

# 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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## PCH-9

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

<b>1.1 Product identifier</b>	
Product Name	PCH-9
Chemical Name	Mixture
CAS No.	Mixture
EINECS No.	Mixture
REACH Registration No.	None assigned.
<b>1.2 Recommended use of the chemical and restrictions on use</b>	
Identified use(s)	Photostress® measurements.
Uses advised against	None.
<b>1.3 Supplier's details</b>	
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
<b>1.4 Emergency Phone No.</b>	(00-1) 703-527-3887 CHEMTREC

### 2. SECTION 2: HAZARDS IDENTIFICATION

<b>2.1 Classification of the substance or mixture</b>	
<b>2.1.1 Regulation (EC) No. 1272/2008 (CLP).</b>	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.
<b>2.1.2 Directive 67/548/EEC &amp; Directive 1999/45/EC</b>	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.
<b>2.2 Label elements</b>	According to Regulation (EC) No. 1272/2008 (CLP).
Product Name	PCH-9
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.

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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 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.

2.3 Other hazards

None.

## 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)
Aluminum	20 – 25	7429-90-5	231-072-3	Flam. Sol. 1; H228
6-methyl-2,4-bis(methylthio)phenylene-1,3-diamine	3.5 – 8	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	60 – 75	-	-	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
Aluminum	20 – 25	7429-90-5	231-072-3	F; R11: Highly flammable. F; R15: Contact with water liberates extremely flammable gases.
6-methyl-2,4-bis(methylthio)phenylene-1,3-diamine	3.5 – 8	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	60 – 75	-	-	Not classified

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## 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 water. Get medical attention.

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

May cause skin sensitization. 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. There is no specific antidote.

## 5. SECTION 5: FIRE-FIGHTING MEASURES

### 5.1 Extinguishing media

Suitable Extinguishing Media

Extinguish preferably with waterspray or dry chemical. Carbon dioxide

Unsuitable Extinguishing Media

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. Contain spillages. Clean up spill with a detergent.

## 6. SECTION 6: ACCIDENTAL RELEASE MEASURES

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

Ensure adequate ventilation. Shut off leaks if without risk. Avoid breathing vapours. 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

Absorb spillages onto sand, earth or any suitable adsorbent material. Contain spillages. Transfer to a container for disposal. Dispose of this material and its container as hazardous waste.

### 6.4 Reference to other sections

See Section: 8, 13

## 7. SECTION 7: HANDLING AND STORAGE

### 7.1 Precautions for safe handling

Ensure adequate ventilation. Do not breathe vapour. 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

Store in a cool/low-temperature, well-ventilated (dry) place. Keep container closed when not in use.

Storage Temperature

Ambient.

Storage Life

Stable under normal conditions.

Incompatible materials

Isocyanates. Oxidizing agents. Mineral acids.

### 7.3 Specific end use(s)

Photostress® measurements.

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

### 8.1 Control parameters

#### 8.1.1 Occupational exposure limits

SUBSTANCE	CAS No.	LTEL (8 hr TWA ppm)	LTEL (8 hr TWA mg/m <sup>3</sup> )	STEL (ppm)	STEL (mg/m <sup>3</sup> )	Note
Aluminium metal	7429-90-5	-	10	-	-	WEL
-inhalable dust		-	4	-	-	
-respirable dust		-	-	-	-	

Note: WEL: Workplace Exposure Limit (UK HSE EH40)

#### 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

Provide adequate ventilation when using the material and follow the principles of good occupational hygiene to control personal exposures.

#### 8.2.2 Individual protection measures, such as personal protective equipment (PPE)

Wear protective equipment to comply with good occupational hygiene practice. 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.

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	Aluminium Coloured 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	Not available.
Flammability (solid, gas)	Non-flammable.
Upper/lower flammability or explosive limits	Not applicable.
Vapour pressure	< 1 (mmHg)
Vapour density	Not available.

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Relative density	1.03 (H <sub>2</sub> O = 1)
Solubility(ies)	Slightly soluble. (Water)
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.
<b>9.2 Other information</b>	Volatile Organic Compound Content: <1%

## 10. SECTION 10: STABILITY AND REACTIVITY

<b>10.1 Reactivity</b>	Stable under normal conditions.
<b>10.2 Chemical stability</b>	Stable under normal conditions.
<b>10.3 Possibility of hazardous reactions</b>	None known.
<b>10.4 Conditions to avoid</b>	Keep away from heat and flame.
<b>10.5 Incompatible materials</b>	Isocyanates. Oxidizing agents. Mineral acids.
<b>10.6 Hazardous Decomposition Product(s)</b>	May decompose in a fire giving off toxic fumes. Reacts with strong oxidizing substances.

## 11. SECTION 11: TOXICOLOGICAL INFORMATION

<b>11.1 Information on toxicological effects (Substances in preparations / mixtures)</b>	
<b>Acute toxicity</b>	
Ingestion	Acute Tox. 4; Harmful if swallowed. ATEmix calculation: LD50=1805 mg/kg/bodyweight
Inhalation	Not classified.
Skin Contact	Not classified.
Eye Contact	Not classified.
<b>Irritation</b>	Not classified.
<b>Corrosivity</b>	Not classified.
<b>Sensitisation</b>	Skin Sens. 1; May cause an allergic skin reaction.
<b>Repeated dose toxicity</b>	STOT RE 2; May cause damage to organs through prolonged or repeated exposure.
<b>Carcinogenicity</b>	Not classified.
<b>Mutagenicity</b>	Not classified.
<b>Toxicity for reproduction</b>	Not classified.
<b>11.2 Other information</b>	None.

## 12. SECTION 12: ECOLOGICAL INFORMATION

<b>12.1 Toxicity</b>	Classified as a Marine Pollutant. (Aquatic Chronic 2).
<b>12.2 Persistence and degradability</b>	No information available.
<b>12.3 Bioaccumulative potential</b>	No information available.
<b>12.4 Mobility in soil</b>	No information available.
<b>12.5 Results of PBT and vPvB assessment</b>	Not classified as PBT or vPvB.
<b>12.6 Other adverse effects</b>	None known.

## 13. SECTION 13: DISPOSAL CONSIDERATIONS

<b>13.1 Waste treatment methods</b>	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.
<b>13.2 Additional Information</b>	None.

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## 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). Existing ECHA registration(s) for Aluminum (CAS# 7429-90-5), 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
STOT RE 2; H337	Threshold Calculation
Aquatic Chronic 2; H411	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.

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