

Material Safety Data Sheet

PM C-724 Part A

M SD S No. 624A

Date Of Preparation: A pril 17, 2001

Revision: 0009

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Section 1 - Chemical Product and Company Identification

Product/Chemical Name: PMC-724 Part A General Use: Polyuzethane Elastomer

Manufacturer: Smooth-On Inc., 2000 St. John St., Easton PA 18042, and 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	ACCIH TWA	Exposure Limits	Weight Percent
			OSHA PEL	(%)
Butylbenzyl phthalate	85-68-7	None Established	None Established	65-70
Polymethylene polyphenyl socyanate	9016-87-9	Nome Established	None Established	10-15
4, 4' Methylene bis (phenylis ocyanate)	101-68-8	0.005 ppm	0.02ppm	20-25

Section 3 - Hazards Identification

Potential Health Effects

Primary Entry Routes: Inhalation and Dermal

Target Organs: Lungs skin Acute Effects Inhalation: Vapors are minimal due to low vapor pressure;

if sprayed as an aeros of excessive concentrations are attainable that could be hazardous on single exposure.

Excessive exposure can cause initation to respiratory tract and initation of the eyes. Effects may be delayed. Decreased ventilatory capacity has been associated with exposure to similar isocyanates.

Eye: May cause irritation, redness, tearing, and blur vision. Prolonged vapor contact may cause conjunctivitis.

Skin: Contactwill cause initation, reddening, swelling, rash, scaling or blistering. Prolonged or repeated contact can cause moderate dermatitis.

Ingestion: May have comosive effects on the linings of the mouth and stomach: symptoms can include some throat, abdominal pain, nausea, vomiting and diamhea.

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

Madical Conditions Aggravated by Long-Term Exposure: skin allergies and as piratory disorders

Section 4 - First Aid Measures

Inhalation: Remove source(s) of contamination and move victim to fresh air. If breathing has stopped, give artificial respiration, then oxygen if needed. Contact physician immediately.

Eye Contact: Flish eyes with plenty of water. If imitation persists, seek medical attention.

Skin Contact: In case of skin contact, was hithoroughly with soap and water, remove contaminated clothing and launder before reuse; seek medical attention if ras hidevelops.

Ingestions Do not induce vomiting unless instructed by a physician. Contact physician immediately After first aid, get appropriate in-plant, paramedia, or community medical support.

Section 5 - Fire-Fighting Measures

Flash Point: 390°F (200°C Flash Point Method: CCC

Flammability Classification: Non-Flammable

Extinguishing Media: Water Fog. Dry Chemical, and Carbon Dioxide Foam

Unusual Fire or Explosion Hazards: Hazardous decomposition products may be formed. A void water contamination in closed containers or confined areas as exothermic heat and carbon dioxide can evolve.

Fire-Fighting Instructions: Fire fighters should wear self-contained breathing apparatus. Do not release nunoff from fire control methods to sewers orwaterways.

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.



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Section 6 - Accidental Release Measures

Spill /Leak Precedures: Only properly protected personnel should remain in the spill area; dike and contain spill; absorb or scrape up excess into suitable container for disposal; wash area with dilute ammonia solution. Stop or reduce discharge if it can be done safely.

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

Section 7 - Handling and Storage

Handling Precautions: Minimize breathing of vapors and avoids prolonged or repeated contact with skin. Wearproper protective equipment. If ventilation is not sufficient, wear proper respiratory equipment. Avoid moisture contamination. Reseal partial containers. Use good general housekeeping procedures.

Storage Requirements: Store in cooldry, well-ventilated area.

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 Protections: 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 appons to prevent prolonged orrepeated skin contact. Wear protective eyeglasses or chemicals afety goggles, per OSHA eye- and face-protection regulations (29 CFR 1910.133). Contact lenses are not eye protective devices. A propriate eye protection must be worn instead of, or in conjunction with contact lenses.

Comments: Nevereat, drink, or smoke in work areas. Practice good personal hygiene afterusing this material, especially before eating, drinking, smoking, using the toilet, or applying cosmetics

Section 9 - Physical and Chemical Properties

Physical State: Liquid Appearance: Brown liquid Odor: Characteristic odor Vapor Pressure: <0.00001 @ 25° C Vapor Density (Air=1): 8.6 Specific Gravity (H2O=1, at 4°Ck 1.10 Water Solubility: Negligible:
Bolling Point: None Determined
% Volatile: Nil
Freezing/Melting Point: None Determined
Viscosity: 1 poise

Evaporation Rate: Not Applicable

Section 10 - Stability and Reactivity

Stability: This product is stable at room temperature in closed containers under normal storage and handling conditions.

Polymerization: Hazardous polymerization can occur.

Chemical incompatibilities: Strong bases, water, amines, alcohols.

Conditions to Avoid: A void contamination with water and other materials that react with Isocyanates.

Hazardous Decomposition Products: MDI vapors, hydrogen cyanide gas, oxides of nitrogen, carbon monoxide and carbon dioxide.

