Printing date 06/19/2015 Reviewed on 06/19/2015

1 Identification

- · Product identifier
- · Trade name: EP126 (Part-A)
- · Article number: Epoxy resin blend
- · 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

 ${\it Emergency phone number: (CHEMTREC)}$

(North America): 800-424-9300 (International): 703-527-3887

2 Hazard(s) identification

· Classification of the substance or mixture

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2A H319 Causes serious eye irritation.

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

STOT SE 3 H335 May cause respiratory irritation.

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



- · Signal word Warning
- · Hazard statements

Causes skin irritation.

Causes serious eye irritation.

May cause an allergic skin reaction.

May cause respiratory irritation.

· Precautionary statements

Avoid breathing mist/vapours/spray.

Wear protective gloves / eye protection / face protection.

Wash thoroughly after handling.

Use only outdoors or in a well-ventilated area.

Contaminated work clothing must not be allowed out of the workplace.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If swallowed: Call a poison center/doctor if you feel unwell.

If skin irritation or rash occurs: Get medical advice/attention.

If eye irritation persists: Get medical advice/attention.

If on skin: Wash with plenty of soap and water.

(Contd. on page 2)

Printing date 06/19/2015 Reviewed on 06/19/2015

Trade name: EP126 (Part-A)

(Contd. of page 1)

Take off immediately all contaminated clothing and wash it before reuse.

Store in a closed container.

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



Health = 2Fire = 1Reactivity = 0

· HMIS-ratings (scale 0 - 4)



Health = *2Fire = 1

3 Composition/information on ingredients

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

· Hazardous components:	
Epoxy resin (CAS no. 25068-38-6)	50-100%
Aluminum powder (CAS no. 7429-90-5)	25-50%
Flexibilizer epoxy resin (CAS no. Trade secret, 68610-41-3)	1-10%
· Main Components:	
Epoxy resin (CAS no. 25068-38-6)	50-100%
Aluminum powder (CAS no. 7429-90-5)	25-50%
Flexibilizer epoxy resin (CAS no. Trade secret, 68610-41-3)	1-10%
Silicon dioxide, chemically prepared (CAS no. 112945-52-5)	< 2.5%

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.

Seek medical treatment.

· After skin contact:

Immediately wash with water and soap and rinse thoroughly.

Seek medical treatment.

· After eye contact:

Rinse opened eye for several minutes under running water. Then consult a doctor.

Seek medical treatment.

· After swallowing:

Do not induce vomiting; immediately call for medical help.

Seek medical treatment.

Printing date 06/19/2015 Reviewed on 06/19/2015

Trade name: EP126 (Part-A)

(Contd. of page 2)

5 Fire-fighting measures

- · Extinguishing media
- · Suitable extinguishing agents:

CO2, sand, extinguishing powder. Do not use water.

Use fire fighting measures that suit the environment.

- · For safety reasons unsuitable extinguishing agents: Water
- · 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.

Inform respective authorities in case of seepage into water course or sewage system.

· Methods and material for containment and cleaning up:

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

Do not flush with water or aqueous cleansing agents

7 Handling and storage

- · Handling:
- · Precautions for safe handling Ensure good ventilation/exhaustion at the workplace.
- · Information about protection against explosions and fires: Protect against electrostatic charges.
- · 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.

Store in cool, dry conditions in well sealed receptacles.

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.

(Contd. on page 4)

Printing date 06/19/2015 Reviewed on 06/19/2015

Trade name: EP126 (Part-A)

(Contd. of page 3)

- · Breathing equipment: Use suitable respiratory protective device in case of insufficient ventilation.
- · Protection of hands:



Protective gloves

- · Material of gloves Chemical resistant gloves.
- · Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection:

Evaporation rate

Water:

· Solubility in / Miscibility with



Safety glasses recommended.

