

# SAFETY DATA SHEET



Revision: 1.1 Date: 15.09.2015

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

www.vishaypg.com

## PCH-12C

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

- 1.1 Product identifier**  
Product Name PCH-12C  
Chemical Name Ricinus Oil/Castor Oil  
CAS No. 8001-79-4  
EINECS No. 232-293-8  
REACH Registration No. None assigned.
- 1.2 Relevant identified uses of the substance or mixture and uses advised against**  
Identified Use(s) Photostress® measurements.  
Uses Advised Against None known.
- 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**
- GHS Classification** Not classified as dangerous for supply/use.
- 2.2 Label elements** According to GHS Classification
- Product Name PCH-12C
- Hazard Pictogram(s) None assigned.
- Signal Word(s) None assigned.
- Hazard Statement(s) None assigned.
- Precautionary Statement(s) None assigned.
- 2.3 Other hazards** None.

### 3. SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.1 Substances

GHS Classification

Chemical identity of the substance	%W/W	CAS No.	EC No.	Hazard Statement(s)
Ricinus Oil/Castor Oil	100	8001-79-4	232-293-8	Not classified.

#### 3.2 Mixtures Not applicable.

# SAFETY DATA SHEET

Revision: 1.1 Date: 15.09.2015

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

www.vishaypg.com

## 4. SECTION 4: FIRST AID MEASURES



### 4.1 Description of first aid measures

Inhalation

Skin Contact

Eye Contact

Ingestion

Unlikely route of exposure.

Wash skin with soap and water. If skin irritation occurs: Get medical advice/attention.

Flush eyes with water for at least 15 minutes while holding eyelids open. If eye irritation persists, get medical advice/attention.

Wash out mouth with water and give 200-300 ml (half a pint) of water to drink.

Do not induce vomiting. If symptoms persist, obtain medical attention.

None known.

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

### 4.3 Indication of any immediate medical attention and special treatment needed

Unlikely to be required but if necessary treat symptomatically.

## 5. SECTION 5: FIRE-FIGHTING MEASURES

### 5.1 Extinguishing media

Suitable Extinguishing Media

Unsuitable extinguishing Media

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

Do not use water jet.

### 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.

## 6. SECTION 6: ACCIDENTAL RELEASE MEASURES

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

Wear suitable gloves if prolonged skin contact is likely. Wash hands thoroughly after handling.

### 6.2 Environmental precautions

Avoid run off to waterways and sewers.

### 6.3 Methods and material for containment and cleaning up

Clean up spill immediately. Wipe up remainder then remove to safe place.

Transfer to a container for disposal. Recover or recycle if possible.

### 6.4 Reference to other sections

See Section: 8, 13

## 7. SECTION 7: HANDLING AND STORAGE

### 7.1 Precautions for safe handling

Wear suitable gloves if prolonged skin contact is likely. Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product.

### 7.2 Conditions for safe storage, including any incompatibilities

Storage temperature

Storage life

Incompatible materials

Store in a well-ventilated place. Keep container tightly closed. Keep away from heat, sources of ignition and direct sunlight.

Ambient. <43 °C

Stable under normal conditions.

Keep away from: Oxidizing agents, Acids.

### 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.

# SAFETY DATA SHEET

Revision: 1.1 Date: 15.09.2015

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

www.vishaypg.com

## 8.2 Exposure controls

### 8.2.1 Appropriate engineering controls

Ensure adequate ventilation. Atmospheric levels should be controlled in compliance with the occupational exposure limit.

### 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).

Skin protection



Wear impervious gloves (EN374).

Respiratory protection

Normally no personal respiratory protection is necessary.



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	Clear / Yellowish Coloured liquid
Odour	Mild odour
Odour Threshold	Not available.
pH	Not established.
Melting Point/Freezing Point	Not established.
Initial boiling point and boiling range	313 °C
Flash point	>93 °C
Evaporation Rate	Not available.
Flammability (solid, gas)	Non-flammable.
Upper/lower flammability or explosive limits	Not available.
Vapour pressure	>0.1
Vapour density	Not available.
Relative density	0.959g/cm <sup>3</sup> (H <sub>2</sub> O = 1)
Solubility(ies)	Insoluble (Water)
Partition coefficient: n-octanol/water	Not available.
Auto-ignition temperature	Not available.
Decomposition Temperature	Not available.
Viscosity	Not available.
Explosive properties	Not explosive.
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	Hazardous polymerisation will not occur.
10.4 Conditions to avoid	Keep away from heat, sources of ignition and direct sunlight.
10.5 Incompatible materials	Oxidizing agents, Acids.
10.6 Hazardous decomposition product(s)	May decompose in a fire giving off toxic fumes. Carbon monoxide, Carbon dioxide.

