Philadelphia Coatings LLC Americas Office: 6 Georgian Row, The Woodlands, Texas, TX 77380, USA Tel: +1 832-948-5588 E-mail: info@philacoatings.com Website: www.philacoatings.com



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1. Chemicals and enterprise identification

Product name and code:

PHILACEP BARRIER PDC Comp. A

Application of the substance:	Two component tar-free and solvent-free epoxy coating
Product use:	Coating Solvent-borne
Colors:	Oxide Red, Gray, Yellow, Black, Green

Supplier/manufacturer:

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Chemical emergency response numbers: 1-800-255-3924 for Domestic and +1-813-248-0585 for International. Shipments of hazardous materials within the listed countries should reference ChemTel's in-county phone numbers: Australia: 1-300-954-583, Brazil: 0-800-591-6042, China: 400-120-0751, India: 000-800-100-4086, Mexico: 01-800-099-0731

2. Hazards identification

The product is classified as hazardous pursuant to the provisions set forth in EC Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). The product thus requires a safety datasheet that complies with the provisions of EC Regulation 1907/2006 (REACH), Annex II and subsequent amendments. Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet. Pictograms:



Signal word: Danger

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Hazard classification (GHS) and indication:			
Flammable liquids	Category 3	H226	Flammable liquid and vapour
Acute toxicity Oral	Category 4	H302	Harmful if swallowed
Skin corrosion/irritation	Category 2	H315	Causes skin irritation
Serious eye damage/eye irritation	Category 2	H319	Causes serious eye irritation
Skin sensitizers	Category 1	H317	May cause an allergic skin reaction
Specific Target Organ toxicity - repeated exposure	Category 2	H373	May cause damage to organs through prolonged or repeated exposure
Aquatic environmental hazard/Long-term	Category 2	H411	Toxic to aquatic life with long lasting effects

3. Ingredient/composition information

Chemical name	Notes	Cas number	EC number	% by weight	Classification
Xylene (Mixture of					Flam. Liq. 3, H226, Acute
isomers)	С	1220 20 7	015 505 7	1 5 4 4 4 9	Tox. 4, H312, Acute Tox. 4,
	C	1330-20-7	215-535-7	1,5 ≤ x < 2	H332 Skin. Irrit. 2, H315 Eye
					Irrit. 2, H319
Bisphenol-A-					Skin Irrit. 2, H315 Eye Irrit. 2,
(Chloromethyl) Epoxy	-	25068-38-6	500-033-5	19,5 ≤ x < 21	H319 Skin Sens. 1, H317
resin (MW ≤ 700)					Aquatic Chronic 2, H411
Crystalline Silica, respirable powder	-	14808-60-7	238-878-4	15 ≤ x < 16,5	STOT RE 2 H373
2,4,6-					
Tris(dimethylaminom	-	90-72-2	202-013-9	12 ≤ x < 13,5	Acute Tox. 4 H302, Eye Irrit.
ethyl)phenol					2 H319, Skin Irrit. 2 H315
1-Methoxy-2-propyl		108 65 6	202 602 0	2.25	Flom Lin 2 H226
acetate	-	108-65-6	203-603-9	2 - 2.5	Flam. Liq. 3, H226

Components not listed are not physical or health hazards as defined in 29 CFR 1910.1200 (Hazard Communication Standard).

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4. First-aid measures

General: In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and seek medical advice.

Eye contact: Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open.

Skin contact: Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.

Inhalation: Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.

Ingestion: If swallowed, seek medical advice immediately and show the container or label. Keep person warm and at rest. Do not induce vomiting.

5. Fire-fighting measures

Extinguishing media: Recommended: alcohol-resistant foam, CO2, powders, water spray.

Extinguishing media not to be used: Do not use water jet.

Recommendations: Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard. Appropriate breathing apparatus may be required. Cool closed containers exposed to fire with water. Do not release runoff from fire to drains or watercourses.

6. Accidental release measures

Personal precautions: Exclude sources of ignition and ventilate the area. Avoid breathing vapor or mist. Refer to protective measures listed in sections 7 and 8. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13).

