Revision: 1.1 Date: 15.09.2015

ACCORDING TO EC-REGULATIONS 1907/2006 (REACH), 1272/2008 (CLP) & 453/2010



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PLM-4R

| 1. | SECTION 1: IDENTIFICATION OF THE SUBS | STANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING |
|-------|--|--|
| 1.1 | Product identifier | |
| | Product Name | PLM-4R |
| | Chemical Name | Bisphenol A Diglycidyl Ether |
| | CAS No. | 25036-25-3 |
| | EINECS No. | None assigned. |
| | REACH Registration No. | None assigned. |
| 1.2 | Recommended use of the chemical and restrictions | |
| | | |
| | Identified Use(s) | Photostress® measurements. |
| 1.3 | Uses Advised Against | For professional users only. |
| 1.3 | Supplier's details Company Identification | VISHAY MEASUREMENTS GROUP UK LTD |
| | | Stroudley Road |
| | | Basingstoke |
| | | Hampshire |
| | | RG24 8FW |
| | | United Kingdom |
| | Telephone | +44 (0) 1256 462131 |
| | Fax | +44 (0) 1256 471441 |
| | E-Mail (competent person) | mm.uk@vishaypg.com |
| 1.4 | Emergency Phone No. | (00-1) 703-527-3887 |
| | | CHEMTREC |
| | | |
| 2. | SECTION 2: HAZARDS IDENTIFICATION | |
| 2.1 | Classification of the substance or mixture | |
| 2.1 | Classification of the substance or mixture | |
| 2.1.1 | Regulation (EC) No. 1272/2008 (CLP) | Skin Irrit. 2; Causes skin irritation. |
| | | Skin Sens. 1; May cause sensitization by skin contact. |
| | | Eye Irrit. 2; Causes serious eye irritation. |
| | | |
| 2.1.2 | Directive 67/548/EEC & Directive 1999/45/EC | Xi; R36/38: Irritating to eyes and skin. |
| | | R43: May cause sensitization by skin contact. |
| • • | Label elements | Assertise to Deputation (EQ) No. 1979/2000 (CLD) |
| 2.2 | Label elements | According to Regulation (EC) No. 1272/2008 (CLP) PLM-4R |
| | Product Name | PLN-4K |
| | Hazard Pictogram(s) | A |
| | hazara histogram(o) | |
| | | |
| | | |
| | | |
| | Signal Word(s) | Warning |
| | Signal Word(S) | wanning |
| | Hazard Statement(s) | H315: Causes skin irritation. |
| | | H317: May cause an allergic skin reaction. |
| | | H319: Causes serious eye irritation. |
| | | |
| | Precautionary Statement(s) | P261: Avoid breathing vapours. |
| | | P280: Wear protective gloves/protective clothing/eye protection/face protection. |
| | | P302+P352: IF ON SKIN: Wash with plenty of soap and water. |
| | | P333+P313: If skin irritation or rash occurs: Get medical advice/attention. |
| | | P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. |
| | | • |
| | | |

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Remove contact lenses, if present and easy to do. Continue rinsing. P337+P313: If eye irritation persists: Get medical advice/attention.

2.3 Other hazards

None.

3. **SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

3.1 Substances Substances in preparations / mixtures

EC Classification Regulation (EC) No. 1272/2008 (CLP)

SECTION 4: FIRST AID MEASURES

| Chemical identity of the substance | %W/W | CAS No. | EC No. | Hazard Statement(s) | |
|------------------------------------|------|------------|--------|---|--|
| Bisphenol A Diglycidyl Ether | 100 | 25036-25-3 | - | Skin Irrit. 2; H315 Skin Sens. 1; H317 Eye Irrit. 2; H319 | |

Directive 67/548/EEC & Directive 1999/45/EC

| Chemical identity of the | %W/W | CAS No. | EC No. | EC Classification and Risk Phrases |
|--------------------------|------|------------|--------|---|
| substance | | | | |
| Bisphenol A Diglycidyl | 100 | 25036-25-3 | - | Xi; R36/38: Irritating to eyes and skin. |
| Ether | | | | R43: May cause sensitization by skin contact. |

3.2 Mixtures Not applicable.

| _ | | _ | |
|---|--|---|--|
| Г | | | |
| | | | |

4.

