EPY-500 PART B



www.vpgsensors.com

Date of issue:30/11/2022 Date of First Issue: 04/09/2012

Version 5.0

ACCORDING TO EC-REGULATIONS 1907/2006 (REACH), 1272/2008 (CLP) & 2020/878

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

1.1 Product identifier

Product Name EPY-500 Part B
Product Code Not applicable
Unique Formula Identifier (UFI) Not applicable

Nanoform The product does not contain nanoparticles.

1.2 Relevant identified uses of the substance or mixture

and uses advised against

Identified Use(s) PC14 Metal surface treatment products, including galvanic and electroplating

products

Uses Advised Against For professional users only.

1.3 Details of the supplier of the safety data sheet

Company Identification VISHAY MEASUREMENTS GROUP GMBH

Tatschenweg 1 74078 Heilbronn Deutschland

 Telephone
 +49 (0) 7131 39099-0

 Fax
 +49 (0) 7131 39099-229

 E-Mail (competent person)
 mm.de@vpgsensors

1.4 Emergency telephone number

National Poisons Information Centre (United Kingdom) +44 (0) 3448 920111 24 hr. emergency phone number

Healthcare Professionals ONLY

 NHS 24
 111
 Members of Public

 Emergency Phone No.
 (00-1) 703-527-3887
 CHEMTREC (24 hours)

Languages spoken All official European languages.

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

2.1.1 Regulation (EC) No. 1272/2008 (CLP) Skin Sens. 1; H317

Eye Dam. 1; H318 Resp. Sens. 1; H334

2.2 Label elements According to Regulation (EC) No. 1272/2008 (CLP)

Product Name EPY-500 Part B

Hazard Pictogram(s)





Signal Word(s) DANGER

Contains: 1,2,4,5-Benzenetetracarboxylic dianhydride

Hazard Statement(s) H317: May cause an allergic skin reaction.

H318: Causes serious eye damage.

H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Document No. 14147 Page: 1 of 8

EPY-500 PART B



www.vpgsensors.com

Date of issue:30/11/2022 Date of First Issue: 04/09/2012

Version 5.0

ACCORDING TO EC-REGULATIONS 1907/2006 (REACH), 1272/2008 (CLP) & 2020/878

Precautionary Statement(s) P260: Do not breathe dusts or mists.

P261: Avoid breathing mist/vapours/spray.

P280: Wear protective gloves/protective clothing/eye protection/face

protection/hearing protection.

P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for

breathing.

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

P310: Immediately call a POISON CENTER/doctor.

P342+P311: If experiencing respiratory symptoms: Call a POISON

CENTER/doctor.

Supplemental information None Known

2.3 Other hazards May form explosible dust clouds in air. Contact with water or moist air causes

production of opaque and corrosive fumes.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances - Not applicable.

3.2 **Mixtures**

EC Classification Regulation (EC) No. 1272/2008 (CLP)

Chemical identity of the substance	%W/W	CAS No.	EC No.	REACH Registration No.	Hazard classification
Benzene-1,2:4,5- tetracarboxylic dianhydride	80 -< 90	89-32-7	201-898-9	None assigned	Skin Sens. 1; H317 Eye Dam. 1; H318 Resp. Sens. 1; H334

Note: For full text of H phrases see section 16.

SECTION 4: FIRST AID MEASURES



4.1 Description of first aid measures

Self-protection of the first aider

Inhalation

Skin Contact

Eye Contact

Ingestion

Use personal protective equipment as required. Wear appropriate personal protective equipment, avoid direct contact. Ensure adequate ventilation. Do not

breathe dusts or mists. Avoid all contact. Avoid exposure during pregnancy. IF INHALED: If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTER/doctor. If breathing is laboured, oxygen should be administered by qualified personnel. If breathing has stopped, apply artificial respiration.

IF ON SKIN: Remove contaminated clothing and wash all affected areas with plenty of water. Contaminated clothing should be thoroughly cleaned. If skin

irritation or rash occurs: Get medical advice/attention.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor. Obtain prompt consultation, preferably from an ophthalmologist.

Continue irrigation until medical attention can be obtained.

