

EP90

Universal Epoxy Primer, Part B

Prepared in accordance with European Regulation 1907/2006/EC (REACH), 1272/2008/EC (CLP), and GHS

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Trade name: EP90 Universal Epoxy Primer, Part B

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

Application of the substance: Epoxy curing agent

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier: Zest Polyurethanes

Alternator Avenue, Montague Gardens, Cape Town, South Africa, 7441, Tel: +27 (021) 555-3090

Further information obtainable from: The Technical Manager, Zest Polyurethanes. Email: zest@duram.co.za

1.4 Emergency telephone number: The Technical Manager, Zest Polyurethanes, Tel: +27 (021) 555-3090 (GMT 10:00-18:00)

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

GHS08 health hazard

Muta. 2 H341 Suspected of causing genetic defects.

GHS05 corrosion

Skin Corr. 1B H314 Causes severe skin burns and eye damage.

Eye Dam. 1 H318 Causes serious eye damage.

GHS07

Acute Tox. 4 H302 Harmful if swallowed.

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

2.2 Label elements Label according to Directive 67/548/EEC or Directive 1999/45/EC

Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation.

Hazard pictograms



GHS05 GHS07 GHS08

Signal word Danger

Hazard-determining components of labelling:

Cashew (Anacardium occidentale) Nutshell Extract, Decarboxylated, Distilled

m-phenylenebis(methylamine)

phenol

3-aminopropyldimethylamine

· Hazard statements

H302 Harmful if swallowed.
 H314 Causes severe skin burns and eye damage.
 H317 May cause an allergic skin reaction.
 H341 Suspected of causing genetic defects.

· Precautionary statements

P101 If medical advice is needed, have product container or label at hand.
 P102 Keep out of reach of children.
 P103 Read label before use.
 P260 Do not breathe dust/fume/gas/mist/vapours/spray.
 P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P310 Immediately call a POISON CENTER/doctor.
 P405 Store locked up.
 P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· **2.3 Other hazards** Not applicable




· Results of PBT and vPvB assessment



· **PBT:** Not applicable.
 · **vPvB:** Not applicable.

3. COMPOSITION / INFORMATION ON INGREDIENTS

3.1 Chemical characterisation: Mixtures

Description: Mixture of substances listed below with non-hazardous additions

Hazardous ingredients (GHS) according to Regulation (EC) No 1272/2008 [CLP]		
CAS: 8007-24-7 EC number: 700-991-6 Reg.nr.: 01-2119502450-57-0000	Cashew (Anacardium occidentale) Nutshell Extract, Decarboxylated, Distilled Eye Dam. 1, H318; Acute Tox. 4, H302; Acute Tox. 4, H312; Skin Irrit. 2, H315; Skin Sens. 1A,  H317, H226, H312 + H332, H315	17,0 - 23,0%
CAS: 90-72-2 EINECS: 202-013-9 Index number: 603-069-00-0	2,4,6-tris(dimethylaminomethyl)phenol Acute Tox.4, H302; Skin Irrit. 2, H315; Eye Irrit. 2, H319 	~ 4,0%
CAS: 1477-55-0 EINECS: 216-032-5	m-phenylenebis(methylamine) Skin Corr. 1B, H314; Acute Tox. 4, H302; Acute Tox. 4, H332; Skin Sens. 1, H317; Aquatic Chronic 3, H412 	3,0 - 4,0%

CAS: 108-95-2 EINECS: 203-632-7 Index number: 604-001-00-2	phenol Acute Tox. 3, H301; Acute Tox. 3, H311; Acute Tox. 3, H331; Muta. 2, H341; STOT RE 2, H373; Skin Corr. 1B, H314 	
CAS: 109-55-7 EINECS: 203-680-9 Index number: 612-061-00-6	3-aminopropylidimethylamine Flam. Liq. 3, H226; Skin Corr. 1B, H314; Acute Tox. 4, H302; Skin Sens. 1, H317 	

Additional information: For the wording of the listed risk phrases refer to section 16.

4. FIRST AID MEASURES

4.1 Description of first aid measures

General information:

Immediately remove any clothing soiled by the product.

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

After inhalation:

Supply fresh air and to be sure call for a doctor.

In case of unconsciousness place patient stably in side position for transportation.

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:

Call for a doctor immediately.

Drink plenty of water and provide fresh air. Call for a doctor immediately.