4.1 Description of first aid measures Inhalation

| | Inhalation | IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. |
|-----|--|---|
| | Skin Contact | IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and wash before reuse. If skin irritation or rash occurs: Get medical advice/attention. |
| | Eye Contact | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. |
| | Ingestion | IF SWALLOWED: rinse mouth. Do NOT induce vomiting. If vomiting occurs spontaneously, keep head below hips to prevent aspiration into the lungs. Make victim drink water. Do not give anything by mouth to an unconscious person. Get medical advice/attention if you feel unwell. |
| 4.2 | Most important symptoms and effects, both acute and delayed | Contains epoxy constituents. May produce an allergic reaction. Causes irritation to eyes and skin. |
| 4.3 | Indication of any immediate medical attention and special treatment needed | None known. Treat symptomatically. |

5. SECTION 5: FIRE-FIGHTING MEASURES

5.1 Extinguishing media Suitable Extinguishing Media Extinguish with carbon dioxide, dry chemical, foam or waterspray. Unsuitable extinguishing Media Do not use water jet. Direct water jet may spread the fire. Special hazards arising from the substance or mixture 5.2 May decompose in a fire giving off toxic fumes. 5.3 Advice for fire-fighters

Fire fighters should wear complete protective clothing including self-contained breathing apparatus. Do not breathe fumes. Keep containers cool by spraying

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with water if exposed to fire. Avoid run off to waterways and sewers.

| | SECTION 6: ACCIDENTAL RELEASE MEAS | DURED |
|-------|---|---|
| 6.1 | Personal precautions, protective equipment and | Ensure adequate ventilation. Avoid breathing vapours. Wear protective |
| | emergency procedures | gloves/protective clothing/eye protection/face protection. |
| 6.2 | Environmental precautions | Do not allow to enter drains, sewers or watercourses. |
| 6.3 | Methods and material for containment and cleaning | Adsorb spillages onto sand, earth or any suitable adsorbent material. Transfer to |
| | up | a container for disposal. Dispose of this material and its container as hazardous |
| 6.4 | Deference to other continue | waste. |
| 6.4 | Reference to other sections | See Section: 8, 13 |
| 7. | SECTION 7: HANDLING AND STORAGE | |
| 7.1 | Precautions for safe handling | Obtain special instructions before use. Do not handle until all safety precautions |
| | | have been read and understood. Avoid breathing fumes. Ensure adequate |
| | | ventilation. In case of inadequate ventilation wear respiratory protection. Wear |
| | | protective gloves/protective clothing/eye protection/face protection. Avoid |
| | | contact with skin, eyes or clothing. Do not eat, drink or smoke when using this |
| | | product. Wash hands before breaks and after work. |
| 7.2 | Conditions for safe storage, including any | Ensure adequate ventilation. |
| | incompatibilities | |
| | Storage temperature | Ambient. |
| | Storage life | Stable under normal conditions. |
| | Incompatible materials | Strong Acids. Strong oxidising agents. |
| 7.3 | Specific end use(s) | Photostress® measurements. |
| 8. | SECTION 8: EXPOSURE CONTROLS/PERS | ONAL PROTECTION |
| 8.1 | Control parameters | |
| 8.1.1 | Occupational Exposure Limits | Not established. |
| | | |
| 8.1.2 | Biological limit value | Not established. |
| 8.1.3 | PNECs and DNELs | Not established. |
| | | |
| 8.2 | Exposure controls | Encourse a de sus terres d'action |
| 8.2.1 | Appropriate engineering controls | Ensure adequate ventilation. |
| | | |
| 8.2.2 | Individual protection measures, such as personal | Use personal protective equipment as required. Wash contaminated clothing |
| 8.2.2 | Individual protection measures, such as personal protective equipment (PPE) | Use personal protective equipment as required. Wash contaminated clothing before reuse. Avoid contact with skin and eyes. |
| 8.2.2 | | |
| 8.2.2 | protective equipment (PPE) | before reuse. Avoid contact with skin and eyes. |
| 8.2.2 | protective equipment (PPE) | before reuse. Avoid contact with skin and eyes. Wear protective eye glasses for protection against liquid splashes. Wear eye |
| 8.2.2 | protective equipment (PPE) | before reuse. Avoid contact with skin and eyes. Wear protective eye glasses for protection against liquid splashes. Wear eye protection with side protection (EN166). Have available eyewash bottle with |
| 8.2.2 | protective equipment (PPE) Eye/face protection | before reuse. Avoid contact with skin and eyes. Wear protective eye glasses for protection against liquid splashes. Wear eye protection with side protection (EN166). Have available eyewash bottle with clean water. |
| 8.2.2 | protective equipment (PPE) | before reuse. Avoid contact with skin and eyes. Wear protective eye glasses for protection against liquid splashes. Wear eye protection with side protection (EN166). Have available eyewash bottle with clean water. Wear impervious gloves (EN374). Breakthrough time of the glove material: refer |
| 8.2.2 | protective equipment (PPE) Eye/face protection | before reuse. Avoid contact with skin and eyes. Wear protective eye glasses for protection against liquid splashes. Wear eye protection with side protection (EN166). Have available eyewash bottle with clean water. Wear impervious gloves (EN374). Breakthrough time of the glove material: refer to the information provided by the gloves' producer. The gloves type used must |
| 8.2.2 | protective equipment (PPE) Eye/face protection | before reuse. Avoid contact with skin and eyes. Wear protective eye glasses for protection against liquid splashes. Wear eye protection with side protection (EN166). Have available eyewash bottle with clean water. Wear impervious gloves (EN374). Breakthrough time of the glove material: refer to the information provided by the gloves' producer. The gloves type used must be chosen based on the work activity and duration as well as |
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| 8.2.2 | protective equipment (PPE) Eye/face protection | before reuse. Avoid contact with skin and eyes. Wear protective eye glasses for protection against liquid splashes. Wear eye protection with side protection (EN166). Have available eyewash bottle with clean water. Wear impervious gloves (EN374). Breakthrough time of the glove material: refer to the information provided by the gloves' producer. The gloves type used must be chosen based on the work activity and duration as well as |
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Thermal hazards

