



Safety Data Sheet

SDS No. 614A

Section 1 - Chemical Product and Company Identification

Product/Chemical Name: Part A for: Econ® 60; PMC® 780, PMC® 121-50; Renew® UR60, UR 80; Reoflex® 50, 60; VytaFlex® 50, 60

General Use: Polyurethane Elastomer

Manufacturer: Smooth-On, Inc.,
5600 Lower Macungie Rd., Macungie, PA 18062
Phone (610) 252-5800, FAX (610) 252-6200

Emergency Contact: Chem-Tel
Domestic: 800-255-3924 International: 813-248-0585

Section 2 - Hazards Identification

Classification of the substance or mixture

Acute toxicity, oral-Category 4
Acute toxicity, inhalation-Category 4
Acute toxicity, dermal-Category 4
Skin irritation-Category 2
Eye irritation-Category 2A
Specific target organ toxicity-single exposure-Category 3 (respiratory)

Pictogram:



Signal word: Warning

GHS Label elements, including precautionary statements

Health Hazards	H302 + H312 + H332	Harmful if swallowed, in contact with skin or if inhaled
	H315	Causes skin irritation
	H319	Causes serious eye irritation
	H335	May cause respiratory irritation
General Precautions:	P101	If medical advice is needed, have product container or label at hand.
	P102	Keep out of reach of children.
	P103	Read label before use.
Prevention Precautions:	P261	Avoid breathing dust/fume/gas/mist/vapors/spray.
	P264	Wash skin thoroughly after handling.
	P270	Do not eat, drink or smoke when using this product.
	P271	Use only outdoors or in a well-ventilated area.
	P280	Wear protective gloves/protective clothing/eye protection/face protection.
Response Precautions:	P301 + P312	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
	P302 + P352	IF ON SKIN: Wash with plenty of soap and water.

	P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
	P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	P312	Call a POISON CENTER or doctor/physician if you feel unwell.
	P322	Rinse mouth.
	P330	If skin irritation occurs: Get medical advice/attention.
	P332 + P313	If eye irritation persists: Get medical advice/attention.
	P337 + P313	Take off contaminated clothing.
	P362	Store in a well-ventilated place. Keep container tightly closed.
Storage Precautions:	P405	Store locked up.
Disposal Precautions:	P501	Dispose of contents/container according to local, state and federal laws

Hazards not otherwise classified (HNOC) or not covered by GHS - lachrymator

Section 3 - Composition / Information on Ingredients

The following ingredients are hazardous according to OSHA criteria.

CAS No.	Component	% by Weight
9057-91-4	Poly[oxy(methyl-1,2-ethanediyl)], α-hydro-Ω-hydroxy, polymer with 1,3 diisocyanatomethylbenzene	> 90
26471-62-5	Toluene diisocyanate	< 1

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: Flush eyes with plenty of water. If irritation persists, seek medical attention.

Skin Contact: In case of skin contact, wash thoroughly with soap and water.

Ingestion: Do not induce vomiting unless instructed by a physician. Never give anything by mouth to an unconscious person.

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

Section 5 - Fire-Fighting Measures

Flammable Classification: Non-Flammable

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

Unusual Fire or Explosion Hazards: None known.

Fire-Fighting Instructions: Use water spray to cool fire-exposed surfaces and to protect personnel. Shut off "fuel" to fire. If a leak or spill has not ignited, use water spray to disperse the vapors. Either allow fire to burn under controlled conditions or extinguish with foam or dry chemical. Try to cover liquid spills with foam.

Further information: 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:

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.

Environmental precautions:

No special environmental precautions required.

Section 7 - Handling and Storage

Handling Precautions: Use good general housekeeping procedures. Wash hands after use.

Storage Requirements: Keep container(s) tightly closed and properly labeled. Store in cool, dry, well ventilated place away from heat, direct sunlight, strong oxidizers and any incompatibles. Store in approved containers and protect against physical damage. Keep containers securely sealed when not in use. Indoor storage should meet OSHA standards and appropriate fire codes. Containers that have been opened must be carefully resealed to prevent leakage. Empty containers retain residue and may be dangerous. Avoid water contamination.

