

SAFETY DATA SHEET

Revision: 1.1 Date: 20.05.2015

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


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PHL-6

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

1.1 Product identifier	
Product Name	PHL-6
Chemical Name	Mixture
CAS No.	Mixture
EINECS No.	Mixture
REACH Registration No.	None assigned.
1.2 Recommended use of the chemical and restrictions on use	
Identified Use(s)	Photostress® measurements.
Uses Advised Against	None.
1.3 Supplier's details	
Company Identification	Vishay Measurements Group, Inc. Post Office Box 27777 Raleigh, NC 27611 USA
Telephone	919-365-3800
Fax	919-365-3945
E-Mail (competent person)	mm.us@vishaypg.com
1.4 Emergency Phone No.	1-800-424-9300 (U.S.) CHEMTREC

2. SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture	
2.1.1 Regulation (EC) No. 1272/2008 (CLP)	Acute Tox. 4; Harmful if swallowed. Skin Sens. 1; May cause an allergic skin reaction. STOT RE 2; May cause damage to organs through prolonged or repeated exposure. Aquatic Chronic 2; Toxic to aquatic life with long lasting effects.
2.1.2 Directive 67/548/EEC & Directive 1999/45/EC	R33: Danger of cumulative effects. R43: May cause sensitization by skin contact. Xn; R48/22: Harmful: danger of serious damage to health by prolonged exposure if swallowed. N; R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
2.2 Label elements	According to Regulation (EC) No. 1272/2008 (CLP)
Product Name	PHL-6
Hazard Pictogram(s)	
Signal Word(s)	Warning
Hazard Statement(s)	H302: Harmful if swallowed. H317: May cause an allergic skin reaction. H373: May cause damage to organs through prolonged or repeated exposure. H411: Toxic to aquatic life with long lasting effects.
Precautionary Statement(s)	P273: Avoid release to the environment. P280: Wear protective gloves/protective clothing/eye protection/face protection. P301+P312: IF SWALLOWED: Call a POISON CENTER or doctor/physician if

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you feel unwell.
P330: Rinse mouth.
P302+P352: IF ON SKIN: Wash with plenty of soap and water.
P333+P313: If skin irritation or rash occurs: Get medical advice/attention.
None.

2.3 Other hazards

3. SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances Substances in preparations / mixtures

3.2 Mixtures

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

Chemical identity of the substance	%W/W	CAS No.	EC No.	Hazard Statement(s)
6-methyl-2,4-bis(methylthio)phenylene-1,3-diamine	5-10	106264-79-3	403-240-8	Acute Tox. 4; H302 Skin Sens. 1; H317 Aquatic Acute 1; H400 Aquatic Chronic 1; H410
Aryl Mercuric Carboxylate	0.2	27236-65-3	248-355-2	Acute Tox. 2; H300 Acute Tox. 1; H310 Acute Tox. 2; H330 STOT RE 2; H373 Aquatic Acute 1; H400 Aquatic Chronic 1; H410
Non-classified ingredients	80-95	-	-	Not classified

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

Chemical identity of the substance	%W/W	CAS No.	EC No.	EC Classification and Risk Phrases
6-methyl-2,4-bis(methylthio)phenylene-1,3-diamine	5-10	106264-79-3	403-240-8	Xn;R22: Harmful if swallowed. R43: May cause sensitization by skin contact. N; R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Aryl Mercuric Carboxylate	0.2	27236-65-3	248-355-2	T+; R26/27/28: Very toxic by inhalation, in contact with skin and if swallowed. R33: Danger of cumulative effects. N; R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Non-classified ingredients	80-95	-	-	Not classified

4. SECTION 4: FIRST AID MEASURES



4.1 Description of first aid measures

Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell.

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. Make victim drink

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- | | | |
|-----|---|---|
| 4.2 | Most important symptoms and effects, both acute and delayed | water. Get medical attention.
May be harmful if swallowed and enters airways. May cause damage to organs through prolonged or repeated exposure: |
| 4.3 | Indication of any immediate medical attention and special treatment needed | Treat symptomatically. |

5. SECTION 5: FIRE-FIGHTING MEASURES

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|-----|--|--|
| 5.1 | Extinguishing media
Suitable Extinguishing Media
Unsuitable extinguishing Media | Extinguish preferably with waterspray or dry chemical. Carbon dioxide
None known. |
| 5.2 | Special hazards arising from the substance or mixture | May decompose in a fire giving off toxic fumes. Reacts with strong oxidizing substances. |
| 5.3 | Advice for fire-fighters | Fire fighters should wear complete protective clothing including self-contained breathing apparatus. Do not breathe fumes. |

6. SECTION 6: ACCIDENTAL RELEASE MEASURES

- | | | |
|-----|--|--|
| 6.1 | Personal precautions, protective equipment and emergency procedures | Wear protective gloves/protective clothing/eye protection/face protection. |
| 6.2 | Environmental precautions | Do not allow to enter drains, sewers or watercourses. (Marine Pollutant) |
| 6.3 | Methods and material for containment and cleaning up | Adsorb spillages onto sand, earth or any suitable adsorbent material. Contain spillages. Transfer to a container for disposal. Flush spill area with copious amounts of water. |
| 6.4 | Reference to other sections | See Section: 8, 13 |