8.2.3 Environmental Exposure Controls

Not applicable. Avoid release to the environment.

9. SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

| 9.1 | Information on basic physical and chemical properties | |
|-----|---|-----------------------------|
| | Appearance | Clear Amber Coloured liquid |
| | Odour | Not available. |
| | Odour Threshold | Not available. |
| | рН | Not established. |
| | Melting Point/Freezing Point | Not available. |
| | Initial boiling point and boiling range | 327°C |
| | Flash Point | 235°C (Closed Cup) |
| | Evaporation Rate | Not available. |
| | Flammability (solid, gas) | Non-flammable. |
| | Upper/lower flammability or explosive limits | Not applicable. |
| | Vapour pressure | <1 mmHg |
| | Vapour density | Not available. |
| | Relative density | 1.17 (H2O = 1) (Mixture) |
| | Solubility(ies) | Insoluble. |
| | Partition coefficient: n-octanol/water | Not available. |
| | Auto-ignition temperature | Not applicable. |
| | Decomposition Temperature | Not available. |
| | Viscosity | Not available. |
| | Explosive properties | Not available. |
| | Oxidising properties | Not oxidising. |
| 9.2 | Other information | None. |
| | | |

10. SECTION 10: STABILITY AND REACTIVITY

| 10.1 | Reactivity |
|------|------------|
|------|------------|

- 10.2 Chemical stability
- 10.3 Possibility of hazardous reactions
- 10.4 Conditions to avoid
- 10.5 Incompatible materials10.6 Hazardous decomposition product(s)

Stable under normal conditions. Stable under normal conditions. Combustion or thermal decomposition will evolve toxic and irritant vapours. Avoid contact with heat and ignition sources and oxidizers. Strong Oxidizing agents and Nitrates. Strong Acids and Alkalis. Decomposes in a fire giving off toxic fumes: Carbon monoxide, Carbon dioxide, and Aldehydes.

