Safety Data Sheet

Supersedes: April 11, 2018

PRODUCT NAME:	**PES 105 AQUAMETAL REPAIR STICK**
MANUFACTURER:	**Polymeric Engineered Solutions,**
	5401 HWY 21 W, Bryan, TX.77803
TELEPHONE NUMBER:	**979-779-8700**
E: mail	**pes1@pes-solutions.com**

EMERGENCY TELEPHONE NUMBER: Chemtrec (800)-424-9300

THIS PRODUCT IS A KIT AND SUPPLIED AS A MULTI PART PRODUCT WHICH CONSISTS OF A BASE COMPONENT AND ACTIVATOR COMPONENT. THIS DOCUMENT CONTAINS THE MSDS FOR BOTH BASE AND ACTIVATOR COMPONENTS.

DISCLAIMER: The information supplied in the SDS is correct at the time of writing and date of issue. No warranties, expressed or implied, including, but not limited to, any implied warranty of merchantability or fitness for particular purpose or course of performance or usage of trade. The user of the material is responsible for ensuring the suitability of this product for application.

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Document Number 1037/101/version 3:

SECTION 1: Identification of Substance/ Preparation and Company

1.1 Product identifier

PES 105 AQUAMETAL REPAIR STICK

1.2 Relevant identified uses of the substance or mixture and uses advised against

Epoxy Resin & Polymercaptan Curing Agent

1.3 Details of the supplier of the safety data sheet

5401 Hwy 21 West Bryan, Tx 77803

Tel: (979) 779-8700

Email: pes1@pes-solutions.com

1.4 Emergency telephone number

Chemtrec (800)-424-9300

SECTION 2: Hazards Identification

2.1 Classification of the substance or mixture

Classification in accordance with the Dangerous Preparations Directive 1999/45/EC

Skin Irritation	**Category 2**
H315 Causes skin irritation	
Serious Eye Irritation	**Category 2**
H319 Causes Serious Eye Irritation	
Skin Sensitizer	**Category 1**
H317 May Cause an allergic Skin Reaction	
Chronic Hazards to the Aquatic Environment	**Category 3**

H412 Harmful to Aquatic life with long lasting effects

Sensitizing

R43 May cause sensitization by skin contact

Xi – irritant

R36/38 irritating to eyes and skin

Dangerous to the environment

R52/53 Harmful to aquatic organisms, may cause long term adverse effects in the aquatic environment

Xn; R20/21/22	**Harmful by inhalation, in contact with skin and if swallowed**
C; R34	**Causes burns**
R43	**May cause sensitization by skin contact**
Muta. 3; R68	**Possible risk of irreversible effects**
Repr. 2; R62	**Possible risk of impaired fertility**
R52/53	**Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment**

2.2 Label elements

Labeling in accordance with the Classification Labeling and Packaging Regulation EC (no) 1272/2008

Pictograms:

Signal Word: **WARNING**

Hazard statements:
H315: Causes skin irritation.
H317: May cause an allergic skin reaction.
H319: Causes serious eye irritation
H412 Harmful to aquatic life with long lasting effects

Precautionary statements:
P101: if medical advice is needed have product container or label at hand
P102: Keep out of reach of children
P501: Dispose of waste and residues in accordance with local authority requirements

Precautionary statements:
PREVENTION
P273: Avoid release to the environment
P280 Wear protective gloves

Precautionary statements:
RESPONSE
P302+P352 IF ON SKIN: Wash with plenty soap and water
P333+P313: If skin irritation or rash occurs: Get medical advice/ attention
P337+ P313: If eye irritation persists: Get medical advice/ attention

2.3 Other hazards

If released into watercourses in sufficient quantities may be harmful to aquatic life. None of the components are considered to be Persistent, Bioaccumulative and Toxic (PBT) or very Persistent, very Bioaccumulative (vPvB).

SECTION 3: Composition/ Information on Ingredients

3.1 Substances

Not applicable, product is a mixture.

3.2 Mixtures

Contains the following hazardous components above thresholds of concern:

Hazardous Components	Cas Number	%	Classification according to Regulation (EC) No 1272/2008	Classification according to Directive 67/548/EEC
Bisphenol A	80-05-7	<10%	Skin Sens. 1 H317, Eye Dam. 1 H318, STOT SE 3 H335, Repr. 2 H361f, Aquatic Chronic 2 H411	Repr. Cat. 3; R62 Xi; R37-41, R43 R52

See section 16 for full description of R phrases and H statements.

