



Material Safety Data Sheet

PC Series

MSDS No. 203

Date of Preparation: July 8, 2002

Revision: 0003

Section 1 - Chemical Product and Company Identification

Product/Chemical Name: PC Series Epoxy

Other Designations: Formulated Epoxy

General Use: Adhesive

Manufacturer: Smooth-On Inc., 2000 St. John St., Easton PA 18042

Phone (610) 252-5800, FAX (610) 252-6200

Emergency Contact: Chem-Tel

Domestic 800-255-3924

International 813-248-0585

Section 2 - Composition / Information on Ingredients

Component	CAS Number	ACGIH TWA	Exposure Limits OSHA PEL	Weight Percent (%)
Diglycidyl Ether of Bisphenol A	25085-99-8	None Established	None Established	50-55
Triphenyl Phosphite	101-02-0	None Established	None Established	5-10
Silica, Amorphous	67762-90-7	6mg/m ³ as dust	10mg/m ³ as dust	2-5
Iron Oxide	1317-61-9	None Established	None Established	1-3
Titanium Dioxide	13463-67-7	10mg/m ³ as dust	15mg/m ³ as dust	5-10

Section 3 - Hazards Identification

☆☆☆☆☆ Emergency Overview ☆☆☆☆☆

Potential Health Effects

HMIS	
H	1
F	1
R	0

Primary Entry Routes: Skin

Acute Effects

Inhalation: unlikely unless heated

Eye: can cause irritation

Skin: can cause irritation

Ingestion: Unknown

Carcinogenicity: IARC, NTP, and OSHA do not list any components of this product as a carcinogen.

Medical Conditions Aggravated by Long-Term Exposure: preexisting eye and skin disorders may be aggravated by exposure

Section 4 - First Aid Measures

Inhalation: Remove to fresh air: if breathing is labored seek medical attention.

Eye Contact: Flush with water for 15 minutes; seek medical attention

Section 4 - First Aid Measures (continued)

Skin Contact: remove with soap and water: if redness or rash develops seek medical attention: Launder contaminated clothing before reuse.

Ingestion: seek medical attention

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

Section 5 - Fire-Fighting Measures

Flash Point: >392 °F (200 °C)

Flash Point Method: PMCC

Flammability Classification: Non-Flammable

Extinguishing Media: Foam, Dry Chemical, and Carbon Dioxide

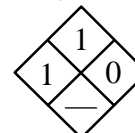
Unusual Fire or Explosion Hazards: None

Hazardous Combustion Products: Oxides of Nitrogen and Carbon, Acids and Aldehydes when burned

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 face piece operated in pressure-demand or positive-pressure mode.

NFPA



Section 6 - Accidental Release Measures

Spill /Leak Procedures

Containment: Dike and contain for later disposal. Do not release into sewers or waterways.

Cleanup: Scrape up excess.

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

Section 7 - Handling and Storage

Handling Precautions: Avoid prolonged or repeated skin contact. Use good general housekeeping procedures.

Storage Requirements: Store in Closed containers. Use only with adequate ventilation.

Section 8 - Exposure Controls / Personal Protection

Engineering Controls:

Ventilation: Provide general or local exhaust ventilation systems to maintain airborne concentrations below OSHA PELs (Sec. 2). Local exhaust ventilation is preferred because it prevents contaminant dispersion into the work area by controlling it at its source.

Administrative Controls:

Respiratory Protection: Seek professional advice prior to respirator selection and use. Follow OSHA respirator regulations (29 CFR 1910.134) and, if necessary, wear an MSHA/NIOSH-approved respirator. Select respirator based on its suitability to provide adequate worker protection for given working conditions, level of airborne contamination, and presence of sufficient oxygen. For emergency or nonroutine operations (cleaning spills, reactor vessels, or storage tanks), wear an SCBA. *Warning! Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.*

Section 8 - Exposure Controls / Personal Protection (continued)

If respirators are used, OSHA requires a written respiratory protection program that includes at least: medical certification, training, fit testing, periodic environmental monitoring, maintenance, inspection, cleaning, and convenient, sanitary storage areas.

Protective Clothing/Equipment: Wear chemically protective gloves, boots, and aprons to prevent prolonged or repeated skin contact. Wear protective eyeglasses or chemical safety goggles, per OSHA eye- and face-protection regulations (29 CFR 1910.133). Contact lenses are not eye protective devices. Appropriate eye protection must be worn instead of, or in conjunction with contact lenses.

Safety Stations: Make emergency eyewash stations, safety/quick-drench showers, and washing facilities available in work area.

Contaminated Equipment: Separate contaminated work clothes from street clothes. Launder before reuse. Remove this material from your shoes and clean personal protective equipment.

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.

Section 9 - Physical and Chemical Properties

Physical State:

Odor: mild odor

Vapor Pressure: None (Polymeric Resin)

Vapor Density (Air=1): None

Specific Gravity (H₂O=1, at 4 °C): 1.40

Water Solubility: negligible

Boiling Point: None

Freezing/Melting Point: Not Established

Evaporation Rate: None

Viscosity: Paste

Section 10 - Stability and Reactivity

Stability: These products are stable at room temperature in closed containers under normal storage and handling conditions.

