



SAFETY DATA SHEET

SDS No. 619AEU

Revision Date: December 5, 2022 Version: 1.0
According to Regulation (EC)
No. 1907/2006 as amended

Section 1 - Identification of the substance/mixture and of the company

- 1.1 Product Identifier**
Trade Name: **Part A: REOFLEX 50, REOFLEX 60, VYTAFLEX 10
VYTAFLEX 20, VYTAFLEX 30, VYTAFLEX 40, VYTAFLEX 50,
VYTAFLEX 60**
- 1.2 Relevant identified uses of the substance or mixture and uses advised against**
General Use: Polyurethane Elastomer
Restrictions on Use: None known
- 1.3 Details of the supplier of the safety data sheet:**
Company: Smooth-On, Inc.,
5600 Lower Macungie Rd., Macungie, PA 18062, U.S.A.
Telephone: Phone (610) 252-5800
E-mail address of person responsible for the SDS: Visit our website at www.smooth-on.com or email
sds@smooth-on.com
- 1.4 Emergency Contact:** Chem-Tel Domestic: 800-255-3924 International: 813-248-0585
Italy Istituto Superiore di Sanità (ISS) +390649906140

Section 2 – Hazard(s) Identification

2.1 Classification of the substance or mixture:

Classification (REGULATION (EC) No 1272/2008) as amended

For the full text of the H-Statements mentioned in this Section, see Section 16

- H302** Acute toxicity, oral - Category 4
- H312** Acute toxicity, dermal - Category 4
- H330** Acute toxicity, inhalation - Category 2
- H315** Skin irritation - Category 2
- H317** Sensitization, Skin Category 1
- H319** Eye irritation - Category 2A
- H335** Specific target organ toxicity-single exposure - Category 3 (respiratory)
- H351** Carcinogenicity - Category 2

2.2 Label elements, including precautionary statements

Labelling (REGULATION (EC) No 1272/2008) as amended

Pictogram(s):
Signal word: **Danger**



Supplemental Hazard Statements:

None

Health Hazards:

H302 + H312 Harmful if swallowed or in contact with skin
 H330 Fatal if inhaled
 H315 Causes skin irritation
 H317 May cause an allergic skin reaction
 H319 Causes serious eye irritation
 H335 May cause respiratory irritation
 H351 Suspected of causing cancer.

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.
 P261 Avoid breathing dust/fume/gas/mist/vapors/spray.
 P264 Wash skin with soap and water 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, long sleeves, and face shield or safety glasses

Response Precautions:

P301 + P312 IF SWALLOWED: Call a POISON CENTRE/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.
 P308 + P313 IF exposed or concerned: Get medical advice/ attention.
 P312 Call a POISON CENTRE/doctor/physician if you feel unwell.
 P330 Rinse mouth.
 P332 + P313 If skin irritation occurs: Get medical advice/attention.
 P337 + P313 If eye irritation persists: Get medical advice/attention.
 P362 Take off contaminated clothing.

Storage Precautions:

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
 P405 Store locked up.

Disposal Precautions:

P501 Dispose of contents/container according to local, state and federal laws.

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

UFI: WYU2-40N5-P00H-0XFJ

Section 3 - Composition / Information on Ingredients**3.1 Substances/Mixtures****Hazardous ingredients according to Regulation (EC) No 1272/2008**

Chemical name	Classification	CAS-No.	Concentration % wt
Poly[oxy(methyl-1,2-ethanediyl)], α -hydro- Ω -hydroxy, polymer with 1,3 diisocyanatomethylbenzene	Acute Tox.4 Acute Tox. 4 Skin Irrit. 2 Eye Irrit. 2 Acute Tox. 4 STOT SE 3	9057-91-4 ECCN:618-583-0	98 – 100
Toluene-2,4-diisocyanate	Skin Irrit. 2 Resp. Sens. 1; Eye Irrit. 2 Skin Sens. 1 Acute Tox. 2 * STOT SE 3 Resp. Sens. 1 Carc. 2 H351 Aquatic Chronic 3	584-84-9 ECCN:209-544-5	0.7 – 1.0
Toluene-2,6-diisocyanate	Skin Irrit. 2 Resp. Sens. 1 Eye Irrit. 2 Skin Sens. 1 Acute Tox. 2 * STOT SE 3 Resp. Sens. 1 Carc. 2 H351 Aquatic Chronic 3	91-08-7 ECCN:202-039-0	0.7 – 1.0

For the full text of the H-Statements mentioned in this Section, see Section 16.