Rinse mouth. Do NOT induce vomiting. Do not give anything by mouth to an unconscious person. If exposed or concerned: Get medical attention/advice.

Document No. 14147 Page: 2 of 8

EPY-500 PART B



ACCORDING TO EC-REGULATIONS 1907/2006 (REACH), 1272/2008 (CLP) & 2020/878

www.vpgsensors.com

Date of issue:30/11/2022 Date of First Issue: 04/09/2012

Version 5.0

4.2 Most important symptoms and effects, both acute and delayed

4.3 Indication of any immediate medical attention and special treatment needed

May cause an allergic skin reaction. Causes serious eye damage. May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Treat symptomatically.

IF IN EYES: Chemical eye burns may require extended irrigation.

SECTION 5: FIREFIGHTING MEASURES

5.1 **Extinguishing media**

Suitable Extinguishing media

Unsuitable extinguishing media

Special hazards arising from the substance or mixture

5.3 Advice for fire-fighters

5.2

As appropriate for surrounding fire. Extinguish preferably with foam, carbon dioxide or dry chemical.

Do not use water jet. Direct water jet may spread the fire. Avoid dust generation Finely dispersed particles form explosive mixtures with air.

Decomposes in a fire giving off toxic fumes: Nitrogen oxides, Carbon dioxide and Carbon monoxide. Contact with water or moist air causes production of opaque and corrosive fumes. May form explosible dust clouds in air.

Fire fighters should wear complete protective clothing including self-contained breathing apparatus. Do not breathe fumes. Avoid dust generation Keep containers cool by spraying with water if exposed to fire. Avoid run off to waterways and sewers.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation In case of leakage, eliminate all ignition sources. Avoid breathing dust. Avoid contact with skin, eyes or clothing. In case of inadequate ventilation wear respiratory protection. Use personal protective equipment as required. See Section: 8.

6.2 **Environmental precautions** Avoid release to the environment. Do not allow to enter drains, sewers or watercourses.

6.3 Methods and material for containment and cleaning Stop leak if safe to do so. Ensure suitable personal protection during removal of spillages. Vacuum spilled material. Recommended: High efficiency particulate air filter (HEPA filter). Use non-sparking tools. Avoid dust generation Do not use compressed air for cleaning purposes. Transfer to a lidded container for disposal or recovery. Ventilate the area and wash spill site after material pick-up is complete. Dispose of this material and its container as hazardous waste

6.4 Reference to other sections See Section: 8, 13

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling Ensure adequate ventilation Avoid contact with skin, eyes or clothing. Avoid breathing dust. Use personal protective equipment as required. See Section: 8. Avoid dust generation. Do not allow dust to accumulate on surfaces and equipment. Use non-dispersive workplace cleaning (no compressed air / high pressure cleaners). Do not use in confined spaces. Wash hands thoroughly after handling. Contaminated clothing should be thoroughly cleaned. Protect from moisture.

7.2 Conditions for safe storage, including any incompatibilities

Storage temperature

Storage life Incompatible materials

7.3 Specific end use(s) Store in a cool/low-temperature, well-ventilated (dry) place away from heat and ignition sources. Keep away from heat and direct sunlight. Protect from moisture. Ambient

Stable under normal conditions

Keep away from: Acids, strong bases, Flammable liquids, Reducing agents, Oxidizing agents, Corrosive Substances and Alkalis. Keep away from moisture. Contact with water or moist air causes production of opaque and corrosive fumes.

See Section: 1.2.

Document No. 14147 Page: 3 of 8





www.vpgsensors.com

Date of issue: 30/11/2022 Date of First Issue: 04/09/2012

Version 5.0

ACCORDING TO EC-REGULATIONS 1907/2006 (REACH), 1272/2008 (CLP) & 2020/878

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

8.1.1 Occupational Exposure Limits

United Kingdom

SUBSTANCE	CAS No.	LTEL (8 hr TWA ppm)	LTEL (8 hr TWA mg/m³)	STEL (ppm)	STEL (mg/m³)	Note
Talc, respirable dust	14807-96-6	-	1	-	-	-

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

Ireland

SUBSTANCE	CAS No.	Occupational Exposure Limit Value (8-hour reference period)		Occupational Exposure Limit Value (15-minute reference period)		Notes
		ppm	mg/m³	ppm	mg/m³	
Talc						
Total inhalable dust	14807-96-6	-	10	-	-	-
respirable dust		-	0.8	-	-	-

Source: 2021 Code of Practice for Safety, Health and Welfare at Work (Chemical Agents) Regulation (2001 – 2021) and the Safety, Health and Welfare at Work (Carcinogens) Regulations (2001 – 2019); Health and Safety Authority

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 or use appropriate containment. Atmospheric levels

should be controlled in compliance with the occupational exposure limit.