Polymerization: Hazardous polymerization cannot occur.

Chemical Incompatibilities: Strong oxidizing agents, strong Lewis or mineral acids.

Conditions to Avoid: Mixing with Amines under uncontrolled conditions.

Hazardous Decomposition Products: Thermal oxidative decomposition can produce: Oxides of Nitrogen and Carbon, Acids and Aldehydes when burned.

Section 11- Toxicological Information**Toxicity Data:***

Eye Effects: Irritation
Skin Effects: Irritation

Carcinogenicity: None
Mutagenicity: None Determined
Teratogenicity: None Determined

Section 12 - Ecological Information

None Determined

Section 13 - Disposal Considerations

Disposal: Contact your supplier or a licensed contractor for detailed recommendations. Follow applicable Federal, state, and local regulations.

Section 14 - Transport Information

DOT
Not Regulated

IATA
Not Regulated

IMDG
Not Regulated

Section 15 - Regulatory Information

EPA Regulations: This material is not considered a hazardous material.

RCRA Hazardous Waste Number: Not listed (40 CFR 261.33): None

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: None

CERCLA Reportable Quantity (RQ), None

SARA 311/312 Codes: None

This product does not contain the chemicals that are subject to release reporting requirements under section 313 of SARA Title III.

SARA Toxic Chemical (40 CFR 372.65): None

SARA EHS (Extremely Hazardous Substance) (40 CFR 355): Not listed,

TSCA Inventory Status (40CFR710): All components of this formula are on the TSCA inventory

State Regulations:

California Proposition 65: These products contain a trace amount of Epichlorohydrin, which has been identified by the state California to cause cancer.

Massachusetts, Minnesota, Pennsylvania and Washington Right To Know, Substance List:

<u>Chemical Name</u>	<u>CAS #</u>	<u>% by Weight</u>
Titanium Dioxide	13463-67-7	10.0 Max

Section 16 - Other Information

Prepared By: Dominick J. Finocchio

Title: Technical Director

Disclaimer: The information contained in this MSDS is considered accurate as of the version date. However, no warranty is expressed or implied regarding the accuracy of the data. Since the use of this product is not within the control of Smooth-On Inc., it is the user's obligation to determine the suitability of the product for its intended application and assumes all risk and liability for its safe use.



Material Safety Data Sheet

PC Series

MSDS No. 203

Date of Preparation: July 8, 2002

Revision: 0003

Section 1 - Chemical Product and Company Identification

Product/Chemical Name: PC-B

Other Designations: Formulated Epoxy

General Use: Adhesive

Manufacturer: Smooth-On Inc., 2000 St. John St., Easton PA 18042

Phone (610) 252-5800, FAX (610) 252-6200

Emergency Contact: Chem-Tel

Domestic 800-255-3924

International 813-248-0585

Section 2 - Composition / Information on Ingredients

Component	CAS Number	ACGIH TWA	Exposure Limits OSHA PEL	Weight Percent (%)
Sodium Aluminosilicate	1344-00-9	10 mg/m ³	None Established	30-35
Polyamide Resin	68953-36-6	None Established	None Established	20-25
Wollastonite	13983-17-0	10 mg/m ³	None Established	15-20
Amidoamine	68298-14-6	None Established	None Established	10-15
Tetraethylene Pentamine	112-57-2	None Established	None Established	1-3
2,4,6 Tri (dimethyl) phenol	90-72-2	None Established	None Established	1-3

Section 3 - Hazards Identification

☆☆☆☆☆ Emergency Overview ☆☆☆☆☆

Potential Health Effects

Primary Entry Routes: Skin, inhalation of vapors

Acute Effects

Inhalation: vapors are irritating to respiratory tract.

Eye: can cause burns

Skin: will cause burns: may cause sensitization after prolonged or repeated use.

Ingestion: will cause severe damage to the mucous membranes if swallowed.

Carcinogenicity IARC, NTP, and OSHA: IARC, NTP, and OSHA do not list any components of this product as a carcinogen.

Medical Conditions Aggravated by Long-Term Exposure: preexisting eye and skin disorders may be aggravated by exposure

HMIS	
H	2
F	1
R	0

Section 4 - First Aid Measures

Inhalation: Remove to fresh air; if breathing is labored seek medical attention.

Eye Contact: Flush with water for 15 minutes; seek medical attention

Skin Contact: remove with soap and water: if redness or rash develops seek medical attention:
Launder contaminated clothing before reuse.

Ingestion: do not induce vomiting; seek medical attention

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

Section 5 - Fire-Fighting Measures

Flash Point: >268 °F (131°C)

Flash Point Method: PMCC

Flammability Classification: Non-Flammable

Extinguishing Media: Foam, Dry Chemical, and Carbon Dioxide

Unusual Fire or Explosion Hazards: None

Hazardous Combustion Products: Oxides of Nitrogen and Carbon when burned

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 face piece operated in pressure-demand or positive-pressure mode.