Section 8 - Exposure Controls / Personal Protection

Respiratory Protection: Respiratory protection is not normally required when using this product with adequate ventilation. Should a respirator be needed, follow OSHA respirator regulations 29 CFR 1910.134 and European Standards EN 141, 143 and 371; wear an MSHA/NIOSH or European Standards EN 141, 143 and 371 approved respirators equipped with organic vapor cartridges.

Hand Protection: Wear chemically resistant gloves such as butyl rubber, neoprene or PVC.

Eye Protection: Safety glasses with side shields per OSHA eye- and face-protection regulations 29 CFR 1910.133 and European Standard EN166. Contact lenses are not eye protective devices. Appropriate eye protection must be worn instead of, or in conjunction with contact lenses.

Other Protective Clothing/Equipment: Additional protective clothing or equipment is not normally required. Provide eye bath and safety shower.

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. Wash thoroughly after handling.

Section 9 - Physical and Chemical Properties

Appearance : clear yellow viscous liquid

Odor/Threshold: sharp pungent odor

pH: N.A. (non-aqueous)

Melting Point/Freezing Point: N.A.

Low/High Boiling Point: N.A.

Flash Point: >270 °F

Evaporation Rate: Not available

Flammability: f.p. at or above 200 °F

UEL/LEL: Not available

Vapor Pressure: None (Polymeric Resin)

Vapor Density (Air=1): >1

Specific Gravity (H₂O=1, at 4 °C): 1.04

Water Solubility: Negligible

Partition coefficient: Not available

Auto-ignition temperature: Not available

Decomposition temperature: Not available

Viscosity: 50,000 centipoise

% Volatile: Nil

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 bases, and acids.

Hazardous Decomposition Products: Thermal oxidative decomposition can produce carbon oxides and traces of incompletely burned carbon compounds.

Section 11- Toxicological Information

Skin Corrosion/Irritation: no data

Serious Eye Damage/Irritation: no data

Respiratory/Skin Sensitization: no data

Germ Cell Mutagenicity: no data

Carcinogenicity: no data

Reproductive Toxicity: no data

Specific Target Organ Toxicity – Single Exposure: no data

Specific Target Organ Toxicity – Repeated Exposure: no data

Aspiration Hazard: no data

Acute Toxicity: no data

Chronic Exposure: no data

Potential Health Effects – Miscellaneous: no data

Section 12 - Ecological Information

Toxicity: no data

Persistence and Degradability: no data

Bioaccumulative Potential: no data

Mobility in Soil: no data

Other Adverse Effects: no data

Section 13 - Disposal Considerations

Disposal: Under RCRA it is the responsibility of the user of the product to determine at the time of disposal whether the product meets RCRA criteria for hazardous waste. Waste management should be in full compliance with federal, state and local laws.

Empty containers retain product residue which may exhibit hazards of material, therefore to not pressurize, cut, glaze, weld or use for any other purposes. Return drums to reclamation centers for proper cleaning and reuse.

Section 14 - Transport Information

DOT

IATA

IMDG

Not Regulated

Not Regulated

Not Regulated

Section 15 - Regulatory Information

United States EPA Regulations:

CERCLA Hazardous Substance (40 CFR 302.4) listed specific per RCRA, Sec. 3001; CWA, Sec. 311 (b)(4); CWA, Sec. 307(a), CAA, Sec. 112

Chemical Name

RQ

% Reportable Component

Toluene Diisocyanate–

100 lbs.

<1.0

SARA EHS (Extremely Hazardous Substance) (40 CFR 355):

Chemical Name

CAS #

% by Weight

Toluene Diisocyanate

26471-62-5

<1.0

These products contain the following chemicals that are subject to release reporting requirements under **section 313 of SARA Title III.**

Chemical Name

CAS #

% by Weight

Toluene Diisocyanate

26471-62-5

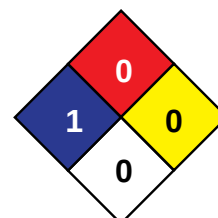
<1.0

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

California Proposition 65: This product contains a chemical known to the state of California to cause cancer, birth defects or other reproductive harm.