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

General hygiene measures for the handling of chemicals are applicable. Avoid all contact. Avoid breathing vapours. Wash hands before breaks and after work. Keep work clothes separately. Contaminated clothing should be thoroughly cleaned. Do not eat, drink or smoke at the work place.

Protective clothing should be selected specifically for the working place, depending on concentration and quantity of the hazardous substances handled. The resistance of the protective clothing to chemicals should be ascertained with the respective supplier.

Eye/ face protection



Skin protection



Wear protective eye glasses for protection against liquid splashes. Wear eye protection with side protection (EN166).

Hand protection:

Wear impervious gloves (EN374). Gloves should be changed regularly to avoid permeation problems. Breakthrough time of the glove material: refer to the information provided by the gloves' producer. Recommended: PVC / Nitrile rubber.

Body protection:

Wear dustproof working clothes. Wear impervious protective clothing, including boots, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

Use only in well-ventilated areas. In case of inadequate ventilation wear respiratory protection. A suitable mask with filter type A (EN141 or EN405) may be appropriate.

Respiratory protection







www.vpgsensors.com

Date of issue:30/11/2022 Date of First Issue: 04/09/2012

Version 5.0

ACCORDING TO EC-REGULATIONS 1907/2006 (REACH), 1272/2008 (CLP) & 2020/878

> Thermal hazards Not applicable

8.2.3 **Environmental exposure controls** Avoid release to the environment. Do not allow to enter drains, sewers or

watercourses.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Powder Physical state Colour Not available Odour Not established Melting point and freezing point Not established Boiling point or initial boiling point and boiling range Not established Flammability Not established Lower and upper explosion limit or lower and upper Not applicable - solid

flammability limit

Flash point Not applicable - solid Not applicable - solid Auto-ignition temperature Not established Decomposition temperature Not established Kinematic viscosity Not applicable - solid Solubility Not established Partition coefficient: n-octanol/water (log value) Not applicable Not established Vapour pressure Density and/or relative density Not applicable - solid

Relative vapour density Particle characteristics

9.2 Other information

> Explosive properties Not explosive. May form explosible dust clouds in air.

Oxidising properties Not oxidising.

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 May form explosible dust clouds in air. Contact with water or moist air causes

Not applicable - solid

Not established

production of opaque and corrosive fumes.

10.4 Conditions to avoid Keep away from heat, sources of ignition and direct sunlight.

10.5 Incompatible materials Keep away from: Acids, strong bases, Flammable liquids, Reducing agents,

Oxidizing agents, Corrosive Substances and Alkalis. Protect from moisture.

10.6 Hazardous decomposition product(s) Decomposes in a fire giving off toxic fumes: Nitrogen oxides, Carbon dioxide and

Carbon monoxide.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

Ingestion Mixture: Based upon the available data, the classification criteria are not met.

Acute Toxicity Estimate Mixture Calculation: Estimated LD50 > 2000 mg/kg

Inhalation Mixture: Based upon the available data, the classification criteria are not met.

Acute Toxicity Estimate Mixture Calculation: Estimated LC50 > 5 mg/l. (dust/mist) Skin Contact Mixture: Based upon the available data, the classification criteria are not met.

Acute Toxicity Estimate Mixture Calculation: Estimated LD50 > 2000 mg/kg

bw/day.

