

**Safety Data Sheet
acc. to OSHA HCS**

Printing date 06/25/2015

Version 2

Reviewed on 06/25/2015

1 Identification of the substance/mixture and of the company/undertaking

· **Product identifier** Polyken 1619 Liquid Adhesive

· **Trade name:** Polyken 1619 Liquid Adhesive

· **Relevant identified uses of the substance or mixture and uses advised against**

· **Sector of Use**

SU22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

· **Product category** PC1 Adhesives, sealants

· **Process category**

PROC10 Roller application or brushing

PROC11 Non industrial spraying

· **Environmental release category**

ERC8d Wide dispersive outdoor use of processing aids in open systems

ERC10b Wide dispersive outdoor use of long-life articles and materials with high or intended release (including abrasive processing)

· **Application of the substance / the mixture** Coating adhesive

· **Uses advised against** -

· **Details of the supplier of the safety data sheet**

· **Manufacturer/Supplier:** Seal For Life Industries - Polyken TM

· **Contact details**

Seal For Life Industries LLC

25 Forge Parkway, Franklin MA, 02038 USA

Tel. (+1) 800-343-7875, Fax. (+1) 800-328-4822, Email: franklin@sealforlife.com

Seal For Life Industries LLC

2320 Bowling Green Road, Franklin KY, 42134 USA

Tel. (+1) 800-343-7875, Fax. (+1) 800-328-4822, Email: franklin@sealforlife.com

Seal For Life Industries BVBA

Nijverheidsstraat 13, B-2260 Westerlo, Belgium

Tel. +32 14 72 25 00, Fax. +32 14 72 25 70, Email: belgium@sealforlife.com

Seal For Life Industries - Stopaq B.V.

Gasselterstraat 20, 9503JB Stadskanaal, the Netherlands

Tel +31 599 696 170, Fax +31 599 696 177, Email: info@sealforlife.com

Seal For Life Industries Mexico S de R.L. de C.V.

Calle 11 Norte 11002, Cd Ind Nueva Tijuana, Tijuana Baja California, Mexico, CP 22500

Tel USA: +1 858 633 9797, Tel Mx: +52 664 647 4397, Fax USA: +1 858 633 9740, Fax Mx: +52 664 607 9105

Email: mexico@sealforlife.com

Seal For Life India Private Ltd.

Plot17, GIDC Savli, Vadodara, Gujarat, Baroda, India - 391775

Tel: +91 266 726 4721, Fax: +91 266 726 4724, Email: india@sealforlife.com

· **Information department:** Occupational product safety department of Seal For Life Industries

· **Emergency telephone number:**

For worldwide emergency assistance call CHEMTREC (24 hours):

Within USA/Canada 1-800-424-9300; Outside USA/Canada +1 703-527-3887 (collect calls accepted)

(Contd. on page 2)

— US —

**Safety Data Sheet
acc. to OSHA HCS**

Printing date 06/25/2015

Version 2

Reviewed on 06/25/2015

Trade name: Polyken 1619 Liquid Adhesive

(Contd. of page 1)

2 Hazard(s) identification

· Classification of the substance or mixture



GHS02 Flame

Flam. Liq. 2 H225 Highly flammable liquid and vapor.



GHS08 Health hazard

Repr. 2 H361 Suspected of damaging fertility or the unborn child.

STOT RE 2 H373 May cause damage to the central nervous system through prolonged or repeated exposure.

Asp. Tox. 1 H304 May be fatal if swallowed and enters airways.



GHS07

Skin Irrit. 2 H315 Causes skin irritation.

STOT SE 3 H336 May cause drowsiness or dizziness.

· Label elements

· **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).

· Hazard pictograms



GHS02



GHS07



GHS08

· Signal word Danger

· Hazard-determining components of labeling:

toluene

· Hazard statements

H225 Highly flammable liquid and vapor.

H315 Causes skin irritation.

H361 Suspected of damaging fertility or the unborn child.

H336 May cause drowsiness or dizziness.

H373 May cause damage to the central nervous system through prolonged or repeated exposure.

H304 May be fatal if swallowed and enters airways.

· Precautionary statements

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P241 Use explosion-proof electrical/ventilating/lighting/equipment.

