

## SAFETY DATA SHEET PHOTORESIST DEVELOPER

### SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

#### 1.1. Product identifier

Product name PHOTORESIST DEVELOPER  
 Product No. PDN, EPDN250ML, ZE

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

Identified uses Manufacture of electrical equipment  
 Uses advised against At this moment in time we do not have information on use restrictions. They will be included in this safety data sheet when available

#### 1.3. Details of the supplier of the safety data sheet

Supplier ELECTROLUBE. A division of HK  
 WENTWORTH LTD  
 ASHBY PARK, COALFIELD WAY,  
 ASHBY DE LA ZOUCH, LEICESTERSHIRE  
 LE65 1JR  
 UNITED KINGDOM  
 +44 (0)1530 419600  
 +44 (0)1530 416640  
 info@hkw.co.uk

#### 1.4. Emergency telephone number

+44 (0)1530 419600 between 8.30am - 5.00pm GMT Mon – Fri

### SECTION 2: HAZARDS IDENTIFICATION

#### 2.1. Classification of the substance or mixture

##### Classification (EC 1272/2008)

Physical and Chemical Hazards	Not classified.
Human health	Skin Corr. 1B - H314
Environment	Not classified.

##### Classification (1999/45/EEC)

C;R34.

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

#### 2.2. Label elements

Contains SODIUM HYDROXIDE  
 Label In Accordance With (EC) No. 1272/2008



Signal Word Danger

##### Hazard Statements

H314 Causes severe skin burns and eye damage.

##### Precautionary Statements

P280 Wear protective gloves/protective clothing/eye protection/face protection.

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P305+351+338

IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

Immediately call a POISON CENTER or doctor/physician.

P310

## Supplementary Precautionary Statements

P260

Do not breathe vapour/spray.

P264

Wash contaminated skin thoroughly after handling.

## 2.3. Other hazards

Not Classified as PBT/vPvB by current EU criteria.

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

### 3.2. Mixtures

<b>TRISODIUM PHOSPHATE</b>	<b>5-10%</b>
CAS-No.: 7601-54-9	EC No.: 231-509-8
Classification (EC 1272/2008) Skin Irrit. 2 - H315 Eye Irrit. 2 - H319	Classification (67/548/EEC) Xi;R36/38.
<b>DISODIUM METASILICATE</b>	<b>1-5%</b>
CAS-No.: 6834-92-0	EC No.: 229-912-9
Classification (EC 1272/2008) Skin Corr. 1B - H314 STOT SE 3 - H335	Classification (67/548/EEC) C;R34 Xi;R37
<b>SODIUM CARBONATE</b>	<b>1-5%</b>
CAS-No.: 497-19-8	EC No.: 207-838-8
Classification (EC 1272/2008) Eye Irrit. 2 - H319	Classification (67/548/EEC) Xi;R36
<b>SODIUM HYDROXIDE</b>	<b>1-5%</b>
CAS-No.: 1310-73-2	EC No.: 215-185-5
Classification (EC 1272/2008) Skin Corr. 1A - H314	Classification (67/548/EEC) C;R35

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

### Composition Comments

Ingredients not listed are classified as non-hazardous or at a concentration below reportable levels.

## SECTION 4: FIRST AID MEASURES

### 4.1. Description of first aid measures

#### Inhalation

Keep the affected person warm and at rest. Get prompt medical attention.

#### Ingestion

DO NOT INDUCE VOMITING! Rinse mouth thoroughly. Promptly get affected person to drink large volumes of water to dilute the swallowed chemical. Get medical attention immediately!

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## **Skin contact**

Wash off promptly and flush contaminated skin with water. Promptly remove clothing if soaked through and flush skin with water. Get medical attention if irritation persists after washing.

## **Eye contact**

Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes and get medical attention.

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

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

Treat Symptomatically.

## **SECTION 5: FIREFIGHTING MEASURES**

### **5.1. Extinguishing media**

#### **Extinguishing media**

This product is not flammable. Use fire-extinguishing media appropriate for surrounding materials.

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

#### **Hazardous combustion products**

Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

#### **Unusual Fire & Explosion Hazards**

No unusual fire or explosion hazards noted.

### **5.3. Advice for firefighters**

#### **Special Fire Fighting Procedures**

Avoid breathing fire vapours.

#### **Protective equipment for fire-fighters**

Self contained breathing apparatus and full protective clothing must be worn in case of fire.

## **SECTION 6: ACCIDENTAL RELEASE MEASURES**

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

Wear protective clothing as described in Section 8 of this safety data sheet.

### **6.2. Environmental precautions**

Do not discharge into drains, water courses or onto the ground.

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

DO NOT TOUCH SPILLED MATERIAL! Wear necessary protective equipment. Absorb in vermiculite, dry sand or earth and place into containers.

### **6.4. Reference to other sections**

Wear protective clothing as described in Section 8 of this safety data sheet. See section 11 for additional information on health hazards. For waste disposal, see section 13.

## **SECTION 7: HANDLING AND STORAGE**

### **7.1. Precautions for safe handling**

Avoid spilling, skin and eye contact.

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

Store in tightly closed original container in a dry, cool and well-ventilated place. Keep in original container.

### **7.3. Specific end use(s)**

The identified uses for this product are detailed in Section 1.2.

## **SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

### **8.1. Control parameters**

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Name	STD	TWA - 8 Hrs		STEL - 15 Min		Notes
SODIUM HYDROXIDE	WEL				2 mg/m <sup>3</sup>	

WEL = Workplace Exposure Limit.

## 8.2. Exposure controls

### Protective equipment



### Process conditions

Use engineering controls to reduce air contamination to permissible exposure level. Provide eyewash station.