Document No. 14147 Page: 5 of 8

EPY-500 PART B



www.vpgsensors.com

Date of issue:30/11/2022 Date of First Issue: 04/09/2012

Version 5.0

ACCORDING TO EC-REGULATIONS 1907/2006 (REACH), 1272/2008 (CLP) & 2020/878

Skin corrosion/irritation Serious eye damage/irritation

Benzene-1,2:4,5-tetracarboxylic dianhydride

Respiratory or skin sensitization

Benzene-1,2:4,5-tetracarboxylic dianhydride

Germ cell mutagenicity
Carcinogenicity

Reproductive toxicity
STOT - single exposure
STOT - repeated exposure
Aspiration hazard

11.2 Information on other hazards11.2.1 Endocrine disrupting properties

11.2.2 Other information

12.6

Mixture: Based upon the available data, the classification criteria are not met.

Mixture: Eye Dam. 1; H318: Causes serious eye damage.

Eye Dam. 1; H318: Causes serious eye damage.

Result: Causes severe eye damage. OECD 405 (rabbit) (Unnamed

publication, 1975; 2008)

Harmonised Classification; ECHA registration dossier

Mixture: Skin Sens. 1; H317: May cause an allergic skin reaction.

Resp. Sens. 1; H33; May cause allergy or asthma symptoms or breathing

difficulties if inhaled.

Skin Sens. 1; H317: May cause an allergic skin reaction.

Mouse local lymph node assay (LLNA) (OECD 429 and EU Method B42) Result: Adverse effects observed (Sensitising) (Unnamed publication, 2009) Resp. Sens. 1; H33; May cause allergy or asthma symptoms or breathing

difficulties if inhaled.

Result: Adverse effects observed (Sensitising) (Unnamed publication, 1989)

Harmonised Classification; ECHA registration dossier

Mixture: Based upon the available data, the classification criteria are not met. Mixture: Based upon the available data, the classification criteria are not met. Mixture: Based upon the available data, the classification criteria are not met. Mixture: Based upon the available data, the classification criteria are not met. Mixture: Based upon the available data, the classification criteria are not met. Mixture: Based upon the available data, the classification criteria are not met.

This product does not contain a substance that has endocrine disrupting

properties with respect to humans as no components meets the criteria.

None

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity Mixture: Based upon the available data, the classification criteria are not met.

12.2 Persistence and degradability

No data for the mixture as a whole.

Readily biodegradable. Read across: Pyromellitic acid PMA

Benzene-1,2:4,5-tetracarboxylic dianhydride 100% degradation in water 28d (OECD 301B)

ECHA registration dossier

12.3 Bioaccumulative potential No data for the mixture as a whole.

The substance has low potential for bioaccumulation. Benzene-1,2:4,5-tetracarboxylic dianhydride Bioconcentration factor (BCF): 1 (pH 1-10 @25℃)

ECHA registration dossier

12.4 Mobility in soil No data for the mixture as a whole.

Koc:1 Log Koc:0.155 (OECD 121 and EU Method C.19)

Benzene-1,2:4,5-tetracarboxylic dianhydride Highly Mobile

ECHA registration dossier

12.5 Results of PBT and vPvB assessment Not classified as PBT or vPvB.

This product does not contain a substance that has endocrine disrupting

properties with respect to non-target organisms as no components meets the

criteria.

12.7 Other adverse effects None known

SECTION 13: DISPOSAL CONSIDERATIONS

Endocrine disrupting properties

13.1 Waste treatment methods This material and its container must be disposed of as hazardous waste. Dispose

of wastes in an approved waste disposal facility.

Directive 2008/98/EC (Waste Framework Directive): HP4, HP13

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

Document No. 14147 Page: 6 of 8





www.vpgsensors.com

Date of issue:30/11/2022 Date of First Issue: 04/09/2012

Version 5.0

ACCORDING TO EC-REGULATIONS 1907/2006 (REACH), 1272/2008 (CLP) & 2020/878

SECTION 14: TRANSPORT INFORMATION

		ADR/RID	ADN	IMDG	IATA/ICAO
14.1	UN number or ID number	None assigned			
14.2	UN proper shipping name	None assigned	None assigned	None assigned	None assigned
14.3	Transport hazard class(es)	None assigned	None assigned	None assigned	None assigned
14.4	Packing group	None assigned	None assigned	None assigned	None assigned
14.5	Environmental hazards	Not applicable	Not applicable	Not classified as a Marine Pollutant.	Not applicable
14.6	Special precautions for user	See Section: 2			
14.7	Maritime transport in bulk according to IMO instruments	Not applicable	Not applicable	Not applicable	
14.8	Additional information	None			

