

10/31/14

Material Safety Data Sheet

PC - 11, Part A

MSDS No. 121203-22

Date of Preparation: 12/3/2012

Revision: 15

Section 1 - Chemical Product and Company Identification

Product/Chemical Name: PC -11, part A

PC 11 Marine Grade All purpose

Chemical Formula: Mixture

White Epoxy paste

CAS Number: Mixture**General Use:** Adhesive**Manufacturer:** Protective Coating Company, 221 S. Third St., Allentown, PA 18102-4922, Emergency Phone 1-800-255-3924, International + 01 or +001-813-248-0585 (Please call collect if necessary) (24 Hr) CHEM-TEL
Contact Phone (610)432-3543, FAX (610)432-5043 (9AM-5PM EST)

Section 2 - Composition / Information on Ingredients

Ingredient Name	CAS Number	
	Bisphenol A Epoxy Resin	25068-38-6
Formaldehyde, polymer with 1,3,dimethylbenzene	6422-86-2	5 - 10
Magnesium Silicate	14807-96-6	10-20
Aluminum Silicate	1332-58-7	10-20
Titanium(IV) Oxide	1317-70-0	5-10

Ingredient	OSHA PEL		ACGIH TLV		NIOSH REL		NIOSH IDLH
	TWA	STEL	TWA	STEL	TWA	STEL	
Bisphenol A Epoxy resin	None estab.	None estab.	None estab.	None estab.	None estab.	None estab.	None estab.

Section 3 - Hazards Identification

☆☆☆☆☆ Emergency Overview ☆☆☆☆☆

WARNING: MAY CAUSE ALLERGIC SKIN REACTION.
CAUSES EYE AND SKIN IRRITATION.
MAY CAUSE RESPIRATORY TRACT IRRITATION.

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PPE[†]B

†Sec. 8

Potential Health Effects

Acute Effects**Inhalation:** May cause respiratory tract irritation. Coughing.**Eye:** Causes eye irritation. Direct contact may cause temporary redness and discomfort.**Skin:** May cause allergic skin reaction. Causes skin irritation. Redness.**Ingestion:** Not expected to be harmful by ingestion.**Carcinogenicity:** IARC, NTP, and OSHA do not list PC - 11, Part A as a carcinogen.**Medical Conditions Aggravated by Long-Term Exposure:** skin and eye conditions.

Section 4 - First Aid Measures

Inhalation: Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.**Eye Contact:** Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention.**Skin Contact:** Immediately flush skin with plenty of water (using soap, if available). Remove contaminated clothing and footwear. Wash clothing before reuse. Thoroughly clean shoes before reuse. If symptoms develop and persist, get medical attention.**Ingestion:** Do not induce vomiting. Keep individual calm. Never give anything by mouth to an unconscious person. Get medical attention.*After first aid, get appropriate in-plant, paramedic, or community medical support.*

Section 5 - Fire-Fighting Measures

Flash Point: 480° F
Flash Point Method: Closed Cup
Flammability Classification: IIIB
Extinguishing Media: Water spray, CO₂, dry chemicals.
Unusual Fire or Explosion Hazards: None known.
Hazardous Combustion Products: Carbon monoxide, carbon dioxide, aldehydes
Fire-Fighting Instructions: Do not release runoff from fire control methods to sewers or waterways.
Fire-Fighting Equipment: Because fire may produce toxic thermal decomposition products, wear a self-contained breathing apparatus (SCBA) with a full facepiece operated in pressure-demand or positive-pressure mode.



Section 6 - Accidental Release Measures

Spill /Leak Procedures: Dispose of in normal manner.
Disposal: Incinerate in furnace or bury in landfill according to applicable regulations; not a hazardous waste.
Regulatory Requirements: Follow applicable OSHA regulations (29 CFR 1910.120).

Section 7 - Handling and Storage

Ventilation: Provide general or local exhaust ventilation systems if product is sanded or ground.
Respiratory Protection: Follow OSHA respirator regulations (29 CFR 1910.134) and, if necessary, wear a MSHA/NIOSH-approved respirator.
Protective Clothing/Equipment: Wear chemically protective gloves to prevent skin contact. Wear protective eyeglasses or chemical safety goggles
Comments: Never eat, drink, or smoke in work areas. Practice good personal hygiene after using this material, especially before eating, drinking, smoking, using the toilet, or applying cosmetics.
Handling Precautions: None
Storage Requirements: Storage temperature: <90°F(32°C). Store in a cool, dry, well ventilated area.
Regulatory Requirements: Follow applicable OSHA regulations (29 CFR 1910.120).

