Revision: 1.1 Date: 20.05.2015

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



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PL-6/PC-9

1.	SECTION 1: IDENTIFICATION OF THE SUBS	STANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING
1.1	Product identifier	
	Product Name	PL-6/PC-9
	Chemical Name	Mixture
	CAS No.	Mixture
	EINECS No.	Mixture
	REACH Registration No.	None assigned.
1.2	Recommended use of the chemical and restrictions	None assigned.
1.2		
	on use	
	Identified Use(s)	Photostress® measurements.
	Uses Advised Against	None.
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
1.4	Emergency r none no.	CHEMTREC
		CHEMINEC
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 by inhalation, in contact with skin and if swallowed.
		Skin Irrit. 2; Causes skin irritation.
		Eye Irrit. 2; Causes serious eye irritation.
		STOT SE 3; May cause respiratory irritation.
2.1.2	Directive 67/548/EEC & Directive 1999/45/EC	Xn; R20/21/22: Harmful by inhalation, in contact with skin and if swallowed.
		Xi;R36/37/38: Irritating to eyes, respiratory system and skin.
2.2	Label elements	According to Regulation (EC) No. 1272/2008 (CLP)
·	Product Name	PL-6/PC-9
	Hazard Pictogram(s)	
	Signal Word(s)	Warning
		H302: Harmful if swallowed.
	Hazard Statement(s)	
		H312: Harmful in contact with skin.
		H315: Causes skin irritation.
		H319: Causes serious eye irritation.
		H332: Harmful if inhaled.
		H335: May cause respiratory irritation.
	Precautionary Statement(s)	P261: Avoid breathing vapours.
		P280: Wear protective gloves/protective clothing/eye protection/face protection.
		P304+P340: IF INHALED: Remove victim to fresh air and keep at rest in a
		P304+P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
		P304+P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. P333+P313: If skin irritation or rash occurs: Get medical advice/attention.

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

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P309+P311: IF exposed or if you feel unwell: Call a POISON CENTER or doctor/physician.

2.3 Other hazards

EUH204: Contains isocyanates. May produce an allergic reaction.

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)	
Poly(propylene glycol), tolylene 2,4-diisocyanate terminated	>99.9	9057-91-4	-	Acute Tox. 4; H302 Acute Tox. 4; H312 Skin Irrit. 2; H315 Eye Irrit. 2; H319 Acute Tox. 4; H332 STOT SE 3; H335	

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

Chemical identity of the substance	%W/W	CAS No.	EC No.	EC Classification and Risk Phrases
Poly(propylene glycol), tolylene 2,4-diisocyanate terminated	>99.9	9057-91-4	-	Xn;R20/21/22: Harmful by inhalation, in contact with skin and if swallowed. R36/37/38: Irritating to eyes, respiratory system and skin.

SECTION 4: FIRST AID MEASURES



4.

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 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. Get medical advice/attention if you feel unwell.
4.2	Most important symptoms and effects, both acute and delayed	Contains isocyanates. May produce an allergic reaction. May cause irritation to skin, eves and respiratory system.
4.3	Indication of any immediate medical attention and special treatment needed	IF SWALLOWED: Give a slurry of activated charcoal in water to drink. Treat symptomatically.

5. SECTION 5: FIRE-FIGHTING MEASURES

5.1 Extinguishing media Suitable Extinguishing Media

Extinguish with carbon dioxide, dry chemical, foam or waterspray.



Revision: 1.1 Date: 20.05.2015

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



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5.2 5.3	Unsuitable extinguishing Media Special hazards arising from the substance or mixture Advice for fire-fighters	None known. May decompose in a fire giving off toxic fumes. Fire fighters should wear complete protective clothing including self-contained breathing apparatus. Do not breathe fumes. Keep containers cool by spraying with water if exposed to fire. Avoid run off to waterways and sewers.
6.	SECTION 6: ACCIDENTAL RELEASE MEAS	URES
6.1	Personal precautions, protective equipment and emergency procedures	Ensure adequate ventilation. Wear protective gloves/protective clothing/eye protection/face protection. Shut off leaks if without risk. Eliminate sources of ignition.
6.2 6.3	Environmental precautions Methods and material for containment and cleaning up	Do not allow to enter drains, sewers or watercourses. Adsorb spillages onto sand, earth or any suitable adsorbent material. 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. Heating can generate vapors that could cause headaches, nausea, dizziness, and respiratory irritation if inhaled. 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	Keep container tightly closed and in a well-ventilated place.
	Storage temperature Storage life	Ambient. Stable under normal conditions.
7.3	Incompatible materials Specific end use(s)	Keep away from: Oxidizing agents and Strong Acids and Alkalis. Photostress® measurements.
8.	SECTION 8: EXPOSURE CONTROLS/PERSO	DNAL PROTECTION
8.1 8.1.1 8.1.2 8.1.3	Control parameters Occupational Exposure Limits Biological limit value PNECs and DNELs	Not established. Not established. Not established.
8.2 8.2.1	Exposure controls 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.
	Skin protection	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 concentration/quantity of material being handled.
	Respiratory protection	Normally no personal respiratory protection is necessary. In case of inadequate ventilation wear respiratory protection.