Spill: Preferably clean with a detergent. Avoid using solvents.

Note: see section 8 for personal protective equipment and section 13 for waste disposal.

7. Handling and storage

Handling: Vapors are heavier than air and may spread along floors. Vapors may form explosive mixtures with air. Prevent the creation of flammable or explosive concentrations of vapors in air and avoid vapor concentrations higher than the occupational exposure limits. To dissipate static electricity during transfer, earth drum and connect to receiving container with bonding strap. Operators should wear antistatic footwear and clothing and floors should be of the conducting type.

In addition, the product should only be used in areas from which all naked lights and other sources of ignition have been excluded. Electrical equipment should be protected to the appropriate standard.

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed.

Put on appropriate personal protective equipment (see section 8).

Never use pressure to empty. Container is not a pressure vessel.

Always keep in containers made from the same material as the original one.

Comply with the health and safety at work laws.

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When operators, whether spraying or not, must work inside the spray booth, ventilation is unlikely to be enough to control particulates and solvent vapor in all cases. In such circumstances they should wear a compressed air-fed respirator during the spraying process and until such time as the particulates and solvent vapor concentration has fallen below the exposure limits.

Avoid contact with skin and eyes. Avoid the inhalation of dust, particulates, spray or mist arising from the application of this preparation. Avoid inhalation of dust from sanding.

Keep container tightly closed. Keep away from heat, sparks and flame. No sparking tools should be used.

Storage: Store in accordance with local regulations. Observe label precautions. Store in a dry, cool and well-ventilated area.

Keep away from heat and direct sunlight. No smoking. Prevent unauthorized access.

Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

Do not empty into drains. Keep away from sources of ignition. Keep away from oxidizing agents, strong alkalis, strong acids.

8. Exposure controls/personal protection

Engineering measures: Provide adequate ventilation. Where reasonably practicable, this should be achieved using local exhaust ventilation and good general extraction. If these are not enough to maintain concentrations of particulates and solvent vapors below the OEL, suitable respiratory protection must be worn.

Ingredient name & Occupational exposure limits

Xylene: EU OEL (Europe, 12/2017). Absorbed through skin. STEL: 442 mg/m³ 15 minutes. STEL: 100 ppm 15 minutes. TWA: 221 mg/m³ 8 hours. TWA: 50 ppm 8 hours. 1-Methoxy-2-propyl acetate: EH40/2005-WELs (12/2011). TWA: 274 mg/m³ 8 hour(s). TWA: 50 ppm 8 hour(s). STEL: 548 mg/m³ 15 minute(s). STEL: 100 ppm 15 minute(s).

Derived effect levels

Product/ingredient name	Туре	Exposure	Value	Population	Effects
Xylene (Mixture of isomers)	DNEL	Long term Inhalation	77 mg/m³	Workers	Systemic
	DNEL	Long term Dermal	180 mg/kg bw/day	Workers	Systemic

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Predicted effect concentrations

Product/ingredient name	Compartment detail	Value	Method detail
Xylene (Mixture of isomers)	Fresh water	0.327 mg/l	-
	Marine water	0.327 mg/l	-
	Fresh water sediment	12.46 mg/kg	-
	Marine water sediment	12.46 mg/kg	-
	Soil	2.31 mg/kg	-
	Sewage Treatment Plant	6.68 mg/l	-

Personal protective equipment

Skin and body: Personnel should wear antistatic clothing made of natural fibres or of high-temperature-resistant synthetic fibres. **Hands:** Wear suitable gloves. Recommended, gloves (breakthrough time) > 8 hours: Viton, Responder, nitrile rubber, 4H, Teflon. May be used, gloves (breakthrough time) 4 - 8 hours: neoprene, butyl rubber. Not recommended, gloves (breakthrough time) < 1 hour: polyvinyl alcohol (PVA), PVC. For right choice of glove materials, with focus on chemical resistance and time of penetration, seek advice by the supplier of chemical resistant gloves. The user must check that the final choice of type of glove selected for handling this product is the most appropriate and considers the conditions of use, as included in the user's risk assessment.