Section 8 - Exposure Controls / Personal Protection

Ventilation: Provide general or local exhaust ventilation systems if product is sanded or ground.
Respiratory Protection: Follow OSHA respirator regulations (29 CFR 1910.134) and, if necessary, wear a MSHA/NIOSH-approved respirator.
Protective Clothing/Equipment: Wear chemically protective gloves to prevent skin contact. Wear protective eyeglasses or chemical safety goggles.

Section 9 - Physical and Chemical Properties

Physical State: Paste
Appearance and Odor: White, mild odor
Density: 8.6 lbs./ gallon
Specific Gravity (H₂O=1, at 4 °C): 1.03
Water Solubility: Insoluble in water
Other Solubilities: alcohols
Boiling Point: No data
% Volatile: < 1 %

Section 10 - Stability and Reactivity

Stability: PC - 11, Part A is stable.
Polymerization: Hazardous polymerization cannot occur.

Section 11- Toxicological Information

Toxicity Data:

Lethal Dose Information(mg/kg)	Oral	Skin	Inhale	LC5
Bisphenol A Epoxy Resin	>5000 rat	20000 rabbit	N/EST	N/EST

Section 12 - Ecological Information

Ecotoxicity: No data
Environmental Fate: No data
Environmental Degradation: No data
Soil Absorption/Mobility: No data

Section 13 - Disposal Considerations

Disposal: Incinerate in furnace or bury in landfill according to applicable regulations; not a hazardous waste. Contact your supplier or a licensed contractor for detailed recommendations. Follow applicable Federal, state, and local regulations.

Section 14 - Transport Information

DOT Transportation Data (49 CFR 172.101):	IMDG Proper Shipping Name:	ICAO/IATA Proper Shipping Name:
Shipping Name: Not regulated	Environmentally hazardous substance, solid, n.o.s. (Epoxy resin)	Environmentally hazardous substance, solid, n.o.s. (Epoxy resin)
Shipping Symbols: Not required.	Hazard Class: 9	Hazard Class: 9
Hazard Class: Not Hazardous	ID Number: UN3082	ID Number: UN3082
ID No.: Not applicable.	Packing Group: PG III	Packing Group: PG III
Packing Group: Not determined	EMS Number: F-A,S-F	Cargo Packing Instruction: 914
Label: Not required	Marine pollutant.: Yes	Passenger Packing Instruction: 914
Special Provisions (172.102): None		Additional Information MARINE POLLUTANT

Section 15 - Regulatory Information

EPA Regulations:

RCRA Hazardous Waste Number: Not listed (40 CFR 261.33)
 RCRA Hazardous Waste Classification (40 CFR 261.): Not classified
 CERCLA Hazardous Substance (40 CFR 302.4) unlisted specific per RCRA, Sec. 3001; CWA, Sec. 311 (b)(4); CWA, Sec. 307(a), CAA, Sec. 112
 CERCLA Reportable Quantity (RQ), Not listed.
 SARA 311/312 Codes: None.
 SARA Toxic Chemical (40 CFR 372.65): Not listed.
 SARA EHS (Extremely Hazardous Substance) (40 CFR 355): Not listed.

OSHA Regulations:

Air Contaminant (29 CFR 1910.1000, Table Z-1, Z-1-A): Not listed
 OSHA Specifically Regulated Substance, none

State Regulations:

Section 16 - Other Information

Storage Requirements: Storage temperature: <90°F(32°C). Store in a cool, dry, well ventilated area.
Personal Hygiene: Wash thoroughly after handling, especially before eating, drinking, smoking, and using restroom facilities. Wash contaminated goggles, faceshield, and gloves.

Prepared By: Charles Moloney

Revision Notes:

Notes: A bulletin such as this cannot be expected to cover all possible individual situations. As the user has the responsibility to provide a safe workplace, all aspects of an individual operation should be examined to determine if, or where, precautions- in addition to those described herein- are required. Any health hazard and safety information herein should be passed on to your customers or employees as the case may be.