Section 11- Toxicological Information

Eye Effects: Imitation Skin Effects: Imitation Mutagenicity: None Determined
Teratogenicity: None Determined

Section 12 - Ecological Information

None Established

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Section 13 - Disposal Considerations

Disposal: This material must be disposed of in accordance with applicable Federal, state and local regulations.

Section 14 - Transport Information

DOT

IATA

IMDG

Shipping Name:

Butyl Benzyl Phthalate Mixture (Greater than 100 pounds of Butyl

Benzyl Phthalate)

UN#: 3082 Hazard Class 9 Label: Miscellaneous Shipping Name:

Butyl Benzyl Phthalate Mixture

(Greater than 100 pounds of Butyl Berzyl Phthalate)

UN#: 3082 Hazard Class 9 Label: Miscellaneous Shipping Name:

Butyl Benzyl Phthalate Mixture

UN#: 3082 Hazard Class: 9 Label: Marine Pollutant

Section 15 - Regulatory Information

EPA Regulations:

RCRA Hazardous Waste Number: Not listed (40 CFR 261.33)

CERCLA Hazardous Substance (40 CFR 3024) listed specific per RCRA, Sec. 3001; CWA, Sec. 311 (b)(4); CWA, Sec. 307(a),

CAA, Sec. 112

Chemical Name Butyl Benzyl Phthalate

%Reportable Component

RQ. 1001bs.

700 Max

SARA Toxic Chemical (40 CFR 372.65): None

This product contains the following chemicals that are subject to release reporting requirements undersection 313 of

SARA Title III.

Chemical Name

CAS#

%by Weight

4, 4' Methylene bis (phenylisocyanate)

101-68-8 9016-87-9 250 Max 150 Max

Polymethylene polyphenyl isocyanate SARA EHS (Extremely Hazardous Substance) (40 CFR 355): None

Clean Air Act

SOCMI Chemical: 4, 4' Methylene bis (phenylis ocyanate)

Hap Code: XOV

TSCA Inventory Status (40 CFR710): All components of this formulation are listed in the TSCA Inventory.

State Regulations:

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

Florida, Massachusetts, Minnesota, Pennsylvania, and Washington Substance List:

Chemical Name

CAS#

%by Weight

4, 4' Methylene bis (phenylis ocyanate)

101-68-8

250 Max

Massachusetts, Michigian and Pennsylvania Substance List:

Chemical Name Butyl Benzyl Phthalate

85-68-7

%by Weight 700 May

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 is k and liability for its safe use.

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Material Safety Data Sheet

PM C-724 Part B

M SDS No. 624B

Date Of Preparation: A pril 18, 2001

Revision: 0009

HMIS

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Section 1 - Chemical Product and Company Identification

Product/Chemical Name: PMC-724 Part B General Use: Polyurethane Elastomer

Manufacturer: Smooth-On Inc., 2000 St. John St., Easton PA 18042, and 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	ACCIH TWA	Exposure Limits OSHA PEL	Weight Percent (%)		
Butyl benzyl phthalate	85-68-7	None Established	None Established	30-35		
New Jersey Trade Secret #221290880-5003P	<u>-</u>	None Established	None Established	30-35		
Kaolin	1332-58-7	2 mg/m as dust	15mg/m as dust	15-20		
Silica, Quartz	14808-60-7	0.1 mg/m as dust	50 mg/m² as dust	15-20		
Titanium Dioxide	13463-67-7	10mg/m³ as dust	15mg/m³as dust	1-3		
Phenylmexunc neodecanoate	26545-49-3	0.01 mg/m²	001 ng/m²	0.1		

Section 3 - Hazards Identification

Potential Health Effects

Primary Entry Routes: Dernal

Target Organs: pancreas, liver, thyroid and eyes.

Acute Effects

Inhalation: Vapors, which are not significant unless heated or sprayed can cause initation to respiratory tract.

Eye: May cause initation, redness, tearing.

Shin: Contact will cause imitation and reddening swelling.

Ingestion: Effects are unknown.

Carcinogenicity: IARC lists Silica, quartz dust, as a probable carcinogen.

Medical Conditions Aggresated by Long Term Esposure: Pre-existing skin disorders.

Chronic Effects of Overesposure:

This product contains an organo-mercury catalyst below the reportable level required by CSHA 1910.1200; however, due to the chronic toxicity of organo-mercury compounds careful handling of this product is required.

Section 4 - First Aid Measures

Inhalation: Remove source(s) of contamination and move victim to fiesh air.

Eye Contact: Flish eyes with plenty of water. If imitation persists, seek medical attention.

Skin Contact: In case of skin contact, was hithoroughly with soap and water, remove contaminated clothing and launder before muse; seek medical attention if rash develops.

Ingestion: Do not induce vomiting unless instructed by a physician. Contact physician immediately After first aid, get appropriate in-plant, paramedia, or community medical support.

Section 5 - Fire-Fighting Measures

Flash Point: >300 °F (150°C)

Flash Point Method: COC

Flammability Classification: Non-Flammable

Extinguishing Media: Water Fog, Dry Chemical, and Carbon Dioxide Foam

Umusual Fire or Explosion Hazards: Nore

Fire-Fighting Instructions: Fire fighters should wear self-contained breathing apparatus. Do not release nunoff from fire control methods to sewers orwaterways.