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7 I ligiteat alla citetiteat properti		
· Information on basic physical and chemical properties · General Information		
· Appearance:		
Form:	Flowable	
Color:	Grey	
· Odor:	Odorless	
· Odour threshold:	Not available	
· pH-value:	Not available	
· Change in condition		
Melting point/Melting range:	Not available	
Boiling point/Boiling range:	Not available	
	N . 9.11	
· Flash point:	Not available	
· Flammability (solid, gaseous):	Not available	
· Ignition temperature:		
Decomposition temperature:	Not available	
· Auto igniting:	Not available	
· Danger of explosion:	Not available	
· Explosion limits:		
Lower:	Not available	
Upper:	Not available	
· Vapor pressure:	Not available	
· Density:		
Relative density at 20 °C (68 °F)	1.27 g/cm3	
Vapour density	Not available	
, wpour wousing	110 Williams	

Not available

Insoluble.

(Contd. on page 5)

Printing date 06/19/2015 Reviewed on 06/19/2015

Trade name: EP126 (Part-A)

(Contd. of page 4)

· Partition coefficient (n-octanol/water): Not available

· Viscosity:

Dynamic:Not availableKinematic:Not available

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:

25068-38-6 bisphenol-A-(epichlorohydrin) epoxy resin

 Oral
 LD50
 11.400 mg/kg (rat)

 Dermal
 LD50
 2000 mg/kg (rat)

- · Primary irritant effect:
- · on the skin: Causes skin irritation.
- · on the eye: Severe eye irritant.
- · Sensitization: May cause allergic skin reaction.
- · 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)

Substance is not listed

· NTP (National Toxicology Program)

None of the ingredients is listed.

· OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

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.

Printing date 06/19/2015 Reviewed on 06/19/2015

Trade name: EP126 (Part-A)

(Contd. of page 5)

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.

· Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

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

None of the ingredients is listed.

(Contd. on page 7)

Printing date 06/19/2015 Reviewed on 06/19/2015

Trade name: EP126 (Part-A)

(Contd. of page 6)

· 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.

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



· 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 SDS: Product safety department
- · Contact: Master Bond Inc.
- · Date of preparation / last revision 06/19/2015 / -
- · Abbreviations and acronyms:

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

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2

Eye Irrit. 2A: Serious eye damage/eye irritation, Hazard Category 2A

Skin Sens. 1: Sensitisation - Skin, Hazard Category 1

STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3

US

Printing date 06/19/2015 Reviewed on 06/19/2015

1 Identification

- · Product identifier
- · Trade name: EP126 (Part-B)
- · Article number: Curing agent blend
- · 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 Hazard(s) identification

· Classification of the substance or mixture

Acute Tox. 4 H312 Harmful in contact with skin.

Eye Irrit. 2A H319 Causes serious eye irritation.

STOT SE 3 H335 May cause respiratory irritation.

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



GHS07

- · Signal word Warning
- · Hazard statements

Harmful in contact with skin.

Causes serious eye irritation.

May cause respiratory irritation.

· Precautionary statements

Avoid breathing mist/vapours/spray.

Wear protective gloves / eye protection / face protection.

Wash thoroughly after handling.

Use only outdoors or in a well-ventilated area.

Contaminated work clothing must not be allowed out of the workplace.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If swallowed: Call a poison center/doctor if you feel unwell.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

If skin irritation or rash occurs: Get medical advice/attention.

If eye irritation persists: Get medical advice/attention.

If on skin: Wash with plenty of soap and water.

Take off immediately all contaminated clothing and wash it before reuse.

(Contd. on page 2)

(Contd. of page 1)

Safety Data Sheet acc. to OSHA HCS

Printing date 06/19/2015 Reviewed on 06/19/2015

Trade name: EP126 (Part-B)

Store in a closed container.

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



Health = 2Fire = 1Reactivity = 0

· HMIS-ratings (scale 0 - 4)



Health = 2Fire = 1

3 Composition/information on ingredients

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

· Hazardous components:	
Aluminum powder (CAS no. 7429-90-5)	25-50%
4,4'-carbonyldi(phthalic anhydride) (CAS no. 2421-28-5)	25-50%
· Main Components:	
Aluminum powder (CAS no. 7429-90-5)	25-50%
4,4'-carbonyldi(phthalic anhydride) (CAS no. 2421-28-5)	25-50%

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.

