

**Section 1: Identification of the substance/mixture and of the company/undertaking****1.1. Product identifier**

Product name: PPC179 RESIN

**1.2. Relevant identified uses of the substance or mixture and uses advised against****1.3. Details of the supplier of the safety data sheet**

Company name: Farnell Element 14  
Canal Road  
Leeds  
LS12 2TU  
Tel: 08447 11 11 11  
Email: [techsales@farnell.com](mailto:techsales@farnell.com)

**1.4. Emergency telephone number****Section 2: Hazards identification****2.1. Classification of the substance or mixture**

Classification under CHIP: Xi: R36/38; Sens.: R43; N: R51/53

Classification under CLP: Aquatic Chronic 2: H411; Eye Irrit. 2: H319; Skin Irrit. 2: H315; Skin Sens. 1: H317

Most important adverse effects: Irritating to eyes and skin. May cause sensitisation by skin contact. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**2.2. Label elements**

Label elements under CLP:

Hazard statements: H315: Causes skin irritation.  
H317: May cause an allergic skin reaction.  
H319: Causes serious eye irritation.  
H411: Toxic to aquatic life with long lasting effects.

Signal words: Warning

Hazard pictograms: GHS07: Exclamation mark  
GHS09: Environmental



Precautionary statements: P264: Wash hands thoroughly after handling.  
P273: Avoid release to the environment.  
P280: Wear protective gloves.  
P302+352: IF ON SKIN: Wash with plenty of soap and water.  
P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P321: Specific treatment (see instructions on this label).  
P332+313: If skin irritation occurs: Get medical attention.

Label elements under CHIP:

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Hazard symbols: Irritant.

Dangerous for the environment.



Risk phrases: R36/38: Irritating to eyes and skin.

R43: May cause sensitisation by skin contact.

R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety phrases: S24: Avoid contact with skin.

S37: Wear suitable gloves.

S61: Avoid release to the environment. Refer to special instructions / safety data sheets.

## 2.3. Other hazards

PBT: This product is not identified as a PBT substance.

## Section 3: Composition/information on ingredients

### 3.2. Mixtures

Hazardous ingredients:

BISPHENOL A-(EPICHLORHYDRIN) {REACTION PRODUCT}

EINECS	CAS	CHIP Classification	CLP Classification	Percent
500-033-5	25068-38-6	Xi: R36/38; Sens.: R43; N: R51/53	Eye Irrit. 2: H319; Skin Irrit. 2: H315; Skin Sens. 1: H317; Aquatic Chronic 2: H411	>90%

## Section 4: First aid measures

### 4.1. Description of first aid measures

**Skin contact:** Remove all contaminated clothes and footwear immediately unless stuck to skin. Wash immediately with plenty of soap and water. Drench the affected skin with running water for 10 minutes or longer if substance is still on skin. Consult a doctor.

**Eye contact:** Bathe the eye with running water for 15 minutes. Consult a doctor.

**Ingestion:** Wash out mouth with water. Do not induce vomiting. If unconscious, check for breathing and apply artificial respiration if necessary. If unconscious and breathing is OK, place in the recovery position. Consult a doctor.

**Inhalation:** Remove casualty from exposure ensuring one's own safety whilst doing so. If unconscious, check for breathing and apply artificial respiration if necessary. If unconscious and breathing is OK, place in the recovery position. Consult a doctor.

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

**Skin contact:** There may be irritation and redness at the site of contact.

**Eye contact:** There may be irritation and redness. The eyes may water profusely.

**Ingestion:** There may be soreness and redness of the mouth and throat.

**Inhalation:** There may be irritation of the throat with a feeling of tightness in the chest. Exposure may cause coughing or wheezing.

**Delayed / immediate effects:** Delayed effects can be expected after long-term exposure.

### 4.3. Indication of any immediate medical attention and special treatment needed

**Immediate / special treatment:** Eye bathing equipment should be available on the premises.

[cont...]

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## Section 5: Fire-fighting measures

### 5.1. Extinguishing media

**Extinguishing media:** Suitable extinguishing media for the surrounding fire should be used. Use water spray to cool containers.

### 5.2. Special hazards arising from the substance or mixture

**Exposure hazards:** In combustion emits toxic fumes. In combustion emits toxic fumes of carbon dioxide / carbon monoxide.

### 5.3. Advice for fire-fighters

**Advice for fire-fighters:** Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.

## Section 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

**Personal precautions:** Do not attempt to take action without suitable protective clothing - see section 8 of SDS. If outside do not approach from downwind. If outside keep bystanders upwind and away from danger point. Mark out the contaminated area with signs and prevent access to unauthorised personnel. Turn leaking containers leak-side up to prevent the escape of liquid.

