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PL-6/PC-9

1. SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING Product identifier 1.1 PL-6/PC-9 Product Name **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 919-365-3800 Telephone Fax 919-365-3945 E-Mail (competent person) mm.us@vishaypg.com 1-800-424-9300 (U.S.) 1.4 **Emergency Phone No.** 703-527-3887 (Outside U.S.) CHEMTREC **SECTION 2: HAZARDS IDENTIFICATION** 2. 2.1 Classification of the substance or mixture 2.1.1 **GHS Classification** 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. 2.2 Label elements According to GHS Classification Product Name PL-6/PC-9 Hazard Pictogram(s) Signal Word(s) Warning Hazard Statement(s) H302: Harmful if swallowed. 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 position comfortable for breathing. 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. 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

GHS Classification

Chemical identity of the	%W/W	CAS No.	EC No.	Hazard Statement(s)	
substance					
Poly(propylene glycol),	>99.9	9057-91-4	-	Acute Tox. 4; H302	
tolylene 2,4-diisocyanate				Acute Tox. 4; H312	
terminated				Skin Irrit. 2; H315	
				Eye Irrit. 2; H319	
				Acute Tox. 4; H332	
				STOT SE 3; H335	

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. 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	Contains isocyanates. May produce an allergic reaction. May cause irritation to
	delayed	skin, eyes and respiratory system.
4.3	Indication of any immediate medical attention and	IF SWALLOWED: Give a slurry of activated charcoal in water to drink. Treat
	special treatment needed	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	None known.
5.2	Special hazards arising from the substance or mixture	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
		with water if exposed to fire. Avoid run off to waterways and sewers.



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5.	SECTION 6: ACCIDENTAL RELEASE MEAS	DURED
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	Environmental precautions	Do not allow to enter drains, sewers or watercourses.
6.3	Methods and material for containment and cleaning up	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
6.4	Reference to other sections	waste. 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
7.2	Conditions for safe storage including any	product. Wash hands before breaks and after work.
1.2	Conditions for safe storage, including any incompatibilities	Keep container tightly closed and in a well-ventilated place.
	Storage temperature	Ambient.
	Storage life	Stable under normal conditions.
	Incompatible materials	Keep away from: Oxidizing agents and Strong Acids and Alkalis.
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	
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.
	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.
	Thermal hazards	Not applicable.

8.2.3 Environmental Exposure Controls

Avoid release to the environment.

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9. SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES 9.1 Information on basic physical and chemical

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℃
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.

None.

9.2 Other information

10. SECTION 10: STABILITY AND 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. Keep away from heat and flame. Strong oxidising agents. Strong Acids and Alkalis. 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	NTP: Not Listed IARC Monographs: Not Listed OSHA Regulated: Not Listed		



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Toxicity

Mobility in soil

12.

12.1

12.2

12.3

12.4

12.5 12.6

13.

13.1

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14.1

14.2

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SECTION 12: ECOLOGICAL INFORMATION

SECTION 13: DISPOSAL CONSIDERATIONS

SECTION 14: TRANSPORT INFORMATION

14.3	Transport hazard class(es)	6.1
14.4	Packing group	III
14.5	Environmental hazards	Not classified as a Marine Pollutant.
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	
15.1	Safety, health and environmental regulations/legislation specific for the substance or mixture	Not available.
15.2	Chemical Safety Assessment	Not available.
16.	SECTION 16: OTHER INFORMATION	
The fo	llowing sections contain revisions or new statements: 1	-16.
D - (

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	Classification Procedure
Regulation (EC) No. 1272/2008 (CLP)	
Acute Tox. 4; H302	Threshold Calculation
Acute Tox. 4; H312	Threshold Calculation
Skin Irrit. 2; H315	Threshold Calculation
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)

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

according to legislation.

ADR/RID / IMDG / IATA

This material and its container must be disposed of as hazardous waste. Send after pre-treatment to a appropriate hazardous waste incinerator facility

ISOCYANATE SOLUTION, TOXIC, N.O.S (Poly(propylene glycol), tolylene 2,4-

Dispose of contents in accordance with local, state or national legislation.

Persistence and degradability

Results of PBT and VPVB assessment

Bioaccumulative potential

Waste treatment methods

Additional Information

Proper Shipping Name

UN number

Other adverse effects

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ENTS

Revision I

LEGEND

diisocyanate terminated)

UN 2206

14.8

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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
NTP	National Toxicology Program
IARC	International Agency for Research on Cancer
NIOSH	National Institute for Occupational Safety and Health
OSHA	Ocupational Safety and Health Standards

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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