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.



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Section 6 - Accidental Release Measures

Spill / Leak Procedures: Dike and contain spill; absorb or scrape up excess into suitable container for disposal. Stop or reduce discharge if it can be done safely.

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

Section 7 - Handling and Storage

Handling Precautions: Minimize breathing of vapors and avoid prolonged or repeated contact with skin. Wear proper protective equipment. If ventilation is not sufficient, wear proper respiratory equipment. Use good general housekeeping procedures.

Storage Requirements: Store in cooldry, well-ventilated area.

Section 8 - Exposure Controls / Personal Protection

Engineering Controls:

Ventilation: Provide general or local exhaust ventilation systems to maintain aithorne 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 Protections: 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 nonzoutine 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, sanitarys torage areas.

Protective Clothing Equipment: Wear chemically protective gloves, boots, and aprons to prevent prolonged or repeated skin contact. Wear protective eyeglasses or chemicals afety 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.

Comments: Nevereat, 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: Liquid

Appearance: White viscous liquid

Offer: Characteristic odor

Vapor Pressure: None (Polymeni: Resin)

Vapor Density (Air=1): >1

Specific Gravity (H₂O=1, at 4 °C): 1.4

Water Solubility: Negligible:

Boiling Point: None (Polymeric Resin)

% Volatile: Nil

Freezing/Melting Point: None Determined

Viscosity: 90 poise

Evaporation Rate: None (Polymeric Resin)

Section 10 - Stability and Reactivity

Stability: This product is stable at mountemperature in closed containers under normal storage and handling conditions.

Polymerization: Hazardous polymerization can not occur.

Chemical Incompatibilities: Strong acids and oxidizers.

Conditions to Asoid: A void contamination with water and other materials that seact with animes.

Thermal Decomposition Products: Oxides of nitrogen, carbon monoxide and carbon dioxide

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Section 11- Toxicological Information

Toxicity Data:

Acute Inhalation Effects: None established

Reproductive Toxicity: None Established Mintagemicity: None Established

Acute Oral Effects: None Established

Teratogenicity: None Established Sensitization: None Established

Section 12 - Ecological Information

None Established

Section 13 - Disposal Considerations

Disposal: This naterial contains a hazardous constituentas identified in RCRA, Title 40CFR 261, Appendix VIII and must be disposed of in accordance with applicable Federal, state, and local regulations.

Section 14 - Transport Information

DOT

IATA

IMDG

Shipping Name:

Butyl Benzyl Phthalate Mixture

(Greater than 100 pounds of Butyl

Benzyl Phthalate)

UN#: 3082 Hazard Class: 9 Label: Miscellaneous Shipping Name:

Butvl Benzyl Phthalate Mixture (Greater than 100 pounds of Butyl Berzyl

Phthalate) UN#: 3082

Hazard Class: 9 Label: Mis cellaneous

Shipping Name: Butyl Benzyl Phthalate Mixture

UN#: 3082 Hazard Class: 9 Label: Marine Pollutant

Section 15 - Regulatory Information

EPA Regulations:

RCRA Hazardous Waste Number: Not listed (40 CFR 261 33)

CERCLA Hazardous Substance (40 CFR 3024) listed per RCRA, Sec. 3001; CWA, Sec. 311 (b)(4); CWA, Sec. 307(a), CAA, Sec.

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Components That Require Reporting Butyl Benzyl Phthalate

100 lbs. 1Ъ.

% of Reportable Component

35.0 Max. 0.03 Max

SARA Toxic Chemical (40 CFR 372.65):

Mercury (as part of catalyst)

Chemical Name Butyl Benzyl Phthalate CAS# 85-68-7 % by Weight 35.0 Max

This product contains the following chemicals that are subject to release reporting requirements undersection 313 of SARÁ Title III.

Chemical Name

Butyl Benzyl Phthalate Mexcury Compounds

CAS#

% by Weight 35.0Max

85-68-7

0.10 Max

TSCA Inventory Status (40 CFR 710): All components of this product are listed on the TSCA inventory.

SARA EHS (Extremely Hazardous Substance) (40 CFR 355): Not listed, Threshold Planning Quantity (TPQ)

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Section 15 - Regulatory Information (continued)

State Regulations:

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.

Florida Right To Know Substance List Silica

Massachusetts Right To Know, Substance List; Butyl Benzyl Phthalate, Slica, Titanium Dioxide

Pennsylvania Right To Know, Substance List: Butyl Benzyl Phthalate, Kaolin. Silica, Titanium Dioxide

Michigan Right To Know, Substance List: Butyl Benzyl Phthalate

Minnesota Right To Know Substance List: Kaolin, Silica, Titanium Dioxide

Washington Right To Know, Substance List: Silica, Titanium Dioxide

16 - Other Information

Prepared By: Dominick J. Finocchio

Tifle: 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.

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