SECTION 4: First Aid Measures

4.1 Description of first aid measures

Summon immediate medical assistance after contact with skin, eyes, inhalation or ingestion

Eye:	Flush eyes with plenty of running water for 15 minutes, whilst gently holding the eyelids open.
Skin:	Remove product and contaminated clothing and wash area with water.
Ingestion:	Drink plenty of water, DO NOT INDUCE VOMITING. Seek medical attention immediately.
Inhalation:	Remove patient to fresh air. Seek medical advice.

4.2 Most important symptoms and effects, both acute and delayed

SKIN: Redness, Inflammation

SKIN: Rash, Urticaria

EYE: Irritation, Conjunctivitis

4.3 Indication of any immediate medical attention and special treatments needed

Symptomatic treatment as required

SECTION 5: Fire Fighting Measures

5.1 Extinguishing media

Dry chemical, CO2 or Alcohol foam

5.2 Special hazards arising from the substance or mixture

In the event of fire carbon monoxide, carbon dioxide and nitrogen oxides can be release

5.3 Advice for fire fighters

Wear Self-contained breathing apparatus, rubber boots, gloves and body suit

SECTION 6: Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Avoid skin and eye contact

6.2 Environmental precautions

Prevent entry into sewers and watercourses. If product enters sewers or watercourses, inform the appropriate environmental authorities.

6.3 Methods and materials for containment and clearing up

Scrape up and transfer into a suitable container. Wash area with water.

6.4 References to other sections

Refer to section 5, 8 and 13 for protective Measures and Disposal.

SECTION 7: Handling and Storage

7.1 Precautions for safe handling

Avoid contact with skin, eyes and clothing. Handle in well ventilated area. Wash hands after contact.

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a cool, well ventilated area.

7.3 Specific end uses(s)

No industrial or sector specific guidance available.

SECTION 8: Exposure Controls/ Personal Protection

8.1 Control parameters

Substance Name	8 hour exposure limit	15 min exposure limit	Notes, Source
Talc, Respirable dust 14807-96-6	-	—	EH40 WEL

8.2 Exposure controls

Engineering controls Adequate ventilation should be provided so that exposure limits are not exceeded.

Respiratory: Avoid Breathing Vapors, Mists or Sprays; Select and use respiratory protection. Suggested filter type AP2.

Hand Protection Wear suitable chemical resistant gloves recommended. Nitrile or neoprene gloves may be suitable, but glove manufacturers' specifications should always be checked first. Change gloves in accordance with manufacturer recommendations. If gloves are damaged during use, remove immediately and wash hands before replacing with new gloves.

Skin Protection: Avoid Skin Contact; use disposable coveralls

Eye Protection: Avoid Eye Contact; use safety goggles meeting the requirements of BS EN166 3, when handling this product

Environmental Exposure controls Take suitable measures to prevent entry into drains, sewers and watercourses.

SECTION 9: Physical/ Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance: Paste
Odor: Mild
Odor threshold: No data
PH: No data
Melting Point: >356°F
Boiling Point/ Range: >95°F
Flash Point; >212°F
Evaporation Rate: No data
Flammability: Not applicable
Upper/lower flammability limits: No data
Vapor Pressure: No data
Vapor density: No data
Relative density: 1.7g/cm3 at 68°F
Solubility in water: Insoluble in water
Solubility in other solvents: No data
Partition Coefficient: No data
Autoignition temperature: No data
Decomposition temperature: No data
Viscosity: No data
Explosive properties: Not classified as explosive

Oxidizing properties: Not classified as oxidizing

9.2 Other information

None.

SECTION 10: Stability And Reactivity

10.1 Reactivity

Reaction with strong acids

Reacts with strong oxidants

10.2 Chemical stability

Stable

10.3 Possibility of hazardous reactions

Hazardous Polymerization is not likely to occur.

10.4 Conditions to avoid

None if used for intended purpose

10.5 Incompatible materials

See section reactivity

10.6 Hazardous decomposition products

None known

SECTION 11: Toxicological Information

11.1 Information on toxicological effects

This product has not been tested. Judgments on the expected toxicity of this product have been made based upon consideration of its major components.