Disclaimer: The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by the use of this material. All chemicals may present unknown health hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist. Final determination of suitability of the chemical is the sole responsibility of the user. No representation or warranties, either expressed or implied, of merchantability, fitness for a particular purpose or any other natures are made hereunder with respect to the information refers. It is the responsibility of the user to comply with all applicable federal, state and local laws and regulations.

Material Safety Data Sheet

PC - 11, Part B

MSDS No. 121203-59

Date of Preparation: 12/3/2012

Revision: 16

Section 1 - Chemical Product and Company Identification

Product/Chemical Name: PC-11, part B

Chemical Formula: Mixture

CAS Number: Mixture

General Use: Adhesive

Manufacturer: Protective Coating Company, Inc., 221 S. Third St., Allentown, PA 18102-4922, Phone (610) 432-3543, FAX (610) 432-5043 (9AM-5PM EST)

Section 2 - Composition / Information on Ingredients

Polyoxypropylenediamine	9046-10-0
N-Aminoethylpiperazine	140-31-8
Nonylphenol	84852-15-3
Formaldehyde, polymer with 1,3-dimethylbenzene	6422-86-2
Amine terminated liquid copolymer	68683-29-4
Magnesium Silicate	14807-96-6
Aluminum Silicate	1332-58-7

Section 3 - Hazards Identification

☆☆☆☆☆ Emergency Overview ☆☆☆☆☆

DANGER! CAUSES EYE AND SKIN BURNS.

CAUSES RESPIRATORY TRACT IRRITATION.

MAY CAUSE ALLERGIC SKIN REACTION. MAY BE HARMFUL IF SWALLOWED.

HMIS

H 2

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PPE^{†B}

[†]Sec. 8

Potential Health Effects

Acute Effects

Inhalation: Severely irritating to the respiratory system.

Eye: Corrosive to eyes. Causes burns.

Skin: Corrosive to the skin. Causes burns. May cause sensitization by skin contact.

Ingestion: Harmful if swallowed. May cause burns to mouth, throat and stomach.

Carcinogenicity: IARC, NTP, and OSHA do not list PC - 11, Part B as a carcinogen.

Medical Conditions Aggravated by Long-Term Exposure: skin and eye conditions.

Section 4 - First Aid Measures

Inhalation: Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Eye Contact: Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention.

Skin Contact: Immediately flush skin with plenty of water (using soap, if available). Remove contaminated clothing and footwear. Wash clothing before reuse. Thoroughly clean shoes before reuse. If symptoms develop and persist, get medical attention.

Ingestion: Do not induce vomiting. Keep individual calm. Never give anything by mouth to an unconscious person. Get medical attention.

After first aid, get appropriate in-plant, paramedic, or community medical support.

Section 5 - Fire-Fighting Measures

Flash Point: 230° F, (110° C)

Flash Point Method: Closed Cup

Flammability Classification: IIIB

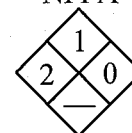
Extinguishing Media: Water spray, CO₂, dry chemicals.

Unusual Fire or Explosion Hazards: None known.

Hazardous Combustion Products: Carbon monoxide, carbon dioxide, aldehydes

Fire-Fighting Instructions: Do not release runoff from fire control methods to sewers or waterways.

NFPA



Fire-Fighting Equipment: Because fire may produce toxic thermal decomposition products, wear a self-contained breathing apparatus (SCBA) with a full facepiece operated in pressure-demand or positive-pressure mode.

Section 6 - Accidental Release Measures

Spill /Leak Procedures: Dispose of in normal manner.

Disposal: Incinerate in furnace or bury in landfill according to applicable regulations; not a hazardous waste.

Regulatory Requirements: Follow applicable OSHA regulations (29 CFR 1910.120).

Section 7 - Handling and Storage

Ventilation: Provide general or local exhaust ventilation systems if product is sanded or ground.

Respiratory Protection: Follow OSHA respirator regulations (29 CFR 1910.134) and, if necessary, wear a MSHA/NIOSH-approved respirator.