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Revision: 1.1 Date: 20.05.2015

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



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Thermal hazards

9.1

Not applicable.

8.2.3 Environmental Exposure Controls

Avoid release to the environment.

9. SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties	
Appearance	Amber- Viscous liquid.
Odour	Odourless
Odour Threshold	Not available.
рН	Not established.
Melting Point/Freezing Point	Not established.
Initial boiling point and boiling range	Not established.
Flash point	160 <i>°</i> C
Evaporation Rate	<1 (BuAc = 1)
Flammability (solid, gas)	Non-flammable.
Upper/lower flammability or explosive limits	Not applicable.
Vapour pressure	< 110 kPa (1.10 bar)
Vapour density	Not available.
Relative density	1.05 (H2O = 1)
Solubility(ies)	Reacts slightly with 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

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	Combustion or thermal decomposition will evolve toxic and irritant vapours.
10.4	Conditions to avoid	Keep away from heat and flame.
10.5	Incompatible materials	Strong oxidising agents. Strong Acids and Alkalis.
10.6	Hazardous decomposition product(s)	Decomposes in a fire giving off toxic fumes:Carbon monoxide, Carbon dioxide, Hydrogen cyanide, Amines and Alcohols.

11. SECTION 11: TOXICOLOGICAL INFORMATION

11.1	Information on toxicological effects (Substances in preparations / mixtures) Acute toxicity			
	Ingestion	Acute Tox. 4		
	Inhalation	Acute Tox. 4		
	Skin Contact	Acute Tox. 4		
	Eye Contact	Acute Tox. 4		
	Irritation	Eye Irrit. 2; Skin Irrit. 2		
	Corrosivity	Not classified.		
	Sensitisation	Not classified.		
	Repeated dose toxicity	Not classified.		
	Carcinogenicity	Not classified.		
	Mutagenicity	Not classified.		
	Toxicity for reproduction	Not classified.		
11.2	Other information	None.		

Revision: 1.1 Date: 20.05.2015

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

SECTION 12: ECOLOGICAL INFORMATION

Toxicity Persistence and degradability

- **Bioaccumulative potential** 12.3
- 12.4 Mobility in soil

12.

12.1

12.2

- **Results of PBT and VPVB assessment** 12.5
- 12.6 Other adverse effects

Not classified as a Marine Pollutant. No information available. No information available. No information available. Not classified as PBT or vPvB. None known.

SECTION 13: DISPOSAL CONSIDERATIONS 13.

13.1 Waste treatment methods

13.2 Additional Information 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. 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 2206 14.2 **Proper Shipping Name** ISOCYANATE SOLUTION, TOXIC, N.O.S (Poly(propylene glycol), tolylene 2,4diisocyanate terminated) Transport hazard class(es) 14.3 6.1 Packing group 14.4 ш 14.5 **Environmental hazards** Not classified as a Marine Pollutant. 14.6 Special precautions for user See Section: 2 Transport in bulk according to Annex II of Not applicable. 14.7 MARPOL73/78 and the IBC Code **Additional Information** 14.8 None.

15. SECTION 15: REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture 15.1

15.1.1 EU regulations

16.

Authorisations and/or Restrictions On Use

National regulations 15.1.2

None known. Not available.

None.

15.2 **Chemical Safety Assessment**

SECTION 16: OTHER INFORMATION

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

References: Existing Safety Data Sheet (SDS) and the Classification and Labelling Inventory for Poly(propylene glycol), tolylene 2,4-diisocyanate terminated (CAS# 9057-91-4).

Classification of the substance or mixture According to Regulation (EC) No. 1272/2008 (CLP)	Classification Procedure
Acute Tox. 4; H302	Threshold Calculation
Acute Tox. 4; H312	Threshold Calculation
Skin Irrit. 2; H315	Threshold Calculation



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Eye Irrit. 2; H319	Threshold Calculation
Acute Tox. 4; H332	Threshold Calculation
STOT SE 3; H335	Threshold Calculation
EUH204	Regulation (EC) No. 1272/2008 (CLP)

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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