Section 4 - First Aid Measures

4.1 Description of 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.

4.2 Most important symptoms and effects, both acute and delayed

None known.

4.3 Indication of any immediate medical attention and specific treatment needed.

None Known.

Section 5 - Fire-Fighting Measures

5.1 Extinguishing Media

Water Fog, Dry Chemical, and Carbon Dioxide Foam

5.2 Special hazards arising from the substance or mixture

None known.

5.3 Advice for firefighters

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. 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**6.1 Personal precautions, protective equipment and emergency procedures**

Only properly protected personnel should remain in the spill area; dike and contain spill. Stop or reduce discharge if it can be done safely.

6.2 Environmental precautions

Stop spill/release if it can be done safely. Prevent spilled material from entering sewers, storm drains or unauthorized drainage systems and natural waterways by using sand, earth, or other appropriate barriers. No special environmental precautions required.

6.3 Methods and material for containment and cleaning up

Put on appropriate protective gear including approved self-contained breathing apparatus, rubber boots and heavy rubber gloves. 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.

6.4 Reference to other sections

See Section 3 for list of Hazardous Ingredients; Sections 8 for Exposure Controls; and Section 13 for Disposal.

Section 7 - Handling and Storage**7.1 Precautions for safe handling**

Use good general housekeeping procedures. Wash hands after use. Do not get in eyes, on skin or on clothing. Do not breathe vapors or mists. Use good personal hygiene practices.

7.2 Conditions for safe storage, including any incompatibilities

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 local 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.

7.3 Specific end use(s)

These precautions are for room temperature handling. Other uses including elevated temperatures or aerosol/spray applications may require added precautions.

Section 8 - Exposure Controls / Personal Protection
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8.1 Control parameters:

Component	CAS-No.	Value	Control Parameters	Basis
Toluene-2,6-diisocyanate	91-08-7	0.001 ppm	TWA	ACGIH TLV
		0.005 ppm	STEL	
Toluene-2,4-diisocyanate	584-84-9	0.02 ppm 0.14 mg/m ³	CLV	OSHA PEL
		0.005 ppm 0.04 mg/m ³	TWA	
		0.02 ppm 0.15 mg/m ³	STEL	
		0.001 ppm	TWA	
		0.005 ppm	STEL	

Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:

None defined.

Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:

None defined.

8.2 Exposure controls:**Engineering measures**

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment**Eye protection**

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Hand protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Skin and body protection

Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Protective measures

Ensure that eye flushing systems and safety showers are located close to the working place.

Section 9 - Physical and Chemical Properties

9.1 Information on basic physical and chemical properties:

Appearance:	Clear yellow vicious liquid	Vapor pressure:	Not Applicable
Odor:	Sharp pungent odor	Vapor density (Air=1):	>1
Color Intensity:	Light	Relative density:	No data
Odor threshold:	Not Applicable	Solubility:	
pH:	4.5 - 7.5	Partition coefficient (n-octanol/water):	Not Applicable
Melting / freezing point:	No data	Auto-ignition temperature:	Not Applicable
Low / high boiling point:	No data	Decomposition temperature:	No data
Flash Point:	No data	Viscosity:	<5,000 centipoise
Evaporation rate:	No data	Explosive properties:	Not Applicable
Flammability (solid, gas):	No data	Specific Gravity (H2O=1, at 4 °C):	No data

Section 10 - Stability and Reactivity

10.1 Reactivity

No hazardous reactions if stored and handled as prescribed/indicated., No corrosive effect on metal. Not fire propagating.

10.2 Chemical stability

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

10.3 Possibility of hazardous reactions

Hazardous polymerization cannot occur

10.4 Conditions to avoid

None known

10.5 Incompatible materials

Strong bases and acids

10.6 Hazardous decomposition products

Thermal oxidative decomposition can produce carbon oxides, gasses/vapors, and traces of incompletely burned carbon compounds.