Eyes: Use safety eyewear designed to protect against splash of liquids.

Respiratory system: If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators. Use respiratory mask with charcoal and dust filter when spraying this product. (as filter combination A2-P2). In confined spaces, use compressed-air or fresh-air respiratory equipment. When use of roller or brush, consider use of charcoal filter.

9. Physical and chemical properties

Physical state:Pasty.Odor:Characteristic.Color:Various colors.Flash point:Closed cup: $23 \le T \le 60$ °CVapour density:0.9 - 1Relative density:N/AExplosion limits:N/AViscosity:TixotropicSolubility:Insoluble in the following materials: cold water and hot water.VOC (Directive 2010/75/CE):14.18 %VOC (carbonic volatile):9.92 %

10. Stability and reactivity

Stable under recommended storage and handling conditions (see section 7). Hazardous decomposition products: carbon monoxide, carbon dioxide, smoke, oxides of nitrogen. Keep away from the following materials to prevent strong exothermic reactions: oxidizing agents, strong alkalis, strong acids.

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11. Ecological information

Aquatic ecotoxicity

Product/ingredient name	Test	Result	Species	Exposure
Xylene (Mixture of isomers)	Mortality	Acute LC50 12000 to	Fish - Bluegill	96 hours
		16114 ug/L Fresh water	-Lepomis	
			macrochirus-1.1g	
Bisphenol-A-(Chloromethyl)		Acute EC50 >11 mg/l	Algae	72 hours
Epoxy resin (MW ≤ 700)		Acute EC50 1.4-1.7 mg/l	Daphnia-Daphnia magna	48 hours
		Acute LC50 3.1 mg/l	Fish - fathead minnow	96 hours
			(Pimephales promelas)	

Ecological information

Biodegra	dability
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Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Xylene (Mixture of isomers)	-	-	Readily
Bisphenol-A-(Chloromethyl)	-	-	Not readily
Epoxy resin (MW ≤ 700)			
1-Methoxy-2-propyl acetate	-	-	Readily
2,4,6-	-	-	Not readily
Tris(dimethylaminomethyl)phenol			

Bioaccumulative potential

Product/ingredient name	LogKow	BCF	Potential
Xylene (Mixture of isomers)	3.12	8.1 to 25.9	Low
Bisphenol-A-(Chloromethyl)	2.64 - 3.78	31	Low
Epoxy resin (MW ≤ 700)			
1-Methoxy-2-propyl acetate	0.2	-	Low

12. Toxicological information

There is no data available on the preparation itself. The preparation has been assessed following the conventional method of the EC Regulation 1272/2008 (CLP) (and subsequent amendments and supplements) and classified for toxicological hazards accordingly. See sections 2 and 15 for details.

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Exposure to component solvent vapor concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Solvents may cause some of the above effects by absorption through the skin.

Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness in extreme cases and loss of consciousness. Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin, resulting in nonallergic contact dermatitis and absorption through the skin. If splashed in the eyes, the liquid may cause irritation and reversible damage. Swallowing may cause nausea, diarrhea, vomiting, gastro-intestinal irritation and chemical pneumonia.

Contains: Bisphenol-A-(Chloromethyl) Epoxy resin (MW ≤ 700). May produce an allergic reaction.

Product/ingredient name	Result	Species	Exposure	
Xylene (Mixture of isomers)	LC50 (Inhalation Gas.) 5000 ppm	Rat	4 hours	
	LC50 (Inhalation Vapor) 6350 ppm	Rat		
	LD50 (Dermal) 4200 mg/kg	Rabbit		
	LD50 (Oral) 3523 mg/kg	Rat		
Bisphenol-A-(Chloromethyl) Epoxy	LD50 (Dermal) >2000 mg/kg	Rat	4 hours	
resin (MW ≤ 700)	LD50 (Oral) >2000 mg/kg	Rat		
	LD50 (Dermal) >2000 mg/kg	Rabbit		
1-Methoxy-2-propyl acetate	LD50 (Oral) >8530 mg/kg	Rat	4 hours	
	LD50 (Dermal) >5000 mg/kg	Rat		

Acute toxicity

13. Disposal considerations

Do not allow to enter drains or watercourses. Material and/or container must be disposed of as hazardous waste.