# SAFETY DATA SHEET

Revision: 1.1 Date: 15.09.2015

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

www.vishaypg.com

## 11. SECTION 11: TOXICOLOGICAL INFORMATION

<b>11.1</b>	<b>Information on toxicological effects (Substances in preparations / mixtures)</b>	
	<b>Acute toxicity</b>	
	Ingestion	Not classified.
	Inhalation	Not classified.
	Skin Contact	Not classified.
	Eye Contact	Not classified.
	<b>Irritation</b>	Not classified.
	<b>Corrosivity</b>	Not classified.
	<b>Sensitisation</b>	Not classified.
	<b>Repeated dose toxicity</b>	Not classified.
	<b>Carcinogenicity</b>	Not classified.
	<b>Mutagenicity</b>	Not classified.
	<b>Toxicity for reproduction</b>	Not classified.
<b>11.2</b>	<b>Other information</b>	NTP: Not Listed IARC Monographs: Not Listed OSHA Regulated: Not Listed

## 12. SECTION 12: ECOLOGICAL INFORMATION

<b>12.1</b>	<b>Toxicity</b>	Not classified as a Marine Pollutant.
<b>12.2</b>	<b>Persistence and degradability</b>	Readily biodegradable.
<b>12.3</b>	<b>Bioaccumulative potential</b>	No data.
<b>12.4</b>	<b>Mobility in soil</b>	The substance may adsorb onto soils and sediments.
<b>12.5</b>	<b>Results of PBT and VPVB assessment</b>	Not classified as PBT or vPvB.
<b>12.6</b>	<b>Other adverse effects</b>	None known.

## 13. SECTION 13: DISPOSAL CONSIDERATIONS

<b>13.1</b>	<b>Waste treatment methods</b>	Dispose of contents in accordance with local, state or national legislation.
<b>13.2</b>	<b>Additional Information</b>	None.

## 14. SECTION 14: TRANSPORT INFORMATION

		<b>ADR/RID / IMDG / IATA</b>
<b>14.1</b>	<b>UN number</b>	Not classified as dangerous for transport.
<b>14.2</b>	<b>Proper Shipping Name</b>	Not classified
<b>14.3</b>	<b>Transport hazard class(es)</b>	Not classified
<b>14.4</b>	<b>Packing group</b>	Not classified
<b>14.5</b>	<b>Environmental hazards</b>	Not classified
<b>14.6</b>	<b>Special precautions for user</b>	Not classified
<b>14.7</b>	<b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b>	Not classified

## 15. SECTION 15: REGULATORY INFORMATION

<b>15.1</b>	<b>Safety, health and environmental regulations/legislation specific for the substance or mixture</b>	None.
-------------	---	-------

## 16. 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 Ricinus Oil/Castor Oil (CAS# 8001-79-4).

# SAFETY DATA SHEET

Revision: 1.1 Date: 15.09.2015

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

www.vishaypg.com

Classification of the substance or mixture According to Regulation (EC) No. 1272/2008 (CLP)	Classification Procedure
Not classified	None.

## 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
NTP	National Toxicology Program
IARC	International Agency for Research on Cancer
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.

## Disclaimers

Information contained in this publication or as otherwise supplied to Users is believed to be accurate and is given in good faith, but it is for the Users to satisfy themselves of the suitability of the product for their own particular purpose. Vishay Precision Group gives no warranty as to the fitness of the product for any particular purpose and any implied warranty or condition (statutory or otherwise) is excluded except to the extent that exclusion is prevented by law. Vishay Precision Group accepts no liability for loss or damage (other than that arising from death or personal injury caused by defective product, if proved), resulting from reliance on this information. Freedom under Patents, Copyright and Designs cannot be assumed.

## Annex to the extended Safety Data Sheet (eSDS)

No information available.



## Disclaimer

ALL PRODUCTS, PRODUCT SPECIFICATIONS AND DATA ARE SUBJECT TO CHANGE WITHOUT NOTICE.

Vishay Precision Group, Inc., its affiliates, agents, and employees, and all persons acting on its or their behalf (collectively, "VPG"), disclaim any and all liability for any errors, inaccuracies or incompleteness contained herein or in any other disclosure relating to any product.

The product specifications do not expand or otherwise modify VPG's terms and conditions of purchase, including but not limited to, the warranty expressed therein.

VPG makes no warranty, representation or guarantee other than as set forth in the terms and conditions of purchase. **To the maximum extent permitted by applicable law, VPG disclaims (i) any and all liability arising out of the application or use of any product, (ii) any and all liability, including without limitation special, consequential or incidental damages, and (iii) any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.**

Information provided in datasheets and/or specifications may vary from actual results in different applications and performance may vary over time. Statements regarding the suitability of products for certain types of applications are based on VPG's knowledge of typical requirements that are often placed on VPG products. It is the customer's responsibility to validate that a particular product with the properties described in the product specification is suitable for use in a particular application. You should ensure you have the current version of the relevant information by contacting VPG prior to performing installation or use of the product, such as on our website at [vpgsensors.com](http://vpgsensors.com).

No license, express, implied, or otherwise, to any intellectual property rights is granted by this document, or by any conduct of VPG.

The products shown herein are not designed for use in life-saving or life-sustaining applications unless otherwise expressly indicated. Customers using or selling VPG products not expressly indicated for use in such applications do so entirely at their own risk and agree to fully indemnify VPG for any damages arising or resulting from such use or sale. Please contact authorized VPG personnel to obtain written terms and conditions regarding products designed for such applications.

Product names and markings noted herein may be trademarks of their respective owners.

Copyright Vishay Precision Group, Inc., 2014. All rights reserved.