☑ GHS Compliant

Safety Data Sheet

SDS No. 1196

Section 1 - Identification

1.1 Product identifier: FLEXER® Epoxy Flexibilizer
1.2 General Use: Epoxy Additive
1.3 Manufacturer: Smooth-On, Inc.,
5600 Lower Macungie Rd., Macungie, PA 18062
Phone (610) 252-5800, FAX (610) 252-6200
SDS@Smooth-On.com
1.4 Emergency Contact: Chem-Tel
Domestic: 800-255-3924 International: 813-248-0585

Section 2 – Hazard(s) Identification

2.1 Classification of the substance or mixture:
Reproductive toxicity – Category 1 (H360)
Aquatic toxicity, acute – Category 1 (H400)
Aquatic toxicity, chronic – Category 1 (H410)

2.2 GHS Label elements, including precautionary statements
Hazard Pictogram(s):

Signal word: Danger

Health Hazards
H360 May damage fertility or the unborn child
Environmental Hazards
H410 Very toxic to aquatic life with long lasting effects
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
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P273 Avoid release to the environment.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
Response Precautions
P308 + P313 IF exposed or concerned: Get medical advice/ attention.
P391 Collect spillage.
Storage Precautions
P405 Store locked up.
Disposal Precautions
P501 Dispose of contents/container according to local, state and federal law

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

Section 3 - Composition / Information on Ingredients

3.1 Substances

The following ingredients are hazardous according to Regulation 2012 OSHA Hazard Communication Standard: 29 CFR 1910.1200:

CAS No.	Component	Concentration (%wt)
85-68-7	Butyl benzyl phthalate	>99

Butyl benzyl phthalate (EC-No. 201-622-7) is included in the Candidate List of Substances of Very High Concern (SVHC) according to Regulation (EC) No. 1907/2006 (REACH).

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

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.

6.3 Methods and material for containment and cleaning up:

Put on appropriate protective gear including NIOSH/MSHA 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**.**

Follow applicable OSHA regulations (29 CFR 1910.120) for disposal.

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 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.

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

8.1 Control parameters: none defined

8.2 Exposure controls:

Respiratory Protection: Respiratory protection is not normally required when using this product with adequate ventilation. Where risk assessment shows air-purifying respirators are appropriate, 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 appropriate filter cartridges as a backup to engineering controls.

Hand Protection: Wear any liquid-tight gloves such as butyl rubber, neoprene, nitrile 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

9.1 Information on basic physical and chemical properties:

Appearance: colorless oily liquid
Odor/Threshold: Not available
pH: N.A. (non-aqueous)
Melting Point/Freezing Point: < -31 °F
Low/High Boiling Point: 698 °F
Flash Point: 235.4 °F (closed cup)
Evaporation Rate: Not available
Flammability: f.p. at or above 200 °F
UEL/LEL: Not available

Vapor Pressure: 14.4 mmHg @ 482.0 °F
0.2 mmHg @ 302.0 °F
Vapor Density (Air=1): 10.8
Specific Gravity (H_2O=1, 4 °C): 1.12 @ 77 °F
Water Solubility: 26.9 mg/l @ 77 °F (OECD TG 105) – negligible
Partition coefficient: low Pow: 4.91 @ 68 °F
Auto-ignition temperature: 449.6 °F
Decomposition temperature: Not available
Viscosity: 395 cPs @ 77 °F
% Volatile: Nil

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:
Skin Corrosion/Irritation: no data **Serious Eye Damage/Irritation:** no data
Respiratory/Skin Sensitization: Guinea pig – result: does not cause skin sensitisation
Germ Cell Mutagenicity: Ames test, *S. typhimurium* – result: negative
Carcinogenicity: No component of this product at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH, NTP or OSHA. IARC has classified butyl benzyl phthalate as a Group 3 – Not classifiable as to its carcinogenicity to humans.
Reproductive Toxicity: presumed human reproductive toxicant; overexposure may cause reproductive disorder(s) based on tests with laboratory animals.
Specific Target Organ Toxicity – Single Exposure: no data
Specific Target Organ Toxicity – Repeated Exposure: no data
Aspiration Hazard: no data
Acute Toxicity:

Oral LD50: 2330 mg/kg (rat, OECD TG 401)
Dermal LD 50: 6700 mg/kg (rat)
Inhalation LC50: >6.7 mg/l (rat – 4h)

Chronic Exposure: no data
Potential Health Effects – Miscellaneous: RTECS: TH9990000; may cause endocrine disruptions.