16 - Other Information

HMIS	
H	1
F	0
R	0



NFPA

Revision: 2

Date Prepared: June 22, 2015

Glossary: ACGIH-American Conference of Governmental Industrial Hygienists; ANSI-American National Standards Institute; Canadian TDG-Canadian Transportation of Dangerous Goods; CAS-Chemical Abstract Service; Chemtrec-Chemical Transportation Emergency Center (US); CHIP-Chemical Hazard Information and Packaging; DSL-Domestic Substances List; EC-Equivalent Concentration; EH40 (UK)-HSE Guidance Note EH40 Occupational Exposure Limits; EPCRA-Emergency Planning and Community Right-To-Know Act; ESL-Effects screening levels; GHS-Globally Harmonized System of Classification and Labelling of Chemicals; HMIS-Hazardous Material Information Service; IATA-International Air Transport Association; IMDG-International Maritime Dangerous Goods Code; LC-Lethal Concentration; LD-Lethal Dose; LEL-Lower Explosion Level; NFPA-National Fire Protection Association; OEL-Occupational Exposure Limit; OSHA-Occupational Safety and Health Administration, US Dept. of Labor; PEL-Permissible Exposure Limit; SARA (Title III)-Superfund Amendments and Reauthorization Act; SARA 313-Superfund Amendments and Reauthorization Act, Section 313; SCBA-Self-Contained Breathing Apparatus; STEL-Short Term Exposure Limit; TCEQ-Texas Commission on Environmental Quality; TLV-Threshold Limit Value; TSCA-Toxic Substances Control Act Public Law 94-469; TWA-Time Weighted Value; UEL-Upper Explosion Level; US DOT-US Department of Transportation; WHMIS-Workplace Hazardous Materials Information System.

Disclaimer: The information contained in this Safety Data Sheet (SDS) 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.

This SDS is prepared to comply with the Globally Harmonized System of Classification and Labelling of Chemicals (GHS) as prescribed by the United States (US) Occupational Safety and Health Administration (OSHA) Hazard Communication Standard (29 CFR 1910.1200), the Canadian Workplace Hazardous Materials Information System (WHMIS), and European Union Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 (REACH).

Classifications of the chemical in accordance with 29 CFR 1910.1200, signal word, hazard and precautionary statement(s), symbol(s) and other information are based on listed concentration of each hazardous ingredient. Unlisted ingredients are not "hazardous" per the OSHA Hazard Communication Standard (29 CFR 1910.1200), WHMIS and EC No 1907/2006 and are considered trade secrets under US Federal Law (29 CFR and 40 CFR), Canadian Law (Health Canada Legislation), and European Union Directives.



Safety Data Sheet

SDS No. 669B

Section 1 - Chemical Product and Company Identification

Product/Chemical Name: Part B for: Reoflex® 40 Dry and Wet; VytaFlex® 10, 20, 30, 40, and 60

General Use: Polyurethane Elastomer

Manufacturer: Smooth-On, Inc.,
5600 Lower Macungie Rd., Macungie, PA 18062
Phone (610) 252-5800, FAX (610) 252-6200

Emergency Contact: Chem-Tel
Domestic: 800-255-3924 International: 813-248-0585

Section 2 - Hazards Identification

Classification of the substance or mixture

Carcinogenicity-Category 2
Reproductive toxicity-Category 1B

Pictogram:



Signal word: Danger

GHS Label elements, including precautionary statements

Health Hazards:	H351	Suspected of causing cancer
	H360	May damage fertility or the unborn child
General Precautions:	P101	If medical advice is needed, have product container or label at hand.
	P102	Keep out of reach of children.
	P103	Read label before use.
Prevention Precautions:	P202	Do not handle until all safety precautions have been read and understood.
	P280	Wear protective gloves/protective clothing/eye protection/face protection.
Response Precautions:	P308 + P313	IF exposed or concerned: Get medical advice/ attention.
Storage Precautions:	P405	Store locked up.
Disposal Precautions:	P501	Dispose of contents/container according to local, state and federal laws.