SECTION 15: REGULATORY INFORMATION

15.1 Safety, health and environmental

> regulations/legislation specific for the substance or mixture

15.1.1 **EU** regulations

> Use restriction according to REACH annex XVII, no.: Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances [Seveso-III-

Directive]

Directive 2010/75/EU on industrial emissions [Industrial

Emissions Directive]

Restrictions of occupation:

Not restricted Not applicable

This substance/mixture does not contain any volatile organic compounds in the

sense of Directive 2010/75/EU.

Observe restrictions to employment for juvenils according to the 'juvenile work

protection guideline' (94/33/EC).

To follow: Directive 98/24/EC of 7 April 1998 on the protection of the health and safety of

workers from the risks related to chemical agents at work

15.1.2 National regulations

Germany

Water hazard class (WGK) slightly hazardous to water (WGK 1) (Selbsteinstufung gemäß AwSV (Gemisch,

Rechenregel).)

15.2 **Chemical Safety Assessment** A REACH chemical safety assessment has not been carried out.

SECTION 16: OTHER INFORMATION

The following sections contain revisions or new statements: New SDS Regulation 2020/878 format, all sections have been updated to include new information. Please review SDS with care.

References:

Existing Safety Data Sheet (SDS), Harmonised Classification(s) for 1, 2, 4,5-Benzenetetracarboxylic Dianhydride (CAS# 89-32-7), and the Classification and Labelling Inventory for Cyrstalline silica (CAS# 14808-60-7) and Magnesium silicate talc (CAS# 14807-96-6).

EU Classification: This Safety Data Sheet was prepared in accordance with EC Regulation (EC) 1907/2006 (REACH), 1272/2008 (CLP) & 2020/878

Classification of the substance or mixture According to Regulation (EC) No. 1272/2008 (CLP)	Classification Procedure
Skin Sens. 1; H317	Threshold Calculation
Eye Dam. 1; H318	Threshold Calculation
Resp. Sens. 1; H334	Threshold Calculation

Document No. 14147 Page: 7 of 8





www.vpgsensors.com

Date of issue: 30/11/2022 Date of First Issue: 04/09/2012

Version 5.0

ACCORDING TO EC-REGULATIONS 1907/2006 (REACH), 1272/2008 (CLP) & 2020/878

LEGEND

ADR European Agreement concerning the International Carriage of Dangerous Goods by Road

ADN European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

BCF Bioconcentration factor (BCF)

CLP Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures

DNEL Derived no effect level
EU European Union
EC European Community
ECHA European Chemicals Agency

EN European Standard

IATA International Air Transport Association
ICAO International Civil Aviation Organization
IMDG International Maritime Dangerous Goods
IMO International Maritime Organization

LC50 Lethal concentration at which 50% of the population is killed

LD50 Lethal dose at which 50% of the population is killed

LTEL Long term exposure limit

NOAEC No observed adverse effect concentration
NOEC No Observed Effect Concentration

OECD Organisation for Economic Cooperation and Development

PBT Persistent, Bioaccumulative and Toxic
PNEC Predicted No Effect Concentration

REACH Registration, Evaluation, Authorisation and Restriction of Chemicals

RID Regulations concerning the International Carriage of Dangerous Goods by Rail

TWA Time Weighted Average STEL Short term exposure limit

vPvB very Persistent and very Bioaccumulative

UN United Nations

Hazard classification / Classification code:

Skin Sens. 1; Skin Sensitisation, Category 1 Eye Dam. 1; Eye Damage, Category 1

Resp. Sens. 1; Respiratory Sensitization, Category 1

Hazard Statement(s)

H317: May cause an allergic skin reaction. H318: Causes serious eye damage.

H334: May cause allergy or asthma symptoms or breathing difficulties if

inhaled.

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.

Document No. 14147 Page: 8 of 8



Legal Disclaimer Notice

Vishay Precision Group, Inc.

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.

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.

Document No.: 63999 Revision: 15-Jul-2014