Report Date : 22/03/2011

REVISION DATE NOVEMBER 2010

MATERIAL SAFETY DATA SHEET PHOTORESIST DEVELOPER

1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

PRODUCT NAME PHOTORESIST DEVELOPER

PRODUCT NO. PDN

EPDN250ML

ZΕ

APPLICATION Manufacture of electrical equipment

SUPPLIER H K WENTWORTH PTY

LIMITED P.O. BOX 339

BROOKVALE, NSW 2100

AUSTRALIA TEL: 02 9938 1566 FAX: 02 9938 1467 GENERAL MANAGER

EMERGENCY TELEPHONE Tel: 029938 1566 between 8.30am and 5.00pm EST

PROPER SHIPPING NAME CAUSTIC ALKALI LIQUID, N.O.S.

2 HAZARDS IDENTIFICATION

RISK PHRASES

R34 Causes burns.

SAFETY PHRASES

S26 In case of contact with eyes, rinse immediately with plenty of water

and seek medical advice.

S27 Take off immediately all contaminated clothing.

S45 In case of accident or if you feel unwell, seek medical advice

immediately (show label where possible).

S24/25 Avoid contact with skin and eyes.

S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

The above phrases are the risks associated with the product

STATEMENT OF HAZARDOUS NATURE

HAZARDOUS SUBSTANCE (According to criteria of NOHSC). DANGEROUS GOODS (According to ADG Code).

DG CLASS

Class 8: Corrosive substances.
PACKING GROUP III
UN NO. 1719
HAZCHEM CODE 2R

3 COMPOSITION/INFORMATION ON INGREDIENTS

| Name | EC No. | CAS-No. | Content % | Classification (67/548) |
|-----------------------|-----------|-----------|-----------|-------------------------|
| TRISODIUM PHOSPHATE | 231-509-8 | 7601-54-9 | 5-10% | C;R34. Xi;R36/38. |
| DISODIUM METASILICATE | 229-912-9 | 6834-92-0 | 1-5% | C;R34 Xi;R37 |
| SODIUM CARBONATE | 207-838-8 | 497-19-8 | 1-5% | Xi;R36 |
| SODIUM HYDROXIDE | 215-185-5 | 1310-73-2 | 1-5% | C;R35 |

The Full Text for all R-Phrases is Displayed in Section 16

COMPOSITION COMMENTS

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

4 FIRST-AID MEASURES

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PHOTORESIST DEVELOPER

NOTES TO THE PHYSICIAN

Treat symptomatically

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!

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.

5 FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA

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

HAZCHEM CODE

2R

6 ACCIDENTAL RELEASE MEASURES

SPILL CLEAN UP METHODS

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

7 HANDLING AND STORAGE

USAGE PRECAUTIONS

Avoid spilling, skin and eye contact.

STORAGE PRECAUTIONS

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

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

| Name | STD | TWA - 8 Hrs | | STEL - 15 Min | | Notes |
|------------------|-----|-------------|---------|---------------|--|-------|
| SODIUM HYDROXIDE | | | 2 mg/m3 | | | |

PROTECTIVE EQUIPMENT





ENGINEERING MEASURES

No particular ventilation requirements.

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.

EYE PROTECTION

Use approved safety goggles or face shield.

OTHER PROTECTION

Wear appropriate clothing to prevent any possibility of skin contact.

HYGIENE MEASURES

DO NOT SMOKE IN WORK AREA! Wash 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.

9 PHYSICAL AND CHEMICAL PROPERTIES

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PHOTORESIST DEVELOPER

APPEARANCE Liquid

COLOUR Varying

ODOUR Odourless

BOILING POINT (°C) 100 (212 F)

MELTING POINT (°C) 0 (32 F)

RELATIVE DENSITY 1.100 @ °c

VAPOUR PRESSURE @ °c

10 STABILITY AND REACTIVITY

STABILITY

Stable under normal temperature conditions.

CONDITIONS TO AVOID

Reacts with alkalis and generates heat.

HAZARDOUS DECOMPOSITION PRODUCTS

Fire or high temperatures create: Corrosive gases/vapours/fumes of: Nitric acid (HNO3). Nitrous gases (NOx).

11 TOXICOLOGICAL INFORMATION

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.

12 ECOLOGICAL INFORMATION

ECOTOXICITY

Not regarded as dangerous for the environment.

13 DISPOSAL CONSIDERATIONS

DISPOSAL METHODS

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.

14 TRANSPORT INFORMATION



PROPER SHIPPING NAME CAUSTIC ALKALI LIQUID, N.O.S.

ADG CLASS Class 8 Corrosive Substance

ENVIRONMENTALLY No.

HAZARDOUS

SUBSTANCE/MARINE

POLLUTANT

UN NO. 1719 **ADG CLASS NO.** 8

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PHOTORESIST DEVELOPER

DG CLASS Class 8: Corrosive

substances.

PACKING GROUP III
TUNNEL RESTRICTION CODE (E)
ADG LABEL NO. 8
HAZCHEM CODE 2R
UN NO. SEA 1719
IMDG CLASS 8
IMDG PACK GR. III

 EMS
 F-A, S-B

 UN NO. AIR
 1719

 AIR CLASS
 8

 AIR PACK GR.
 III

15 REGULATORY INFORMATION

LABELLING



Corrosive

CONTAINS TRISODIUM PHOSPHATE

SODIUM HYDROXIDE

RISK PHRASES

R34 Causes burns.

SAFETY PHRASES

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and seek medical advice.

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immediately (show label where possible).

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S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

POISONS SCHEDULE NUMBER NONE

NATIONAL REGULATIONS AND REFERENCES

National Model Regulations for the Control of Workplace Hazardous Substances.

National Code of Practice for the Control of Workplace Hazardous Substances.

National Code of Practice for the Labelling of Workplace Substances.

National Code of Practice for the Preparation of Material Safety Data Sheets.

Approved Criteria for Classifying Hazardous Substances.

Exposure Standards for Atmospheric Contaminants in the Occupational Environment.

Australian Dangerous Goods Code. The Standard for the Uniform Scheduling of Drugs and Poisons (SUSDP).

16 OTHER INFORMATION

REVISION COMMENTS

NOTE: Lines within the margin indicate significant changes from the previous revision.

ISSUED BY

Helen O'Reilly

REVISION DATE NOVEMBER 2010

REV. NO./REPL. SDS

GENERATED

4

SDS NO. 10431

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PHOTORESIST DEVELOPER

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.

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.