### Engineering measures

Provide adequate ventilation, including appropriate local extraction, to ensure that the defined occupational exposure limit is not exceeded.

### Respiratory equipment

If ventilation is insufficient, suitable respiratory protection must be provided. No specific recommendation made, but respiratory protection must be used if the general level exceeds the recommended occupational exposure limit. EN14387

### Hand protection

Use suitable protective gloves if risk of skin contact. The most suitable glove must be chosen in consultation with the gloves supplier, who can inform about the breakthrough time of the glove material. Gloves should conform to EN374

### Eye protection

Use approved safety goggles or face shield. EN166

### Other Protection

Wear appropriate clothing to prevent any possibility of skin contact.

### Hygiene measures

DO NOT SMOKE IN WORK AREA! Wash hands at the end of each work shift and before eating, smoking and using the toilet. Wash promptly if skin becomes wet or contaminated. When using do not eat, drink or smoke.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

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

Appearance	Liquid
Colour	Varying.
Odour	Odourless.
Initial boiling point and boiling range (°C)	100 (212 F)
Melting point (°C)	0 (32 F)
Relative density	1.100 @ °c
Vapour pressure	@ °c

### 9.2. Other information

None.

## SECTION 10: STABILITY AND REACTIVITY

### 10.1. Reactivity

Will react violently with: Acids.

### 10.2. Chemical stability

Stable under normal temperature conditions.

### 10.3. Possibility of hazardous reactions

Not determined.

### Hazardous Polymerisation

Will not polymerise.

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## **10.4. Conditions to avoid**

Will react violently with: Strong mineral acids.

## **10.5. Incompatible materials**

### **Materials To Avoid**

Strong oxidising substances. Strong alkalis.

## **10.6. Hazardous decomposition products**

Fire or high temperatures create: Corrosive gases/vapours/fumes of: Nitric acid (HNO<sub>3</sub>). Nitrous gases (NO<sub>x</sub>).

## **SECTION 11: TOXICOLOGICAL INFORMATION**

### **11.1. Information on toxicological effects**

#### **Toxicological information**

No information available.

#### **Inhalation**

No specific health warnings noted.

#### **Ingestion**

May cause burns in mucous membranes, throat, oesophagus and stomach.

#### **Skin contact**

Causes burns.

#### **Eye contact**

Causes burns.

#### **Health Warnings**

RESPIRATORY SYSTEM. Serious damage to the lining of nose, throat and lungs. Swallowing concentrated chemical may cause severe internal injury.

## **SECTION 12: ECOLOGICAL INFORMATION**

#### **Ecotoxicity**

Not regarded as dangerous for the environment.

### **12.1. Toxicity**

### **12.2. Persistence and degradability**

#### **Degradability**

There are no data on the degradability of this product.

### **12.3. Bioaccumulative potential**

#### **Bioaccumulative potential**

No data available on bioaccumulation.

### **12.4. Mobility in soil**

### **12.5. Results of PBT and vPvB assessment**

This product does not contain any PBT or vPvB substances.

### **12.6. Other adverse effects**

Not known.

## **SECTION 13: DISPOSAL CONSIDERATIONS**

#### **General information**

Waste is classified as hazardous waste. Disposal to licensed waste disposal site in accordance with the local Waste Disposal Authority.

### **13.1. Waste treatment methods**

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Dispose of waste and residues in accordance with local authority requirements. Absorb in vermiculite or dry sand and dispose of at a licenced hazardous waste collection point.

## SECTION 14: TRANSPORT INFORMATION

### 14.1. UN number

UN No. (ADR/RID/ADN)	1719
UN No. (IMDG)	1719
UN No. (ICAO)	1719

### 14.2. UN proper shipping name

Proper Shipping Name CAUSTIC ALKALI LIQUID, N.O.S. (DISODIUM METASILICATE, SODIUM HYDROXIDE)

### 14.3. Transport hazard class(es)

ADR/RID/ADN Class	8
ADR/RID/ADN Class	Class 8: Corrosive substances.
ADR Label No.	8
IMDG Class	8
ICAO Class/Division	8
Transport Labels	



### 14.4. Packing group

ADR/RID/ADN Packing group	III
IMDG Packing group	III
ICAO Packing group	III

### 14.5. Environmental hazards

Environmentally Hazardous Substance/Marine Pollutant  
No.

### 14.6. Special precautions for user

EMS	F-A, S-B
Emergency Action Code	2R
Hazard No. (ADR)	80
Tunnel Restriction Code	(E)

### 14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

No information required.

## SECTION 15: REGULATORY INFORMATION

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

#### Statutory Instruments

The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (S.I 2009 No. 716). Control of Substances Hazardous to Health.

#### Guidance Notes

Workplace Exposure Limits EH40.

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## EU Legislation

Commission Directive 2000/39/EC of 8 June 2000 establishing a first list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments.

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 with amendments.

### Authorisations (Title VII Regulation 1907/2006)

No specific authorisations are noted for this product.

### Restrictions (Title VIII Regulation 1907/2006)

No specific restrictions of use are noted for this product.

## 15.2. Chemical Safety Assessment

No chemical safety assessment has been carried out.

## SECTION 16: OTHER INFORMATION

**Issued By** Helen O'Reilly

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**SDS No.** 10431

### Risk Phrases In Full

R34 Causes burns.  
R35 Causes severe burns.  
R36/38 Irritating to eyes and skin.  
R36 Irritating to eyes.  
R37 Irritating to respiratory system.

### Hazard Statements In Full

H319 Causes serious eye irritation.  
H314 Causes severe skin burns and eye damage.  
H315 Causes skin irritation.  
H335 May cause respiratory irritation.

## Disclaimer

This 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. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.