7. SECTION 7: HANDLING AND STORAGE

- | | | |
|-----|--|--|
| 7.1 | Precautions for safe handling | 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 incompatibilities
Storage temperature
Storage life
Incompatible materials | Store in dry place. Keep container closed when not in use.
Ambient.
Stable under normal conditions.
None. |
| 7.3 | Specific end use(s) | Photostress® measurements. |

8. SECTION 8: EXPOSURE CONTROLS/PERSONAL 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 | |
| 8.2.1 | Appropriate engineering controls | Ensure adequate ventilation. Guarantee that the eye flushing systems and safety showers are located close to the working place. |
| 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. |

Eye/face protection



Wear protective eye glasses for protection against liquid splashes. Wear eye protection with side protection (EN166). Have available eyewash bottle with clean water.

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Skin protection



Wear impervious gloves (EN374). Breakthrough time of the glove material: refer to the information provided by the gloves' producer.
Rubber gloves recommended.

Respiratory protection



In case of inadequate ventilation wear respiratory protection.

Thermal hazards

Not applicable.

8.2.3 Environmental Exposure Controls

Avoid release to the environment.

9. SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	Light Yellow/Amber Liquid.
Odour	Slight Odour.
Odour Threshold	Not available.
pH	Not established.
Melting Point/Freezing Point	Not established.
Initial boiling point and boiling range	Not available.
Flash point	149°C (SETA)
Evaporation Rate	<1 (BuAc = 1)
Flammability (solid, gas)	Non-flammable.
Upper/lower flammability or explosive limits	Not applicable.
Vapour pressure	< 0.13 kPa (1 mm Hg)
Vapour density	Not available.
Relative density	1.03 (H ₂ O = 1)
Solubility(ies)	Slightly soluble.
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	Stable under normal conditions.
10.2 Chemical stability	Stable under normal conditions.
10.3 Possibility of hazardous reactions	None known.
10.4 Conditions to avoid	Keep away from heat and flame.
10.5 Incompatible materials	Strong oxidising agents. Isocyanates. Mineral acids.
10.6 Hazardous decomposition product(s)	Not determined.

11. SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects (Substances in preparations / mixtures)

Acute toxicity

Ingestion	Acute Tox. 4; Harmful if swallowed.
Inhalation	Not classified.
Skin Contact	Not classified.
Eye Contact	Not classified.
Irritation	Not classified.
Corrosivity	Not classified.

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	Sensitisation	Skin Sens. 1; May cause an allergic skin reaction.
	Repeated dose toxicity	STOT RE 2; May cause damage to organs through prolonged or repeated exposure.
	Carcinogenicity	Not classified.
	Mutagenicity	Not classified.
	Toxicity for reproduction	Not classified.
11.2	Other information	None.

12. SECTION 12: ECOLOGICAL INFORMATION

12.1	Toxicity	Classified as a Marine Pollutant.
12.2	Persistence and degradability	No information available.
12.3	Bioaccumulative potential	No information available.
12.4	Mobility in soil	No information available.
12.5	Results of PBT and VPVB assessment	Not classified as PBT or vPvB.
12.6	Other adverse effects	None known.

13. SECTION 13: DISPOSAL CONSIDERATIONS

13.1	Waste treatment methods	This material and its container must be disposed of as hazardous waste. (2001/118EC). Send after pre-treatment to a appropriate hazardous waste incinerator facility according to legislation.
13.2	Additional Information	Dispose of contents in accordance with local, state or national legislation.

14. SECTION 14: TRANSPORT INFORMATION

		ADR/RID / IMDG / IATA
14.1	UN number	UN 3082
14.2	Proper Shipping Name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.(6-methyl-2,4-bis(methylthio)phenylene-1,3-diamine)
14.3	Transport hazard class(es)	9
14.4	Packing group	III
14.5	Environmental hazards	Marine Pollutant/Environmentally hazardous substance
14.6	Special precautions for user	See Section: 2
14.7	Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
14.8	Additional Information	None.

15. SECTION 15: REGULATORY INFORMATION

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	Not available.

16. SECTION 16: OTHER INFORMATION

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

References: Existing Safety Data Sheet (SDS), Harmonised Classification(s) for 6-methyl-2,4-bis(methylthio)phenylene-1,3-diamine (CAS# 106264-79-3) and the Classification and Labelling Inventory for Aryl Mercuric Carboxylate (CAS# 27236-65-3).

Classification of the substance or mixture According to Regulation (EC) No. 1272/2008 (CLP)	Classification Procedure
Acute Tox. 4; H302	Threshold Calculation
Skin Sens. 1; H317	Threshold Calculation

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STOT RE 2; H337	Threshold Calculation
Aquatic Chronic 2	Summation Calculation

LEGEND

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

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Annex to the extended Safety Data Sheet (eSDS)

No information available.