Section 6 - Accidental Release Measures

Spill /Leak Procedures

Containment: Dike and contain for later disposal. Do not release into sewers or waterways.

Cleanup: Scrape up excess.

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

Section 7 - Handling and Storage

Handling Precautions: Avoid prolonged or repeated eye and skin contact. Avoid breathing vapors and use only with adequate ventilation. Use good general housekeeping procedures.

Storage Requirements: Store in Closed containers. Use only with adequate ventilation.

Section 8 - Exposure Controls / Personal Protection

Engineering Controls:

Ventilation: Provide general or local exhaust ventilation systems to maintain airborne concentrations below OSHA PELs (Sec. 2). Local exhaust ventilation is preferred because it prevents contaminant dispersion into the work area by controlling it at its source.

Administrative Controls:

Respiratory Protection: Seek professional advice prior to respirator selection and use. Follow OSHA respirator regulations (29 CFR 1910.134) and, if necessary, wear an MSHA/NIOSH-approved respirator. Select respirator based on its suitability to provide adequate worker protection for given working conditions, level of airborne contamination, and presence of sufficient oxygen. For emergency or nonroutine operations (cleaning spills, reactor vessels, or storage tanks), wear an SCBA. *Warning! Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.* If respirators are used, OSHA requires a written respiratory protection program that includes at least: medical certification, training, fit testing, periodic environmental monitoring, maintenance, inspection, cleaning, and convenient, sanitary storage areas.

Protective Clothing/Equipment: Wear chemically protective gloves, boots, and aprons to prevent prolonged or repeated skin contact. Wear protective eyeglasses or chemical safety goggles, per OSHA eye- and face-protection regulations (29 CFR 1910.133). Contact lenses are not eye protective devices. Appropriate eye protection must be worn instead of, or in conjunction with contact lenses.

Section 8 - Exposure Controls / Personal Protection (continued)

Safety Stations: Make emergency eyewash stations, safety/quick-drench showers, and washing facilities available in work area.

Contaminated Equipment: Separate contaminated work clothes from street clothes. Launder before reuse. Remove this material from your shoes and clean personal protective equipment.

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.

Section 9 - Physical and Chemical Properties

Physical State:

Appearance and Odor: Tan Paste;
ammonia odor

Vapor Pressure: <1 @ 25°C

Vapor Density (Air=1): No Data

Specific Gravity (H₂O=1, at 4 °C): 1.5

Viscosity (poise): Paste

Water Solubility: negligible

Boiling Point: None

Freezing/Melting Point: None Determined

Evaporation Rate: None Determined

Section 10 - Stability and Reactivity

Stability: PC-B is stable at room temperature in closed containers under normal storage and handling conditions.

Polymerization: Hazardous polymerization cannot occur.

Chemical Incompatibilities: Strong oxidizing agents, strong Lewis or mineral acids.

Conditions to Avoid: Mixing with epoxies under uncontrolled conditions.

Hazardous Decomposition Products: Thermal oxidative decomposition of PC-B can produce: Oxides of Nitrogen and Carbon when burned.

Section 11 – Toxicological Information

Toxicity Data:*

Eye Effects: can cause burns

Skin Effects: will cause burns

Carcinogenicity: None Determined

Mutagenicity: None Determined

Teratogenicity: None Determined

Section 12 - Ecological Information

None Determined

Section 13 - Disposal Considerations

Disposal: Contact your supplier or a licensed contractor for detailed recommendations. Follow applicable Federal, state, and local regulations.

Section 14 - Transport Information

DOT	IATA	IMDG
Not Regulated	Not Regulated	Not Regulated

Section 15 - Regulatory Information

EPA Regulations: This material is not considered a hazardous material.

RCRA Hazardous Waste Number: Not listed (40 CFR 261.33): None

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), None

SARA 311/312 Codes: None

SARA Toxic Chemical (40 CFR 372.65): None

SARA EHS (Extremely Hazardous Substance) (40 CFR 355): Not listed,

TSCA Inventory Status (40CFR710): All components of this formula are on the TSCA inventory

States Right To Know, Substance List:

Florida, Massachusetts and Pennsylvania

<u>Chemical Name</u>	<u>CAS #</u>	<u>% by Weight</u>
Tetraethylene Pentamine	112-57-2	3.0 Max

California Proposition 65: This product does not intentionally contain any chemicals, which have been identified by the state of California to cause cancer, birth defects or other reproductive harm.

Section 16 - Other Information

Prepared By: Dominick J. Finocchio

Title: Technical Director

Disclaimer: The information contained in this MSDS is considered accurate as of the version date. However, no warranty is expressed or implied regarding the accuracy of the data. Since the use of this product is not within the control of Smooth-On Inc., it is the user's obligation to determine the suitability of the product for its intended application and assumes all risk and liability for its safe use.