Section 12 - Ecological Information

12.1 Toxicity:

fish:	LC50, *Lepomis macrochirus* (bluegill) – 1.7 mg/l (96 h)
	NOEC, *Oncorhynchus mykiss* (rainbow trout) – 0.48 mg/l (96 h)
	flow through test LC50, *Pimephales promelas* (fathead minnow) – 2.1 mg/l (96 h, OECD TG 203)
daphnia	static test LC50, *Daphnia magna* (water flea) – 1.8 mg/l (48 h)
algae	Growth inhibition EC50, *Desmodesmus subspicatus* (green algae) – 0.31 mg/l (OECD TG 201)

12.2 Persistence and Degradability: aerobic – exposure time 14 d: result 81% - readily biodegradable
12.3 Bioaccumulative Potential:

bioaccumulation	*Lepomis macrochirus* (bluegill) – 21 d: 0.00973 mg/l
	bioaccumulation factor (BCF): 663

12.4 Mobility in Soil: no data
12.5 Results of PBT and vPvB assessment: no data
12.6 Other Adverse Effects: very toxic to aquatic life with long lasting effects; avoid release to the environment.

Section 13 - Disposal Considerations

13.1 Waste treatment methods: Under Resource Conservation and Recovery Act (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 as defined in 40 CFR Part 261. 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: for packages containing less than 100 lb, this product is not regulated for transport by DOT. For IATA or IMDG Limited Quantity (LQ) is 5 L

14.1 UN number: 3082

14.2 UN proper shipping name: Environmentally hazardous substances, liquid, n.o.s.

14.3 Transport hazard class(es): 9

14.4 Packing group: III

14.5 Environmental hazards: Marine Pollutant

14.6 Special precautions for user: Reportable Quantity (RQ): 100 lb

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:

REACH: Regulation (EC) No 1907/2006 of The European Parliament and of The Council of December 2006 (including amendments and corrigenda as of 17 February 2016): This product is subject to regulation under REACH. The product contains the following ingredient(s) listed on either the Candidate List or Authorization List for Substances of Very High Concern (SVHC):

butyl benzyl phthalate 85-68-7

In the United States (EPA Regulations):

TSCA Inventory Status (40 CFR710): All components of this formulation are listed in the TSCA Inventory. No component of this formulation has been determined to be subject to manufacturing or use restrictions under the Significant New Use Rules (SNURs).

Clean Water Act: butyl benzyl phthalate is listed on the EPA's Priority Pollutant List (40 CFR 423, Appendix A)

SARA 302 Components: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 313.

SARA 311/312 Hazard(s):

CERCLA Hazardous Substances:

butyl benzyl phthalate 85-68-7 (RQ 100 lb)

State Regulatory Information (butyl benzyl phthalate)

Illinois Toxic Air Contaminants List

Maryland Toxic Air Pollutants for Existing Sources, Regulatory Reference B

Rhode Island Toxic Air Contaminants; AAL 24 h avg. 700 µg/m^3; AAL w/LAER 24 h avg. 700 µg/m^3; minimum quantity 2,000 lb/yr

New Jersey RTK Hazardous Substances, Substance Number 2896; Special Health Hazard Code CA

Delaware List of Chemicals and RQs: DRQ 100 lb

New York List of Hazardous Substances: Air RQ 100 lb, Land/Air RQ 1 lb.

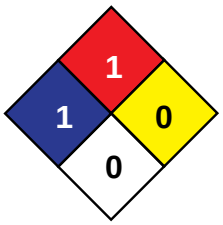
Massachusetts Substance List: Codes F8, F9

California Proposition 65**:** WARNING: This product contains chemicals known to the state of California to cause birth defects or other reproductive harm. (butyl benzyl phthalate)

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

16 - Other Information

HMIS	
H	1
F	1
R	0



NFPA

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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; RCRA-Resource Conservation and Recovery Act; SARA (Title III)-Superfund Amendments and Reauthorization Act; SARA 313-Superfund Amendments and Reauthorization Act, Section 313; SCBA-Self-Contained Breathing Apparatus; SNUN-Significant New Use Notification; SNUR-Significant New Use Rule; 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.