11. SECTION 11: TOXICOLOGICAL INFORMATION

| 11.1 | Information on toxicological effects (Sub | ostances in preparations / mixtures) |
|------|---|--|
| | Acute toxicity | |
| | Ingestion | Not classified. |
| | Inhalation | Not classified. |
| | Skin Contact | May cause an allergic skin reaction. Causes skin irritation. |
| | Eye Contact | Causes serious eye irritation. |
| | Irritation | Eye Irrit. 2; Skin Irrit. 2 Causes serious eye irritation. Causes skin irritation. |
| | Corrosivity | Not classified. |
| | Sensitisation | Skin Sens. 1; May cause an allergic skin reaction. |
| | Repeated dose toxicity | Not classified. |
| | Carcinogenicity | Not classified. |
| | Mutagenicity | Not classified. |
| | Toxicity for reproduction | Not classified. |
| 11.2 | Other information | None. |



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Toxicity

12.

12.1

12.2

12.3 12.4

12.5 12.6

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SECTION 12: ECOLOGICAL INFORMATION

| IONS | |
|---|--|
| None known. | |
| None known. | |
| Not classified as PBT or vPvB. | |
| The product has low mobility in soil. | |
| The product has no potential for bioaccumulation. | |
| Part of the components are biodegradable. | |
| | |

Not classified as a Marine Pollutant.

13. SECTION 13: DISPOSAL CONSIDERATI

Persistence and degradability

Results of PBT and vPvB assessment

Bioaccumulative potential

Other adverse effects

13.1 Waste treatment methods

Mobility in soil

This material and its container must be disposed of as hazardous waste (2008/98/EEC). Send after pre-treatment to an appropriate hazardous waste incinerator facility according to legislation. Dispose of contents in accordance with local, state or national legislation. None.

13.2 Additional Information

14. SECTION 14: TRANSPORT INFORMATION

| | | ADR/RID / IMDG / IATA |
|--------|---|-----------------------|
| 14.1 | UN number | UN 3316 |
| 14.2 | Proper Shipping Name | CHEMICAL KIT |
| 14.3 | Transport hazard class(es) | 9 |
| 14.4 | Packing group | III |
| 14.5 | Environmental hazards | None. |
| 14.6 | Special precautions for user | See Section: 2 |
| 14.7 | Transport in bulk according to Annex II of | Not applicable. |
| | MARPOL73/78 and the IBC Code | |
| 14.8 | Additional Information | None. |
| | | |
| 15. | SECTION 15: REGULATORY INFORMATION | 1 |
| 15.1 | Safety, health and environmental | |
| | regulations/legislation specific for the substance or | |
| | mixture | |
| 15.1.1 | EU regulations | |
| | Authorisations and/or Restrictions On Use | None. |
| 15.1.2 | National regulations | None known. |

15.2 Chemical Safety Assessment

None known. Not available.

16. SECTION 16: OTHER INFORMATION

The following sections contain revisions or new statements: 1-16.

References: Existing Safety Data Sheet (SDS), the Classification and Labelling Inventory for Bisphenol A Diglycidyl Ether (CAS# 25036-25-3).

| Classification of the substance or mixture According to Regulation (EC) No. 1272/2008 (CLP) | Classification Procedure |
|--|--------------------------|
| Skin Irrit. 2; H315 | Threshold Calculation |
| Skin Sens. 1; H317 | Threshold Calculation |
| Eye Irrit. 2; H319 | Threshold Calculation |

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LEGEND

| LTEL | Long Term Exposure Limit |
|------|-----------------------------------|
| STEL | Short Term Exposure Limit |
| DNEL | Derived No Effect Level |
| PNEC | Predicted No Effect Concentration |



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A VPG Brand

 PBT
 PBT: Persistent, Bioaccumulative and Toxic

 vPvB
 vPvT: very Persistent and very Toxic

Training advice: Consideration should be given to the work procedures involved and the potential extent of exposure as they may determine whether a higher level of protection is required.

Disclaimers

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Annex to the extended Safety Data Sheet (eSDS)

No information available.