P260 Do not breathe dust/fume/gas/mist/vapors/spray.

P280 Wear protective gloves / eye protection / face protection.

P240 Ground/bond container and receiving equipment.

P242 Use only non-sparking tools.

P243 Take precautionary measures against static discharge.

P264 Wash thoroughly after handling.

P271 Use only outdoors or in a well-ventilated area.

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P301+P310 If swallowed: Immediately call a poison center/doctor.

(Contd. on page 3)

**Safety Data Sheet
acc. to OSHA HCS**

Printing date 06/25/2015

Version 2

Reviewed on 06/25/2015

Trade name: Polyken 1619 Liquid Adhesive

(Contd. of page 2)

P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position 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.
P321 Specific treatment (see on this label).
P312 Call a poison center/doctor if you feel unwell.
P308+P313 IF exposed or concerned: Get medical advice/attention.
P332+P313 If skin irritation occurs: Get medical advice/attention.
P314 Get medical advice/attention if you feel unwell.
P331 Do NOT induce vomiting.
P370+P378 In case of fire: Use for extinction: CO2, sand, extinguishing powder.
P362+P364 Take off contaminated clothing and wash it before reuse.
P405 Store locked up.
P403+P233 Store in a well-ventilated place. Keep container tightly closed.
P403+P235 Store in a well-ventilated place. Keep cool.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Other hazards**

· **Results of PBT and vPvB assessment**

- **PBT:** Not available.
- **vPvB:** Not available.

3 Composition/information on ingredients

· **Chemical characterization: Mixtures**

- **Description:** Mixture of the substances listed below with nonhazardous additions.

· **Dangerous components:**

108-88-3	toluene	50-100%
⚠ Flam. Liq. 2, H225; ⚠ Repr. 2, H361; STOT RE 2, H373; Asp. Tox. 1, H304; ⚠ Skin Irrit. 2, H315; STOT SE 3, H336		

4 First-aid measures

· **Description of first aid measures**

· **General information:**

Immediately remove any clothing soiled by the product.
In case of irregular breathing or respiratory arrest provide artificial respiration.
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

· **After inhalation:**

Take affected persons into fresh air and keep quiet.
Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.
In case of unconsciousness place patient stably in side position for transportation.

· **After skin contact:**

Immediately wash with water and soap and rinse thoroughly.
If skin irritation continues, consult a doctor.

· **After eye contact:**

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· **After swallowing:** Do not induce vomiting; immediately call for medical help.

· **Information for doctor:**

· **Most important symptoms and effects, both acute and delayed**

Gastric or intestinal disorders
Cramp
Nausea
Headache
Dizziness

(Contd. on page 4)

**Safety Data Sheet
acc. to OSHA HCS**

Printing date 06/25/2015

Version 2

Reviewed on 06/25/2015

Trade name: Polyken 1619 Liquid Adhesive

(Contd. of page 3)

Dizziness
Unconsciousness
Asthma attacks
Allergic reactions

· **Indication of any immediate medical attention and special treatment needed**

Medical supervision for at least 48 hours.

5 Fire-fighting measures

· **Extinguishing media**

· **Suitable extinguishing agents:** CO₂, sand, extinguishing powder. Do not use water.

· **For safety reasons unsuitable extinguishing agents:** Water with full jet

· **Special hazards arising from the substance or mixture**

Formation of toxic gases is possible during heating or in case of fire.

· **Advice for firefighters**

· **Protective equipment:**

Wear self-contained respiratory protective device.

Wear fully protective suit.

· **Additional information** Cool endangered receptacles with water spray.

6 Accidental release measures

· **Personal precautions, protective equipment and emergency procedures**

Wear protective equipment. Keep unprotected persons away.

Mount respiratory protective device.

Ensure adequate ventilation

· **Environmental precautions:**

Inform respective authorities in case of seepage into water course or sewage system.

Do not allow to penetrate the ground/soil.

In case of seepage into the ground inform responsible authorities.

Do not allow to enter sewers/ surface or ground water.

· **Methods and material for containment and cleaning up:**

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

Do not flush with water or aqueous cleansing agents

· **Reference to other sections**

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and storage

· **Handling:**

· **Precautions for safe handling**

Ensure appropriate ventilation/exhaust at the workplace.