### 6.2. Environmental precautions

**Environmental precautions:** Do not discharge into drains or rivers. Contain the spillage using bunding.

### 6.3. Methods and material for containment and cleaning up

**Clean-up procedures:** Absorb into dry earth or sand. Transfer to a closable, labelled salvage container for disposal by an appropriate method.

### 6.4. Reference to other sections

## Section 7: Handling and storage

### 7.1. Precautions for safe handling

**Handling requirements:** Avoid direct contact with the substance. Ensure there is sufficient ventilation of the area. Do not handle in a confined space. Avoid the formation or spread of mists in the air.

### 7.2. Conditions for safe storage, including any incompatibilities

**Storage conditions:** Store in cool, well ventilated area. Keep container tightly closed. Keep away from direct sunlight. The floor of the storage room must be impermeable to prevent the escape of liquids.

**Suitable packaging:** Must only be kept in original packaging.

### 7.3. Specific end use(s)

## Section 8: Exposure controls/personal protection

### 8.1. Control parameters

**Workplace exposure limits:** No data available.

### 8.1. DNEL/PNEC Values

DNEL / PNEC No data available.

[cont...]

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## 8.2. Exposure controls

- Engineering measures:** Ensure there is sufficient ventilation of the area. The floor of the storage room must be impermeable to prevent the escape of liquids.
- Respiratory protection:** Self-contained breathing apparatus must be available in case of emergency.
- Hand protection:** Protective gloves.
- Eye protection:** Safety glasses. Ensure eye bath is to hand.
- Skin protection:** Protective clothing.
- Environmental:** Ensure emissions from ventilation or equipment comply with environmental protection legislation.

## Section 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

- State:** Liquid
- Colour:** Various
- Odour:** Perceptible odour
- Viscosity:** Viscous
- Boiling point/range°C:** >200
- Flash point°C:** 245
- Relative density:** 1.17
- pH:** 7

### 9.2. Other information

**Other information:** No data available.

## Section 10: Stability and reactivity

### 10.1. Reactivity

**Reactivity:** Stable under recommended transport or storage conditions.

### 10.2. Chemical stability

**Chemical stability:** Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

**Hazardous reactions:** Hazardous reactions will not occur under normal transport or storage conditions.

### 10.4. Conditions to avoid

**Conditions to avoid:** Heat.

### 10.5. Incompatible materials

**Materials to avoid:** Strong oxidising agents. Strong bases. Strong acids.

### 10.6. Hazardous decomposition products

**Haz. decomp. products:** In combustion emits toxic fumes. In combustion emits toxic fumes of carbon dioxide / carbon monoxide.

## Section 11: Toxicological information

### 11.1. Information on toxicological effects

**Hazardous ingredients:**

**BISPHENOL A-(EPICHLORHYDRIN) {REACTION PRODUCT}**

ORL	MUS	LD50	15600	mg/kg
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[cont...]

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ORL	RAT	LD50	11400	mg/kg
SKN	RBT	LD50	>20	ml/kg

## Relevant effects for mixture:

Effect	Route	Basis
Irritation	OPT DRM	Hazardous: calculated
Sensitisation	DRM	Hazardous: calculated

## Symptoms / routes of exposure

**Skin contact:** There may be irritation and redness at the site of contact.

**Eye contact:** There may be irritation and redness. The eyes may water profusely.

**Ingestion:** There may be soreness and redness of the mouth and throat.

**Inhalation:** There may be irritation of the throat with a feeling of tightness in the chest. Exposure may cause coughing or wheezing.

**Delayed / immediate effects:** Delayed effects can be expected after long-term exposure.

## Section 12: Ecological information

### 12.1. Toxicity

**Ecotoxicity values:** No data available.

### 12.2. Persistence and degradability

**Persistence and degradability:** Not biodegradable.

### 12.3. Bioaccumulative potential

**Bioaccumulative potential:** Bioaccumulation potential.

### 12.4. Mobility in soil

**Mobility:** Readily absorbed into soil.

### 12.5. Results of PBT and vPvB assessment

**PBT identification:** This product is not identified as a PBT substance.

### 12.6. Other adverse effects

**Other adverse effects:** Toxic to aquatic organisms. Toxic to soil organisms.

## Section 13: Disposal considerations

### 13.1. Waste treatment methods

**Disposal operations:** Transfer to a suitable container and arrange for collection by specialised disposal company.

**Waste code number:** 070208

**Disposal of packaging:** Arrange for collection by specialised disposal company.

**NB:** The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

## Section 14: Transport information

### 14.1. UN number

**UN number:** UN3082

### 14.2. UN proper shipping name

**Shipping name:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.  
(BISPHENOL A-(EPICHLORHYDRIN) {REACTION PRODUCT})

[cont...]

