautions:** Do not allow product to reach sewage system or any water course.· **Methods and material for containment and cleaning up:**

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

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Trade name: EP21LVMed (Part-A)

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7 Handling and storage

- **Handling:**
- **Precautions for safe handling** Ensure good ventilation/exhaustion at the workplace.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No information available.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep receptacle tightly sealed.

8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Control parameters**
- **Components with limit values that require monitoring at the workplace:**
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Additional information:** The lists that were valid during the creation were used as basis.
- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing.
Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.
- **Breathing equipment:** Use suitable respiratory protective device in case of insufficient ventilation.
- **Protection of hands:**



Protective gloves

- **Material of gloves** Chemical resistant gloves.
- **Eye protection:**



Safety glasses recommended.

9 Physical and chemical properties

- **Information on basic physical and chemical properties**
- **General Information**
- **Appearance:**

Form:	Viscous liquid
Color:	Clear
Odor:	Not available
- **Change in condition**

Melting point/Melting range:	Not available
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Trade name: **EP21LVMed (Part-A)**

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Boiling point/Boiling range:	261 °C (502 °F)
· Flash point:	251 °C (484 °F)
· Danger of explosion:	Not available
· Density:	1.17 g/cm ³ (9.764 lbs/gal)
· Solubility in / Miscibility with Water:	Insoluble.

10 Stability and reactivity

- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** Carbon monoxide

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** No information available
- **on the eye:** No information available
- **Sensitization:** No data available
- **Additional toxicological information:**
The product shows the following dangers according to internally approved calculation methods for preparations:
Harmful
- **Carcinogenic categories**

- **IARC (International Agency for Research on Cancer)**

None of the ingredients is listed.

- **NTP (National Toxicology Program)**

None of the ingredients is listed.

12 Ecological information

- **Additional ecological information:**
- **General notes:** Generally not hazardous for water
- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

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Trade name: EP21LVMed (Part-A)

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- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

- **UN-Number**
- **DOT, ADR, IMDG, IATA :** Not regulated
- **UN proper shipping name**
- **DOT, ADR, IMDG, IATA :** Not regulated
- **Transport hazard class(es)**
- **DOT, ADR, IMDG, IATA :** Not regulated
- **Packing group**
- **DOT, ADR, IMDG, IATA :** Not regulated

15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Sara**

- **Section 355 (extremely hazardous substances):**

None of the ingredients is listed.

- **Section 313 (Specific toxic chemical listings):**

None of the ingredients is listed.

- **TSCA (Toxic Substances Control Act):**

All ingredients are listed.

- **Proposition 65**

- **Chemicals known to cause cancer:**

None of the ingredients is listed.

- **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

- **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

- **Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

- **Carcinogenic categories**

- **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

- **TLV (Threshold Limit Value established by ACGIH)**

None of the ingredients is listed.

- **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

- **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

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Trade name: **EP21LVMed (Part-A)**

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- **GHS label elements** The product is classified and labelled according to the Globally Harmonized System (GHS).
- **Hazard pictograms**



GHS07

- **Signal word** Warning

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Department issuing MSDS:** Product safety department

- **Contact:** Master Bond Inc.

- **Abbreviations and acronyms:**

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organization

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

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1 Identification of the substance/mixture and of the company/undertaking

- **Product identifier**

- **Trade name:** EP21LVMed (Part-B)



- **Article number:** Curing agent

- **Relevant identified uses of the substance or mixture and uses advised against**
Recommended use - Adhesives, Sealants, Coatings

- **Details of the supplier of the safety data sheet**

- **Manufacturer/Supplier:**

Master Bond Inc.
154 Hobart Street
USA-Hackensack, NJ 07601
Phone: 201-343-8983

- **Information department:**

Product safety department

Emergency phone number : (CHEMTREC)
(North America) : 800-424-9300
(International) : 703-527-3887

2 Hazards identification

- **Classification of the substance or mixture**

Acute Tox. 4 H302 Harmful if swallowed.

Acute Tox. 4 H312 Harmful in contact with skin.

Skin Irrit. 2 H315 Causes skin irritation.

Skin Sens. 1A H317 May cause an allergic skin reaction.

STOT SE 3 H335 May cause respiratory irritation.

Eye Irrit. 2B H320 Causes eye irritation.

- **Label elements**

- **GHS label elements**

The substance is classified and labelled according to the Globally Harmonized System (GHS).

- **Hazard pictograms**



GHS07

- **Signal word** Warning

- **Hazard statements**

Harmful if swallowed.

Harmful in contact with skin.

Causes skin irritation.

Causes eye irritation.

May cause an allergic skin reaction.

May cause respiratory irritation.

- **Precautionary statements**

Do not breathe dust/fume/gas/mist/vapours/spray.

Wear protective gloves/protective clothing/eye protection/face protection.

Do not get in eyes, on skin, or on clothing.

Wash thoroughly after handling.

Use only outdoors or in a well-ventilated area.