Prevent formation of aerosols.

· **Information about protection against explosions and fires:**

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

· **Conditions for safe storage, including any incompatibilities**

· **Storage:**

· **Requirements to be met by storerooms and receptacles:**

Prevent any seepage into the ground.

Store in a cool location.

(Contd. on page 5)

**Safety Data Sheet
acc. to OSHA HCS**

Printing date 06/25/2015

Version 2

Reviewed on 06/25/2015

Trade name: Polyken 1619 Liquid Adhesive

(Contd. of page 4)

· **Information about storage in one common storage facility:**

Do not store together with oxidizing and acidic materials.

· **Further information about storage conditions:**

Keep receptacle tightly sealed.

Store in cool, dry conditions in well sealed receptacles.

Store receptacle in fume compartment.

Protect from heat and direct sunlight.

· **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

· **Additional information about design of technical systems:** No further data; see item 7.

· **Control parameters**

· **Components with limit values that require monitoring at the workplace:**

108-88-3 toluene

PEL	Long-term value: 200 ppm Ceiling limit value: 300; 500* ppm *10-min peak per 8-hr shift
REL	Short-term value: 560 mg/m ³ , 150 ppm Long-term value: 375 mg/m ³ , 100 ppm
TLV	Long-term value: 75 mg/m ³ , 20 ppm BEI

· **Ingredients with biological limit values:**

108-88-3 toluene

BEI	0.02 mg/L Medium: blood Time: prior to last shift of workweek Parameter: Toluene
	0.03 mg/L Medium: urine Time: end of shift Parameter: Toluene
	0.3 mg/g creatinine Medium: urine Time: end of shift Parameter: o-Cresol with hydrolysis (background)

· **Additional information:** The lists that were valid during the creation were used as basis.

· **Exposure controls**

· **Personal protective equipment:**

· **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.

Do not eat, drink, smoke or sniff while working.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

Do not inhale gases / fumes / aerosols.

· **Breathing equipment:**

Use suitable respiratory protective device in case of insufficient ventilation.

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use selfcontained respiratory protective device.

(Contd. on page 6)

**Safety Data Sheet
acc. to OSHA HCS**

Printing date 06/25/2015

Version 2

Reviewed on 06/25/2015

Trade name: Polyken 1619 Liquid Adhesive

(Contd. of page 5)

· **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye protection:**



Tightly sealed goggles

· **Body protection:** Protective work clothing

9 Physical and chemical properties

· **Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

· **Form:**

Fluid

· **Color:**

Black

· **Odor:**

Solvent-like

· **Odour threshold:**

Not determined.

· **pH-value:**

Not determined.

· **Change in condition**

· **Melting point/Melting range:**

Undetermined.

· **Boiling point/Boiling range:**

110 °C (230 °F)

· **Flash point:**

4 °C (39 °F)

· **Flammability (solid, gaseous):**

Not applicable.

· **Ignition temperature:**

535 °C (995 °F)

· **Decomposition temperature:**

Not determined.

· **Auto igniting:**

Product is not selfigniting.

· **Danger of explosion:**

Product is not explosive. However, formation of explosive air/ vapor mixtures are possible.

· **Explosion limits:**

· **Lower:**

1.2 Vol %

· **Upper:**

7.0 Vol %

· **Vapor pressure at 20 °C (68 °F):**

29 hPa (22 mm Hg)

· **Density at 20 °C (68 °F):**

0.9 g/cm³ (7.511 lbs/gal)

(Contd. on page 7)

**Safety Data Sheet
acc. to OSHA HCS**

Printing date 06/25/2015

Version 2

Reviewed on 06/25/2015

Trade name: Polyken 1619 Liquid Adhesive

(Contd. of page 6)

· Relative density	Not determined.
· Vapour density	Not determined.
· Evaporation rate	Not determined.
· Solubility in / Miscibility with	
· Water:	Not miscible or difficult to mix.
· Segregation coefficient (n-octanol/water):	Not determined.
· Viscosity:	
· Dynamic:	Not determined.
· Kinematic:	Not determined.
· Solvent content:	
· Organic solvents:	79.8 %
· VOC:	79.8 %
	717.9 g/l / 5.99 lb/gal
· Other information	No further relevant information available.