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## 14.3. Transport hazard class(es)

Transport class: 9

## 14.4. Packing group

Packing group: III

## 14.5. Environmental hazards

Environmentally hazardous: Yes

Marine pollutant: No

## 14.6. Special precautions for user

Tunnel code: E

Transport category: 3

## Section 15: Regulatory information

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

### 15.2. Chemical Safety Assessment

## Section 16: Other information

### Other information

**Other information:** This safety data sheet is prepared in accordance with Commission Regulation (EU) No 453/2010.

\* indicates text in the SDS which has changed since the last revision.

**Phrases used in s.2 and 3:** H315: Causes skin irritation.  
H317: May cause an allergic skin reaction.  
H319: Causes serious eye irritation.  
H411: Toxic to aquatic life with long lasting effects.  
R36/38: Irritating to eyes and skin.  
R43: May cause sensitisation by skin contact.  
R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**Legal disclaimer:** The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.

**Section 1: Identification of the substance/mixture and of the company/undertaking****1.1. Product identifier**

Product name: PPC179 HARDENER

**1.2. Relevant identified uses of the substance or mixture and uses advised against****1.3. Details of the supplier of the safety data sheet**

Company name: Farnell Element 14

Canal Road

Leeds

LS12 2TU

Tel: 08447 11 11 11

Email: [techsales@farnell.com](mailto:techsales@farnell.com)**1.4. Emergency telephone number****Section 2: Hazards identification****2.1. Classification of the substance or mixture**

Classification under CHIP: Sens.: R43

Classification under CLP: Eye Irrit. 2: H319; Skin Irrit. 2: H315; Skin Sens. 1: H317

Most important adverse effects: May cause sensitisation by skin contact.

**2.2. Label elements**

## Label elements under CLP:

Hazard statements: H315: Causes skin irritation.  
H317: May cause an allergic skin reaction.  
H319: Causes serious eye irritation.

Signal words: Warning

Hazard pictograms: GHS07: Exclamation mark

Precautionary statements: P264: Wash hands thoroughly after handling.  
P280: Wear protective gloves/protective clothing/eye protection/face protection.  
P302+352: IF ON SKIN: Wash with plenty of soap and water.  
P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P321: Specific treatment (see instructions on this label).  
P332+313: If skin irritation occurs: Get medical attention.  
P362: Take off contaminated clothing and wash before reuse.

## Label elements under CHIP:

Hazard symbols: Irritant.



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**Risk phrases:** R43: May cause sensitisation by skin contact.  
**Safety phrases:** S24: Avoid contact with skin.  
S37: Wear suitable gloves.

## 2.3. Other hazards

**PBT:** This product is not identified as a PBT substance.

## Section 3: Composition/information on ingredients

### 3.2. Mixtures

**Hazardous ingredients:**

3,6-DIAZAOCTANETHYLENEDIAMINE

EINECS	CAS	CHIP Classification	CLP Classification	Percent
203-950-6	112-24-3	Xn: R21; C: R34; Sens.: R43; -: R52/53	Acute Tox. 4: H312; Skin Corr. 1B: H314; Skin Sens. 1: H317; Aquatic Chronic 3: H412	1-10%

## Section 4: First aid measures

### 4.1. Description of first aid measures

**Skin contact:** Remove all contaminated clothes and footwear immediately unless stuck to skin. Wash immediately with plenty of soap and water. Consult a doctor.  
**Eye contact:** Bathe the eye with running water for 15 minutes. Consult a doctor.  
**Ingestion:** Wash out mouth with water. Consult a doctor.  
**Inhalation:** Remove casualty from exposure ensuring one's own safety whilst doing so. Consult a doctor.

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

**Skin contact:** There may be irritation and redness at the site of contact.  
**Eye contact:** There may be irritation and redness. The eyes may water profusely.  
**Ingestion:** There may be soreness and redness of the mouth and throat. Nausea and stomach pain may occur.  
**Inhalation:** Exposure may cause coughing or wheezing.

**Delayed / immediate effects:** Delayed effects can be expected after long-term exposure.

### 4.3. Indication of any immediate medical attention and special treatment needed

**Immediate / special treatment:** Not applicable.

## Section 5: Fire-fighting measures

### 5.1. Extinguishing media

**Extinguishing media:** Suitable extinguishing media for the surrounding fire should be used. Use water spray to cool containers.

### 5.2. Special hazards arising from the substance or mixture

**Exposure hazards:** In combustion emits toxic fumes.

### 5.3. Advice for fire-fighters

**Advice for fire-fighters:** Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.

## Section 6: Accidental release measures

[cont...]