4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed

NO FURTHER RELEVANT INFORMATION AVAILABLE. 5. FIRE FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing agents: Use fire extinguishing methods suitable to surrounding conditions.

5.2 Special hazards arising from the substance or mixture No further relevant information available.

5.3 Advice for firefighters

Protective equipment: Mouth respiratory protective device.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

6.2 Environmental precautions: Do not allow to enter sewers/ surface or ground water.

6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Use neutralising agent.

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

Information about fire - and explosion protection: No special measures required.

- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep container tightly sealed.
- **7.3 Specific end use(s)** No further relevant information available.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

- **Additional information about design of technical facilities:** No further data; see item 7.
- **8.1 Control parameters**
- **Ingredients with limit values that require monitoring at the workplace:**

108-95-2 phenol

IOELV Short-term value: 16 mg/m³, 4 ppm

Long-term value: 8 mg/m³, 2 ppm

Skin

· DNELs

8007-24-7 Cashew (*Anacardium occidentale*) Nutshell Extract, Decarboxylated, Distilled

Oral DNEL 0,25 mg/kg/day (General Population)

Dermal DNEL 0,25 mg/kg/day (General Population)

0,5 mg/kg/day (Workers)

Inhalative DNEL 0,2 mg/m³ (General Population)

0,88 mg/m³ (Workers)

· PNECs

8007-24-7 Cashew (*Anacardium occidentale*) Nutshell Extract, Decarboxylated, Distilled

PNEC 3 µg/l (Aqua (freshwater))

30 µg/l (Aqua (intermittent release))

10 mg/kg (Oral)

0,97 mg/kg (Sediment (freshwater))

0,088 mg/kg (Sediment (marine water))

6,71 mg/kg (Soil)

· 8.2 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.

· Respiratory protection:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

· Protection of hands:

Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· 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:

Tightly sealed goggles

· Body protection: Protective work clothing

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

General Information

Appearance:

Form: Liquid

Colour: Red-brown

Odour: Amine-like

Odour threshold: Not determined.

pH-value at 25 °C: 10,5

Change in condition

Melting point/Melting range: Undetermined.

Boiling point/Boiling range: Undetermined.

Flash Point: 101°C

Flammability (solid, gaseous): Not applicable.

Ignition temperature:

Decomposition temperature: Not determined.

Self-igniting: Product is not selfigniting.

Danger of explosion: Product does not present an explosion hazard.

Explosion limits:

Lower: Not determined.

Upper: Not determined.

Vapour pressure: Not determined.

Density at 25 °C: 0,98977 g/cm³

Relative density: Not determined.

Vapour density: Not determined.

Evaporation rate: Not determined.

Solubility in / Miscibility with

water: Not miscible or difficult to mix.

Partition coefficient (n-octanol/water): Not determined.

Viscosity:

Dynamic at 25 °C: 1050 cps

Kinematic: Not determined.

9.2 Other information: No further relevant information available.

10. STABILITY AND REACTIVITY

10.1 Reactivity: No further relevant information available.

10.2 Chemical stability

Thermal decomposition / conditions to be avoided:

No decomposition if used according to specifications.

10.3 Possibility of hazardous reactions: No dangerous reactions known.

10.4 Conditions to avoid: No further relevant information available.

10.5 Incompatible materials: No further relevant information available.

10.6 Hazardous decomposition products: No dangerous decomposition products known..

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity

Harmful if swallowed.

LD/LC50 values relevant for classification:

Irritating to eyes and skin.

8007-24-7 Cashew (Anacardium occidentale) Nutshell Extract, Decarboxylated, Distilled

Oral LD50 500 mg/kg (rat)

Dermal LD50 >2000 mg/kg (daphnia)

108-95-2 phenol

Oral LD50 317 mg/kg (rat)

Dermal LD50 850 mg/kg (rabbit)

- **Primary irritant effect:**
- **Skin corrosion/irritation**
Causes severe skin burns and eye damage.
- **Serious eye damage/irritation**
Causes serious eye damage.
- **Respiratory or skin sensitisation**
May cause an allergic skin reaction.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- **Germ cell mutagenicity**
Suspected of causing genetic defects.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.