Protective Clothing/Equipment: Wear chemically protective gloves to prevent skin contact. Wear protective eyeglasses or chemical safety goggles

Comments: Never eat, drink, or smoke in work areas. Practice good personal hygiene after using this material, especially before eating, drinking, smoking, using the toilet, or applying cosmetics.

Handling Precautions: None

Storage Requirements: Storage temperature: <90°F(32°C). Store in a cool, dry, well ventilated area.

Regulatory Requirements: Follow applicable OSHA regulations (29 CFR 1910.120).

Section 8 - Exposure Controls / Personal Protection

Ventilation: Provide general or local exhaust ventilation systems if product is sanded or ground.

Respiratory Protection: Follow OSHA respirator regulations (29 CFR 1910.134) and, if necessary, wear a MSHA/NIOSH-approved respirator.

Protective Clothing/Equipment: Wear chemically protective gloves to prevent skin contact. Wear protective eyeglasses or chemical safety goggles.

Section 9 - Physical and Chemical Properties

Physical State: Paste

Appearance and Odor: light blue, slight amine odor.

Density: 8.4 lbs./ gallon

Specific Gravity (H₂O=1, at 4 °C): 1.01

Water Solubility: Insoluble in water

Other Solubilities: alcohols

Boiling Point: No data

% Volatile: < 1 %

Section 10 - Stability and Reactivity

Stability: PC - 11, Part B is stable.

Polymerization: Hazardous polymerization cannot occur.

Section 11- Toxicological Information

Toxicity Data:

Lethal Dose Information(mg/kg)	Oral (mg/kg)	Skin (mg/kg)	Inhale	LC50
Polyoxypropylenediamine	1100 rat	1550 rabbit	No data	No data
N-Aminoethyl piperzine	2150 rat	900 rabbit	No data	No data
Nonylphenol	580 rat	2140 rabbit	No data	No data

Section 12 - Ecological Information

Ecotoxicity: No data

Environmental Fate: No data

Environmental Degradation: No data

Soil Absorption/Mobility: No data

Section 13 - Disposal Considerations

Disposal: Incinerate in furnace or bury in landfill according to applicable regulations; not a hazardous waste. Contact your supplier or a licensed contractor for detailed recommendations. Follow applicable Federal, state, and local regulations.

Section 14 - Transport Information

DOT Transportation Data (49 CFR 172.101):	IMDG Proper Shipping Name:	ICAO/IATA Limited Quantity
Consumer commodity, ORM-D	Corrosive Solid, n.o.s.	Proper Shipping Name: : Corrosive Solid, n.o.s. (aminoethylpiperazine, nonylphenol)
Bulk Shipping Name: Corrosive Solid, n.o.s. (aminoethylpiperazine, nonylphenol)	(aminoethylpiperazine, nonylphenol), LTD QTY	Hazard Class: 8
Hazard Class: 8	Hazard Class: 8	ID Number: UN1759
ID No.: UN1759	ID Number: UN1759	Packing Group: PG III
Packing Group: III	Packing Group: PG III	Marine pollutant: P – marine pollutant
	MarinePollutant	

Section 15 - Regulatory Information

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 RCRA Hazardous Waste Classification (40 CFR 261.): Not classified
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 CERCLA Reportable Quantity (RQ), Not listed.
 SARA 311/312 Codes: None.
 SARA Toxic Chemical (40 CFR 372.65): Not listed.
 SARA EHS (Extremely Hazardous Substance) (40 CFR 355): Not listed.

OSHA Regulations:

Air Contaminant (29 CFR 1910.1000, Table Z-1, Z-1-A): Not listed
 OSHA Specifically Regulated Substance, none

State Regulations:

Section 16 - Other Information

Storage Requirements: Storage temperature: <90°F(32°C). Store in a cool, dry, well ventilated area.

Personal Hygiene: Wash thoroughly after handling, especially before eating, drinking, smoking, and using restroom facilities. Wash contaminated goggles, faceshield, and gloves.

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Disclaimer: The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by the use of this material. All chemicals may present unknown health hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist. Final determination of suitability of the chemical is the sole responsibility of the user. No representation or warranties, either expressed or implied, of merchantability, fitness for a particular purpose or any other natures are made hereunder with respect to the information refers. It is the responsibility of the user to comply with all applicable federal, state and local laws and regulations.