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## 6.1. Personal precautions, protective equipment and emergency procedures

**Personal precautions:** Do not attempt to take action without suitable protective clothing - see section 8 of SDS. Turn leaking containers leak-side up to prevent the escape of liquid.

## 6.2. Environmental precautions

**Environmental precautions:** Do not discharge into drains or rivers. Contain the spillage using bunding.

## 6.3. Methods and material for containment and cleaning up

**Clean-up procedures:** Absorb into dry earth or sand. Transfer to a closable, labelled salvage container for disposal by an appropriate method.

## 6.4. Reference to other sections

**Reference to other sections:** Refer to section 8 of SDS.

## Section 7: Handling and storage

### 7.1. Precautions for safe handling

**Handling requirements:** Avoid direct contact with the substance. Avoid the formation or spread of mists in the air.

### 7.2. Conditions for safe storage, including any incompatibilities

**Storage conditions:** Store in cool, well ventilated area. Keep container tightly closed.

### 7.3. Specific end use(s)

**Specific end use(s):** No data available.

## Section 8: Exposure controls/personal protection

### 8.1. Control parameters

**Workplace exposure limits:** No data available.

### 8.1. DNEL/PNEC Values

**DNEL / PNEC** No data available.

### 8.2. Exposure controls

**Engineering measures:** Ensure there is sufficient ventilation of the area.

**Respiratory protection:** Self-contained breathing apparatus must be available in case of emergency.

**Hand protection:** Impermeable gloves.

**Eye protection:** Safety glasses. Ensure eye bath is to hand.

**Skin protection:** Impermeable protective clothing.

## Section 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

**State:** Liquid

**Colour:** Yellow-brown

**Odour:** Choking

**Flash point°C:** >93

### 9.2. Other information

**Other information:** No data available.

## Section 10: Stability and reactivity

[cont...]

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## 10.1. Reactivity

Reactivity: Stable under recommended transport or storage conditions.

## 10.2. Chemical stability

Chemical stability: Stable under normal conditions.

## 10.3. Possibility of hazardous reactions

Hazardous reactions: Hazardous reactions will not occur under normal transport or storage conditions.  
Decomposition may occur on exposure to conditions or materials listed below.

## 10.4. Conditions to avoid

Conditions to avoid: Heat.

## 10.5. Incompatible materials

Materials to avoid: Strong oxidising agents. Strong acids.

## 10.6. Hazardous decomposition products

Haz. decomp. products: In combustion emits toxic fumes.

## Section 11: Toxicological information

### 11.1. Information on toxicological effects

Hazardous ingredients:

#### 3,6-DIAZAOCTANETHYLENEDIAMINE

IVN	MUS	LD50	350	mg/kg
ORL	MUS	LD50	1600	mg/kg
ORL	RAT	LD50	2500	mg/kg

Relevant effects for mixture:

Effect	Route	Basis
Sensitisation	DRM	Hazardous: calculated

### Symptoms / routes of exposure

**Skin contact:** There may be irritation and redness at the site of contact.

**Eye contact:** There may be irritation and redness. The eyes may water profusely.

**Ingestion:** There may be soreness and redness of the mouth and throat. Nausea and stomach pain may occur.

**Inhalation:** Exposure may cause coughing or wheezing.

**Delayed / immediate effects:** Delayed effects can be expected after long-term exposure.

## Section 12: Ecological information

### 12.1. Toxicity

Ecotoxicity values: No data available.

### 12.2. Persistence and degradability

Persistence and degradability: No data available.

### 12.3. Bioaccumulative potential

Bioaccumulative potential: No data available.

[cont...]

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## 12.4. Mobility in soil

**Mobility:** Readily absorbed into soil.

## 12.5. Results of PBT and vPvB assessment

**PBT identification:** This product is not identified as a PBT substance.

## 12.6. Other adverse effects

**Other adverse effects:** No data available.

## Section 13: Disposal considerations

### 13.1. Waste treatment methods

**Disposal operations:** Transfer to a suitable container and arrange for collection by specialised disposal company.

**NB:** The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

## Section 14: Transport information

**Transport class:** This product does not require a classification for transport.

## Section 15: Regulatory information

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

### 15.2. Chemical Safety Assessment

## Section 16: Other information

### Other information

**Other information:** This safety data sheet is prepared in accordance with Commission Regulation (EU) No 453/2010.

\* indicates text in the SDS which has changed since the last revision.

**Phrases used in s.2 and 3:** 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.  
H319: Causes serious eye irritation.  
H412: Harmful to aquatic life with long lasting effects.  
R21: Harmful in contact with skin.  
R34: Causes burns.  
R43: May cause sensitisation by skin contact.  
R52/53: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**Legal disclaimer:** The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.