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Trade name: EP21LVMed (Part-B)

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· **Classification system:**· **NFPA ratings (scale 0 - 4)**· **HMIS-ratings (scale 0 - 4)**

3 Composition/information on ingredients

· **Description:** Mixture of the substances listed below with nonhazardous additions.· **Hazardous components:**

Polyamide resin (CAS no. 68410-23-1,112-24-3)	50-100%
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· **Main Components:**

Polyamide resin (CAS no. 68410-23-1,112-24-3)	50-100%
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4 First aid measures

· **Description of first aid measures**· **After inhalation:**

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

· **After skin contact:** Immediately wash with water and soap and rinse thoroughly.· **After eye contact:**

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· **After swallowing:** Do not induce vomiting; immediately call for medical help.

5 Firefighting measures

· **Extinguishing media**· **Suitable extinguishing agents:** Use fire fighting measures that suit the environment.· **Advice for firefighters**· **Protective equipment:** Wear personal protective equipments.

6 Accidental release measures

· **Personal precautions, protective equipment and emergency procedures** Wear protective equipment.· **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.· **Methods and material for containment and cleaning up:**

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

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Trade name: EP21LVMed (Part-B)

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7 Handling and storage

- **Handling:**
- **Precautions for safe handling** Ensure good ventilation/exhaustion at the workplace.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No information available.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep receptacle tightly sealed.

8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Control parameters**
- **Components with limit values that require monitoring at the workplace:**
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

· **Additional Occupational Exposure Limit Values for possible hazards during processing:**

112-24-3 3,6-diazaoctanethylenediamin

WEEL	6 mg/m ³ , 1 ppm
	Skin

- **Additional information:** The lists that were valid during the creation were used as basis.
- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing.
Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.
- **Breathing equipment:** Use suitable respiratory protective device in case of insufficient ventilation.
- **Protection of hands:**



Protective gloves

- **Material of gloves** Chemical resistant gloves.
- **Eye protection:**



Safety glasses recommended.

USA

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Trade name: EP21LVMed (Part-B)

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9 Physical and chemical properties

- **Information on basic physical and chemical properties**

- **General Information**

- **Appearance:**

Form: Viscous liquid
Color: Reddish-brown
Odor: Amine-like

- **Change in condition**

Melting point/Melting range: Not available
Boiling point/Boiling range: Not available

- **Flash point:** 221 °C (430 °F)

- **Danger of explosion:** Not available

- **Density:** 0.97 g/cm³ (8.095 lbs/gal)

- **Solubility in / Miscibility with**

Water: Insoluble.

10 Stability and reactivity

- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** Carbon monoxide

11 Toxicological information

- **Information on toxicological effects**

- **Acute toxicity:**

- **LD/LC50 values that are relevant for classification:**

112-24-3 3,6-diazaoctanethylenediamin

Oral LD50 2500 mg/kg (rat)

Dermal LD50 805 mg/kg (rabbit)

- **Primary irritant effect:**

- **on the skin:** Can cause skin irritation.

- **on the eye:** Can cause eye irritation.

- **Sensitization:** May cause sensitization by skin contact.

- **Additional toxicological information:**

The product shows the following dangers according to internally approved calculation methods for preparations:
Harmful

- **Carcinogenic categories**

- **IARC (International Agency for Research on Cancer)**

None of the ingredients is listed.

- **NTP (National Toxicology Program)**

None of the ingredients is listed.

USA

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Trade name: EP21LVMed (Part-B)

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12 Ecological information

- **Additional ecological information:**

- **General notes:**

Water hazard class 1 (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**

- **Recommendation:**

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

- **Uncleaned packagings:**

- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

- **UN-Number**

· DOT, ADR, IMDG, IATA : Not regulated

- **UN proper shipping name**

· DOT, ADR, IMDG, IATA : Not regulated

- **Transport hazard class(es)**

· DOT, ADR, IMDG, IATA : Not regulated

- **Packing group**

· DOT, ADR, IMDG, IATA : Not regulated

15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**

- **Sara**

- **Section 355 (extremely hazardous substances):**

None of the ingredients is listed.

- **Section 313 (Specific toxic chemical listings):**

None of the ingredients is listed.

- **TSCA (Toxic Substances Control Act):**

All ingredients are listed.

- **Proposition 65**

- **Chemicals known to cause cancer:**

None of the ingredients is listed.

- **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

- **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

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Trade name: **EP21LVMed (Part-B)**

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· **Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

· **Carcinogenic categories**· **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

· **TLV (Threshold Limit Value established by ACGIH)**

None of the ingredients is listed.

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

· **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

· **GHS label elements**

The substance is classified and labelled according to the Globally Harmonized System (GHS).

· **Hazard pictograms**

GHS07

· **Signal word** Warning

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Department issuing MSDS:** Product safety department· **Contact:** Master Bond Inc.· **Abbreviations and acronyms:**

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organization

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)