Hazards not otherwise classified (HNOC) or not covered by GHS – none known

Section 3 - Composition / Information on Ingredients

The following ingredients are hazardous according to OSHA criteria.

CAS No.	Component	% by Weight
68515-48-0	Diisononyl phthalate	20 – 50
68479-98-1	Diethyltoluenediamine	1 – 5

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: Flush eyes with plenty of water. If irritation persists, seek medical attention.

Skin Contact: In case of skin contact, wash thoroughly with soap and water.

Ingestion: Do not induce vomiting unless instructed by a physician. Never give anything by mouth to an unconscious person.

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

Section 5 - Fire-Fighting Measures

Flammable Classification: Non-Flammable

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

Unusual Fire or Explosion Hazards: None known.

Fire-Fighting Instructions: Use water spray to cool fire-exposed surfaces and to protect personnel. Shut off “fuel” to fire. If a leak or spill has not ignited, use water spray to disperse the vapors. Either allow fire to burn under controlled conditions or extinguish with foam or dry chemical. Try to cover liquid spills with foam.

Further information: 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:

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.

Environmental precautions:

Prevent further leakage or spillage.

Section 7 - Handling and Storage

Handling Precautions: Ensure good ventilation at the workplace. Use good general housekeeping procedures. Wash hands after use.

Storage Requirements: Keep container(s) tightly closed and properly labeled. Store in cool, dry, well ventilated place away from heat, direct sunlight, strong oxidizers and any incompatibles. Store in approved containers and protect against physical damage. Keep containers securely sealed when not in use. Indoor storage should meet OSHA standards and appropriate fire codes. Containers that have been opened must be carefully resealed to prevent leakage. Empty containers retain residue and may be dangerous. Avoid water contamination.

Section 8 - Exposure Controls / Personal Protection

Respiratory Protection: Respiratory protection is not normally required when using this product with adequate ventilation. Should a respirator be needed, follow OSHA respirator regulations 29 CFR 1910.134 and European Standards EN 141, 143 and 371; wear an MSHA/NIOSH or European Standards EN 141, 143 and 371 approved respirators equipped with organic vapor cartridges.

Hand Protection: Wear chemically resistant gloves such as butyl rubber, neoprene or PVC.

Eye Protection: Safety glasses with side shields per OSHA eye- and face-protection regulations 29 CFR 1910.133 and European Standard EN166. Contact lenses are not eye protective devices. Appropriate eye protection must be worn instead of, or in conjunction with contact lenses.

Other Protective Clothing/Equipment: Additional protective clothing or equipment is not normally required. Provide eye bath and safety shower.

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. Wash thoroughly after handling.

Section 9 - Physical and Chemical Properties

Appearance : clear yellow viscous liquid

Odor/Threshold: sharp pungent odor

pH: N.A. (non-aqueous)

Melting Point/Freezing Point: N.A.

Low/High Boiling Point: N.A.

Flash Point: >270 °F

Evaporation Rate: Not available

Flammability: f.p. at or above 200 °F

UEL/LEL: Not available

Vapor Pressure: None (Polymeric Resin)

Vapor Density (Air=1): >1

Specific Gravity (H₂O=1, at 4 °C): 1.04

Water Solubility: Insoluble

Partition coefficient: Not available

Auto-ignition temperature: Not available

Decomposition temperature: Not available

Viscosity: 300 – 500 centipoise

% Volatile: Nil

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 bases, and acids.

Hazardous Decomposition Products: Thermal oxidative decomposition can produce carbon oxides and traces of incompletely burned carbon compounds.