12. ECOLOGICAL INFORMATION

- **12.1 Toxicity**
- **Aquatic toxicity:**
8007-24-7 Cashew (Anacardium occidentale) Nutshell Extract, Decarboxylated, Distilled
EC50 1300 mg/l (Algae)
LL50 1000 mg/l (Fish)
- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**
Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water
Do not allow product to reach ground water, water course or sewage system.
Must not reach sewage water or drainage ditch undiluted or unneutralised.
Danger to drinking water if even small quantities leak into the ground.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

13. DISPOSAL CONSIDERATIONS

- 13.1- **13.1 Waste treatment methods**
- **Recommendation**
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
 - **Uncleaned packaging:**
 - **Recommendation:** Disposal must be made according to official regulations..

14. TRANSPORT INFORMATION

- 14.1 **14.1 UN-Number**
- **ADR, ADN, IMDG, IATA** Void
 - **14.2 UN proper shipping name** Not regulated as dangerous goods.
 - **ADR, ADN, IMDG, IATA** Void
 - **14.3 Transport hazard class(es)**
 - **ADR**
 - **Class** Void
- Miscellaneous dangerous substances and articles.
- **Label -**
 - **ADN/R Class:** Void
 - **IMDG, IATA**
 - **Class** Void
 - **Label -**
 - **14.4 Packing group**
 - **ADR, IMDG, IATA** Void
 - **14.5 Environmental hazards:**

- **Marine pollutant:** No
- **14.6 Special precautions for user** Not applicable.
- **14.7 Transport in bulk according to Annex II of Marpol and the IBC Code** Not applicable.
- **UN "Model Regulation":** UN-, -

15. REGULATORY INFORMATION

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

- **Labelling according to Regulation (EC) No 1272/2008**

The product is classified and labelled according to the CLP regulation.

- **Hazard pictograms**

GHS05 GHS07 GHS08

- **Signal word** Danger

- **Hazard-determining components of labelling:**

Cashew (Anacardium occidentale) Nutshell Extract, Decarboxylated, Distilled
m-phenylenebis(methylamine)
phenol

3-aminopropyldimethylamine

- **Hazard statements**

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H317 May cause an allergic skin reaction.

H341 SUSPECTED OF CAUSING GENETIC DEFECTS.

- **Precautionary statements**

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P103 Read label before use.

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER/doctor.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

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.

- **Relevant phrases**

H226 Flammable liquid and vapour.

H301 Toxic if swallowed.

H302 Harmful if swallowed.

H311 Toxic in contact with skin.

H312 Harmful in contact with skin.

H314 Causes severe skin burns and eye damage.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H319 Causes serious eye irritation.

H331 Toxic if inhaled.

H332 Harmful if inhaled.

H341 Suspected of causing genetic defects.

H373 May cause damage to organs through prolonged or repeated exposure.

H412 Harmful to aquatic life with long lasting effects.

- **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
IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
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)
DNEL: Derived No-Effect Level (REACH)
PNEC: Predicted No-Effect Concentration (REACH)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
Flam. Liq. 3: Flammable liquids, Hazard Category 3
Acute Tox. 3: Acute toxicity, Hazard Category 3
Acute Tox. 4: Acute toxicity, Hazard Category 4
Skin Corr. 1B: Skin corrosion/irritation, Hazard Category 1B
Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2
Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1
Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2
Skin Sens. 1: Sensitisation - Skin, Hazard Category 1
Skin Sens. 1A: Sensitisation - Skin, Hazard Category 1A
Muta. 2: Germ cell mutagenicity, Hazard Category 2
STOT RE 2: Specific target organ toxicity - Repeated exposure, Hazard Category 2
Aquatic Chronic 3: Hazardous to the aquatic environment - Chronic Hazard, Category 3

Notice to Reader

Important Note: The information contained in this Data Sheet (as may be amended from time to time) is not intended to be exhaustive and is presented in good faith and is believed to be correct at the date of its preparation. It is the user's responsibility to verify that this data sheet is current prior to using the product in which is detailed in it

Persons using the information must make their own determinations as to the suitability of the relevant product for their purposes prior to its use. Where those purposes are other than as specifically recommended in this safety data sheet, the user then uses the product at their own risk

Manufacturer's Disclaimer: The Conditions methods and Factors effecting the handling, storage, application, use, misuse or disposal of the product are not under the control or knowledge of the Manufacturer. Therefore the manufacturer does not assume responsibility for any adverse events that may occur in the handling, storage, application, use, misuse or disposal of the product and, so far as permitted by applicable law the manufacturer expressly disclaims liability for any and all losses, damages and/or expenses arising out of or in any way connected to the storage, handling, use or disposal of the product. Safe handling, storage and disposal are the responsibility of the users. Users must comply with all applicable health and safety laws.

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