Section 11- Toxicological Information

11.1 Information on toxicological effects:

Acute Toxicity- Harmful if swallowed, in contact with skin or if inhaled - Fatal if inhaled

Hazardous Component	LD50 Oral	LC50 Inhalation	LC50 Dermal
Poly[oxy(methyl-1,2-ethanediyl)], α -hydro- Ω -hydroxy, polymer with 1,3 diisocyanatomethylbenzene(CAS: 9057-91-4)	Rat:5800 mg/kg	Rat: 140 ppm/4hr. Mouse: 10 ppm/4hr.	> 9,400 mg/kg (rabbit)

Skin Corrosion/Irritation

Causes skin irritation.

Serious Eye Damage/Irritation

Causes serious eye irritation.

Respiratory/Skin Sensitization

May cause an allergic skin reaction

Germ Cell Mutagenicity

Based on available data the classification criteria are not met.

Carcinogenicity

Suspected of causing cancer.

Reproductive Toxicity

Based on available data the classification criteria are not met.

Specific Target Organ Toxicity – Single Exposure

Based on available data the classification criteria are not met.

Specific Target Organ Toxicity – Repeated Exposure

May cause respiratory irritation.

Aspiration Hazard

Based on available data the classification criteria are not met.

Potential Health Effects – Miscellaneous

No data available

Section 12 - Ecological Information**12.1 Toxicity**

No data available

12.2 Persistence and Degradability

No data available

12.3 Bioaccumulative Potential

No data available

12.4 Mobility in Soil

No data available

12.5 Results of PBT and vPvB assessment

No data available

12.6 Other Adverse Effects

No data available

Section 13 - Disposal Considerations

13.1 Waste treatment methods

Product

Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging

Dispose of as unused product.

Section 14 - Transport Information

14.1 **UN number:** none

14.2 **UN proper shipping name:** none

14.3 **Transport hazard class(es):** not applicable

14.4 **Packing group:** not applicable

14.5 **Environmental hazards:** none known

14.6 **Special precautions for user:** none known

14.7 **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:** not applicable

Section 15 - Regulatory Information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006 and EC No. 2020/878.

Regulation (EC) No 649/2012 of the European Parliament and the Council concerning the export and import of dangerous chemicals : Not applicable

REACH - Candidate List of Substances of Very High Concern for Authorization (Article 59). : Not applicable

REACH Annex XIV: REACH Authorization List : Not applicable

REACH Annex XVII: REACH Restricted Substance List:
Toluene-2,4-diisocyanate & Toluene-2,6-diisocyanate Listed under Annex XVII of REACH. Entry 74

Regulation (EC) No 2019/1021 on substances that deplete the ozone layer : Not applicable

Regulation (EC) No 850/2004 on persistent organic pollutants : Not applicable

Seveso III: Directive: Dangerous substance/hazard categories: H2

KEEP OUT OF REACH OF CHILDREN

WARNING: Known to the State of CA to cause cancer, birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

15.2 Chemical safety assessment

No chemical safety assessment has been carried out for this substance/mixture by the supplier.

16 - Other Information

Revision Date: December 7, 2022 Version: 1.0

Full text of H-Statements referred to under Sections 2 and 3.

- H302** Acute toxicity, oral - Category 4
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- H351** Carcinogenicity - Category 2

Abbreviations and acronyms

ATE - Acute Toxicity Estimate; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; REACH - Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006; EINECS - European Inventory of Existing Commercial Chemical Substances
 ELINCS - European List of Notified Chemical Substances; CAS# - Chemical Abstract Service number;
 PPE - Personal Protection Equipment; Kow - octanol-water partition coefficient; DNEL - Derived No Effect Level; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); NOEC - No Observed Effect Concentration; PNEC - Predicted No Effect Concentration; RMM - Risk Management Measure; OEL - Occupational Exposure Limit; PBT - Persistent, Bioaccumulative and Toxic; vPvB - Very Persistent and Very Bioaccumulative; STOT - Specific Target Organ Toxicity; CSA - Chemical Safety Assessment; EN - European Standard; UN - United Nations; ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road; IATA - International Air Transport Association; IMDG - International Maritime Dangerous Goods; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; WGK - Water Hazard Class

Disclaimer

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