Section 11- Toxicological Information

Skin Corrosion/Irritation: Rabbit – 4 h – no skin irritation (OECD TG 404)

Serious Eye Damage/Irritation: Rabbit – no eye irritation (OECD TG 405)

Respiratory/Skin Sensitization: Buehler Test – guinea pig – does not cause skin sensitization

Germ Cell Mutagenicity: no data

Carcinogenicity:

CA Prop 65: Diisononyl phthalate has been listed by the State of California as a chemical known to cause cancer.

No component of this product at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC, ACGH, NTP or OSHA.

Reproductive Toxicity: no data

Specific Target Organ Toxicity – Single Exposure: no data

Specific Target Organ Toxicity – Repeated Exposure: no data

Aspiration Hazard: no data

Acute Toxicity:

LD50 Oral – Rat – male and female - >50,000 mg/kg (OECD TG 401)

LC50 Inhalation – Rat – 4 h - > 22 mg/l

LD50 Dermal – Rabbit - > >15,800 mg/kg

Chronic Exposure: no data

Potential Health Effects – Miscellaneous: no data

Section 12 - Ecological Information

Toxicity:

toxicity to fish semi-static test LC50 (*Danio rerio*) - >510 mg/l – 96 h

toxicity to daphnia growth inhibition (*Daphnia magna*) - >370 mg/l – 48 h

toxicity to algae static test EC50 (*Desmodesmus subspicatus*) - > 440 mg/l – 72 h

Persistence and Degradability: no data

Bioaccumulative Potential: no data

Mobility in Soil: no data

Other Adverse Effects: no data

Section 13 - Disposal Considerations

Disposal: Under RCRA it is the responsibility of the user of the product to determine at the time of disposal whether the product meets RCRA criteria for hazardous waste. Waste management should be in full compliance with federal, state and local laws.

Empty containers retain product residue which may exhibit hazards of material, therefore to not pressurize, cut, glaze, weld or use for any other purposes. Return drums to reclamation centers for proper cleaning and reuse.

Section 14 - Transport Information

DOT

Not Regulated

IATA

Not Regulated

IMDG

Not Regulated

Section 15 - Regulatory Information

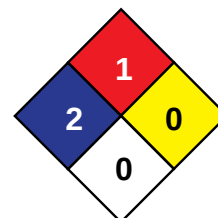
United States EPA Regulations:

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

California Proposition 65: This product contains a chemical which has been identified by the state of California to cause cancer, birth defects or other reproductive harm.

16 - Other Information

HMIS	
H	2
F	1
R	1



NFPA

Revision: 1

Date Prepared: April 28, 2015

Glossary: ACGIH-American Conference of Governmental Industrial Hygienists; ANSI-American National Standards Institute; Canadian TDG-Canadian Transportation of Dangerous Goods; CAS-Chemical Abstract Service; Chemtrec-Chemical Transportation Emergency Center (US); CHIP-Chemical Hazard Information and Packaging; DSL-Domestic Substances List; EC-Equivalent Concentration; EH40 (UK)-HSE Guidance Note EH40 Occupational Exposure Limits; EPCRA-Emergency Planning and Community Right-To-Know Act; ESL-Effects screening levels; GHS-Globally Harmonized System of Classification and Labelling of Chemicals; HMIS-Hazardous Material Information Service; IATA-International Air Transport Association; IMDG-International Maritime Dangerous Goods Code; LC-Lethal Concentration; LD-Lethal Dose; LEL-Lower Explosion Level; NFPA-National Fire Protection Association; OEL-Occupational Exposure Limit; OSHA-Occupational Safety and Health Administration, US Dept. of Labor; PEL-Permissible Exposure Limit; SARA (Title III)-Superfund Amendments and Reauthorization Act; SARA 313-Superfund Amendments and Reauthorization Act, Section 313; SCBA-Self-Contained Breathing Apparatus; STEL-Short Term Exposure Limit; TCEQ-Texas Commission on Environmental Quality; TLV-Threshold Limit Value; TSCA-Toxic Substances Control Act Public Law 94-469; TWA-Time Weighted Value; UEL-Upper Explosion Level; US DOT-US Department of Transportation; WHMIS-Workplace Hazardous Materials Information System.

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