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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

1.1 Product identifier

Product Name PCH-9
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 GHS Classification 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.

2.2 Label elements According to GHS Classification

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.

 $\ensuremath{\mathsf{H373}}\xspace$: 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

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.

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3. SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances Substances in preparations / mixtures

3.2 Mixtures

GHS Classification

Chemical identity of the	%W/W	CAS No.	EC No.	Hazard statement(s)
substance				
Aluminum	20 – 25	7429-90-5	231-072-3	Flam. Sol. 1; H228
6-methyl-2,4-	3.5 – 8	106264-79-3	403-240-8	Acute Tox. 4; H302
bis(methylthio)phenylene-				Skin Sens. 1; H317
1,3-diamine				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

4. SECTION 4: FIRST AID MEASURES



4.1 Description of first aid measures

Inhalation

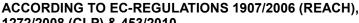
Skin Contact

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. 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

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Most important symptoms and effects, both acute

Indication of any immediate medical attention and

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medical advice/attention.

IF SWALLOWED: rinse mouth. Do NOT induce vomiting. Make victim drink

water. Get medical attention.

May cause skin sensitization. May be harmful if swallowed and enters airways.

May cause damage to organs through prolonged or repeated exposure.

Treat symptomatically. There is no specific antidote.

5. **SECTION 5: FIRE-FIGHTING MEASURES**

5.1 Extinguishing media

Ingestion

and delayed

special treatment needed

4.2

4.3

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

Advice for fire-fighters 5.3

May decompose in a fire giving off toxic fumes. Reacts with strong oxidizing substances.

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 Ensure adequate ventilation. Shut off leaks if without risk. Avoid breathing emergency procedures vapours. Wear protective gloves/protective clothing/eye protection/face

6.2 **Environmental precautions**

6.3 Methods and material for containment and cleaning

6.4 Reference to other sections Do not allow to enter drains, sewers or watercourses. (Marine Pollutant)

Adsorb 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.

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

Ambient.

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 Store in a cool/low-temperature, well-ventilated (dry) place. Keep container

incompatibilities

Storage Temperature

Storage Life

Incompatible materials Specific end use(s)

Stable under normal conditions.

closed when not in use.

Isocyanates. Oxidizing agents. Mineral acids.

Photostress® measurements.

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

8.1 **Control parameters**

7.3

8.1.1 Occupational exposure limits

SUBSTANCE	CAS No.	LTEL (8 hr	LTEL (8 hr	STEL	STEL	Note
		TWA ppm)	TWA mg/m³)	(ppm)	(mg/m³)	
Aluminium metal:						
-total dust		-	10	-	-	NIOSH
-respirable dust	7429-90-5	-	5	-	-	NIOSH
-total dust		-	15	-	-	OSHA
-respirable dust		-	5	-	-	OSHA

8.1.2 Biological limit value Not established.

8.1.3 **PNECs and DNELs** Not established.

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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.

Not applicable.

Respiratory protection

•

In case of inadequate ventilation wear respiratory protection.

Thermal hazards

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. 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.

Upper/lower flammability or explosive limits

Vapour pressure

Vapour density

Relative density

Not available.

1.03 (H2O = 1)

Solvibility (i.e.)

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.

9.2 Other information Volatile Organic Compound Content: <1%

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.

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Incompatible materials

10.5

10.6

11.2

Isocyanates. Oxidizing agents. Mineral acids.

Hazardous Decomposition Product(s)

May decompose in a fire giving off toxic fumes. Reacts with strong oxidizing

substances.

11. SECTION 11: TOXICOLOGICAL INFORMATION

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

Acute toxicity

Ingestion Acute Tox. 4; Harmful if swallowed.

ATEmix calculation: LD50=1805 mg/kg/bodyweight

InhalationNot classified.Skin ContactNot classified.Eye ContactNot classified.IrritationNot classified.CorrosivityNot classified.

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.

 Other information
 NTP: Not Listed

IARC Monographs: Not Listed OSHA Regulated: Not Listed

12. SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity Classified as a Marine Pollutant. (Aquatic Chronic 2).

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. Send

after pre-treatment to a appropriate hazardous waste incinerator facility according to legislation. Dispose of contents in accordance with local, state or

national legislation.

13.2 Additional Information None.

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-

Ш

2,4-bis(methylthio)phenylene-1,3-diamine)

14.3 Transport hazard class(es)14.4 Packing Group

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

14.8 Additional information None.

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15. SECTION 15: REGULATORY INFORMATION

15.1 Safety, health and environmental

None known.

regulations/legislation specific for the substance or

mixture

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 PvB PBT: very Persistent and very Toxic

NTP National Toxicology Program

IARC International Agency for Research on Cancer
NIOSH National Institute for Occupational Safety and Health
OSHA Occupational Safety and Health Administration

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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