European waste catalogue (EWC): 08 01 11* waste paint and varnish containing organic solvents or other dangerous substances. If this product is mixed with other wastes, this code may no longer apply. If mixed with other wastes, the appropriate code should be assigned. For further information, contact your local waste authority.

14. Transport information

Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in accordance with ADR/RID, IMDG/IMO and ICAO/IATA and national regulation.

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International transport regulations

	UN	Proper	Transport hazard	Packing	Environmental	Additional information
	Number	shipping	class(es)	group	hazards	
		name				
ADR/RID	UN 1263	PAINT	3	Ш	No	The environmentally
Class						hazardous substance
						mark is not required when
			3			transported in sizes of ≤5
						L or ≤5 kg. Tunnel
						restriction code (D/E)
IMDG/IMO	UN 1263	PAINT	3	Ш	No	The marine pollutant mark
Class						is not required when
						transported in sizes of ≤5
			3			L or ≤5 kg. Emergency
						schedules (EmS) F-E, S-E
ICAO/IATA	UN 1263	PAINT	3	Ш	No	The environmentally
Class						hazardous substance
						mark may appear if
			2			required by other
			V			transportation regulations.

15. Regulatory information

EU regulations: The product is classified and labeled for supply in accordance with EU Regulation (EC) No. 1907/2006 (REACH) Annex XIV - List of substances subject to authorization

Substances of very high concern

None of the components are listed.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles: Not applicable.

Other EU regulations

Europe inventory: At least one component is not listed

Black List Chemicals: Not listed

Priority List Chemicals: Not determined

Industrial emissions (integrated pollution prevention and control) - Air: Listed

Industrial emissions (integrated pollution prevention and control) - Water: Not listed

Industrial use: The information contained in this safety data sheet does not constitute the user's own assessment of workplace risks, as required by other health and safety legislation. The provisions of the national health and safety at work regulations apply to the use of this product at work.

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16. Other information

Abbreviations and acronyms: ATE = Acute Toxicity Estimate CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008] EUH statement = CLP-specific Hazard statement RRN = REACH Registration Number DNEL = Derived No Effect Level CEPE Classification: 1

Full text of abbreviated H statements referred to in sections 2 and 3:

H226 Flammable liquid and vapor
H302 Harmful if swallowed
H315 Causes skin irritation
H317 May cause an allergic skin reaction
H319 Causes serious eye irritation
H373 (hearing organs) May cause damage to organs through prolonged or repeated exposure. (hearing organs)
H411 Toxic to aquatic life with long-lasting effects

Full text of classifications [CLP/GHS]:

Aquatic Chronic 2, H411 LONG-TERM AQUATIC HAZARD - Category 2 Acute Tox. 4, H302 ACUTE TOXICITY (Oral) - Category 4 Eye Irrit. 2, H319 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2 Flam. Liq. 3, H226 FLAMMABLE LIQUIDS - Category 3 Skin Irrit. 2, H315 SKIN CORROSION/IRRITATION - Category 2 Skin Sens. 1, H317 SKIN SENSITIZATION - Category 1 STOT RE 2, H373 (hearing organs) SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2

This Safety Data Sheet is prepared in accordance with according to Regulation (EC) No. 1272/2008 [CLP/GHS].

Notice to whom it may concern:

Your attention and information in this MSDS are based on the present state of our knowledge and on current laws. The product is not to be used for purposes other than those specified under section 1 without first obtaining written handling instructions. It is always the responsibility of the user to take all necessary steps to fulfill the demands set out in the local rules and legislation. The information in this MSDS is meant to be a description of the safety requirements for our product. It is not to be considered a guarantee of the product's properties.