(a) acute toxicity	LD50 >200mg/kg ORAL Rat
(b) skin corrosion/irritation	LD50 23.000 mg/kg DERMAL Rabbit
(c) serious eye damage/irritation	Not irritating. Rabbit. OECD Guideline 405 (Acute eye irritation/ corrosion)
(d) respiratory/skin sensitisation	Sensitising. Mouse local lymphnode assay (LLNA) OECD Guideline 472 (Genetic toxicology: Escherichia Coli Reverse Mutation Assay)
(e) germ cell mutagenicity	Negative. Bacterial reversemutation assay (e.g Ames test). OECD Guideline 472) Genetic Toxicology Escherichia Coli Reverse Mutation Assay)
(f) carcinogenicity	Contains no substances identified as carcinogens.

SECTION 12: Ecological Information

This product has not been tested. Judgments on the expected toxicity of this product have been made based upon consideration of its major components.

12.1 Toxicity

This product contains components which are considered to be harmful to aquatic organisms and may cause long-term adverse effects in the aquatic environment. Once cured the toxicity of the product is expected to decrease.

12.2 Persistence and degradability

This product is not expected to be readily biodegradable.

12.3 Bioaccumulative potential

This product is expected to have a low bioaccumulation potential.

12.4 Mobility in soil

Cured product is expected to be immobile.

12.5 Results of PBT and vPvB assessment

None of the components are known to be PBT or vPvB.

12.6 Other adverse effects

None known.

SECTION 13: Disposal Considerations

13.1 Waste treatment methods

In uncured state, dispose as chemical waste in accordance with local regulations. Waste from this product may present long term environmental hazards. Thus landfill sites must be considered less acceptable than incineration.
In cured state when mixed correctly with the base component, dispose as solid waste
Empty containers should be disposed of as chemical waste.

SECTION 14: Transport Information

General: Transport and labeling requirements will alter depending on the size of the packaging. Please refer to local transport regulations.

	ADR	IMDG	ICAO
14.1 UN Number	Not Hazardous	Not Hazardous	Not Hazardous
14.2 UN Proper shipping name	Not Hazardous	Not Hazardous	Not Hazardous
14.3 Transport hazard class(es)	Not Hazardous	Not Hazardous	Not Hazardous
14.4 Packing group	Not Hazardous	Not Hazardous	Not Hazardous
14.5 Environmental hazards	Not Hazardous	Not Hazardous	Not Hazardous
14.6 Special precautions for user	Not Hazardous	Not Hazardous	Not Hazardous
14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not applicable	Not applicable	Not applicable

SECTION 15: Regulatory Information

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

All components are listed as existing substances in Europe

All components are listed, or are exempt from listing on the TCSA Inventory

15.2 Chemical Safety Assessment

A Chemical Safety Assessment has not been carried out for this product.

SECTION 16: Other Information

Supersedes: April 11, 2018

Revision information:

Reformatted in accordance with Regulation 453/2010 and Regulation 1272/2008.

List of Abbreviations used in this SDS:

CAS	Chemical Abstracts Service
CLP	Classification, Labeling and Packaging Regulation (EC) no 1272/2008
DSD	Dangerous Substances Directive 67/548/EEC
DPD	Dangerous Preparations Directive 1999/45/EC
EC	European Community/Commission
PBT	Persistent, Bioaccumulative and Toxic
REACH	Registration, Evaluation, Authorization and Restriction of Chemicals Regulation (EC) no 1907/2006
vPvB	very Persistent, very Bioaccumulative

References:

ECHA Classification and Labeling inventory

ECHA database of disseminated registration dossiers

Supplier's Safety Data Sheets

Method used for classification of mixtures:

Ingredient based approaches

R Phrases and H Statements used in Section 3

R36/38	Irritating to eyes and skin,
R43	May cause sensitization by skin contact
R52	Harmful to aquatic organisms
R52/53	Harmful to aquatic organisms, may cause long term adverse effects in the aquatic environment,
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H319	Causes serious eye damage
H411	Toxic to aquatic life with long lasting effects
H412	Harmful to aquatic life with long lasting effects

Training requirements for workers

No special training requirements.