Seek medical treatment.

· After skin contact:

Seek medical treatment.

Immediately wash with water and soap and rinse thoroughly.

· After eye contact:

Seek medical treatment.

Rinse opened eye for several minutes under running water. Then consult a doctor.

· After swallowing:

Do not induce vomiting; immediately call for medical help.

Seek medical treatment.

5 Fire-fighting measures

- · Extinguishing media
- · Suitable extinguishing agents: CO2, sand, extinguishing powder. Do not use water.
- · For safety reasons unsuitable extinguishing agents: Water

(Contd. on page 3)

Printing date 06/19/2015 Reviewed on 06/19/2015

Trade name: EP126 (Part-B)

(Contd. of page 2)

- · 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.

Inform respective authorities in case of seepage into water course or sewage system.

· Methods and material for containment and cleaning up:

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

Do not flush with water or aqueous cleansing agents

7 Handling and storage

- · Handling:
- · Precautions for safe handling

Ensure adequate ventilation, especially in confined areas.

Thorough dedusting.

Ensure good ventilation/exhaustion at the workplace.

- · Information about protection against explosions and fires: Protect against electrostatic charges.
- · 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.

Store in cool, dry conditions in well sealed receptacles.

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.

(Contd. on page 4)

Printing date 06/19/2015 Reviewed on 06/19/2015

Trade name: EP126 (Part-B)

· Protection of hands:





Protective gloves

- · Material of gloves Chemical resistant gloves.
- · Penetration time of glove material

· Solubility in / Miscibility with

Water:

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection:



Safety glasses recommended.

Physical and chemical proper	rties
Information on basic physical and	chemical properties
General Information	• •
Appearance:	
Form:	Powder
Color:	Grey
Odor:	Odorless
Odour threshold:	Not available
pH-value:	Not available
Change in condition	
Melting point/Melting range:	Not available
Boiling point/Boiling range:	Not available
Flash point:	Not available
Flammability (solid, gaseous):	Not available
Ignition temperature:	
Decomposition temperature:	Not available
Auto igniting:	Not available
Danger of explosion:	Not available
Explosion limits:	
Lower:	Not available
Upper:	Not available
Vapor pressure:	Not available
Density:	
Relative density	Not available
Vapour density	Not available
Evaporation rate	Not available

Insoluble.

(Contd. on page 5)

Printing date 06/19/2015 Reviewed on 06/19/2015

Trade name: EP126 (Part-B)

(Contd. of page 4)

· Partition coefficient (n-octanol/water): Not available

· Viscosity:

Dynamic: Not available **Kinematic:** Not available

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)

Substance is not listed

· NTP (National Toxicology Program)

None of the ingredients is listed.

· OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

12 Ecological information

- · Additional ecological information:
- · General notes:

Generally not 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.

(Contd. on page 6)

Printing date 06/19/2015 Reviewed on 06/19/2015

Trade name: EP126 (Part-B)

(Contd. of page 5)

- · 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.

· GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).

(Contd. on page 7)

(Contd. of page 6)

Safety Data Sheet acc. to OSHA HCS

Printing date 06/19/2015 Reviewed on 06/19/2015

Trade name: EP126 (Part-B)

· Hazard pictograms



· 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 SDS: Product safety department
- · Contact: Master Bond Inc.
- · Date of preparation / last revision 06/19/2015 / -
- · 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 Organisation

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

 $DOT: \ US \ Department \ of \ Transportation$

 ${\it IATA: International Air Transport Association}$

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

 ${\it HMIS: Hazardous\ Materials\ Identification\ System\ (USA)}$

Acute Tox. 4: Acute toxicity, Hazard Category 4

Eye Irrit. 2A: Serious eye damage/eye irritation, Hazard Category 2A

 $STOT\ SE\ 3:\ Specific\ target\ organ\ toxicity\ -\ Single\ exposure,\ Hazard\ Category\ 3$

US