10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability**
 - **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:**
Reacts with strong acids.
Reacts with oxidizing agents.
- **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

- **Information on toxicological effects**
 - **Acute toxicity:**

· **LD/LC50 values that are relevant for classification:**

ATE (Acute Toxicity Estimates)

Inhalative	LC50/4h	35.3 mg/l (rat)
------------	---------	-----------------

108-88-3 toluene

Oral	LD50	>5000 mg/kg (rat)
Dermal	LD50	>5000 mg/kg (rabbit)
Inhalative	LC50/4h	28.1 mg/l (rat) (OECD 403)

· **Primary irritant effect:**

· **on the skin:** Irritant to skin and mucous membranes.

· **Additional toxicological information:**

The product shows the following dangers according to internally approved calculation methods for preparations:
Irritant

· **Carcinogenic categories**

· **IARC (International Agency for Research on Cancer)**

108-88-3	toluene	3
1330-20-7	xylene	3

(Contd. on page 8)

— US —

**Safety Data Sheet
acc. to OSHA HCS**

Printing date 06/25/2015

Version 2

Reviewed on 06/25/2015

Trade name: Polyken 1619 Liquid Adhesive

(Contd. of page 7)

100-41-4	ethylbenzene	2B
· NTP (National Toxicology Program)		
None of the ingredients is listed.		
· OSHA-Ca (Occupational Safety & Health Administration)		
None of the ingredients is listed.		

12 Ecological information

· Toxicity

· Aquatic toxicity:	
108-88-3 toluene	
LC50/48h	3.78 mg/l (Ceriodaphnia dubia) (US EPA 600/4-91-003)
LC50/96h	5.5 mg/l (Fish - Oncorhynchus kisutch) (Publ: Transactions A. Fish. Soc. 110, 430-43)
· Persistence and degradability No further relevant information available.	
· Behavior in environmental systems:	
· Bioaccumulative potential No further relevant information available.	
· Mobility in soil No further relevant information available.	
· Additional ecological information:	
· General notes:	
Water hazard class 2 (Self-assessment): hazardous for water	
Do not allow product to reach ground water, water course or sewage system.	
Danger to drinking water if even small quantities leak into the ground.	
· Results of PBT and vPvB assessment	
· PBT: Not available.	
· vPvB: Not available.	
· Other adverse effects No further relevant information available.	

13 Disposal considerations

· Waste treatment methods

· **Recommendation:**

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

· Uncleaned packagings:

· **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

· UN-Number	
· DOT, ADR, IMDG, IATA	UN1133
· UN proper shipping name	
· DOT	Adhesives
· ADR	1133 Adhesives
· IMDG, IATA	ADHESIVES

(Contd. on page 9)

—US—

**Safety Data Sheet
acc. to OSHA HCS**



Printing date 06/25/2015

Version 2

Reviewed on 06/25/2015

Trade name: Polyken 1619 Liquid Adhesive

(Contd. of page 8)

· Transport hazard class(es)	
· DOT 	
· Class · Label	3 Flammable liquids 3
· ADR, IMDG, IATA	
	
· Class · Label	3 Flammable liquids 3
· Packing group	
· DOT, ADR, IMDG, IATA	II
· Environmental hazards:	
· Marine pollutant:	No
· Special precautions for user	
· Danger code (Kemler): · EMS Number:	Warning: Flammable liquids 33 F-E,S-D
· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	
Not applicable.	
· Transport/Additional information:	
· DOT · Quantity limitations	On passenger aircraft/rail: 5 L On cargo aircraft only: 60 L
· ADR · Excepted quantities (EQ)	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· IMDG · Limited quantities (LQ) · Excepted quantities (EQ)	1L Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· UN "Model Regulation":	
UN1133, Adhesives, 3, II	

15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture**
- Sara**

· Section 355 (extremely hazardous substances):

None of the ingredients is listed.

(Contd. on page 10)

**Safety Data Sheet
acc. to OSHA HCS**

Printing date 06/25/2015

Version 2

Reviewed on 06/25/2015

Trade name: Polyken 1619 Liquid Adhesive

(Contd. of page 9)

Section 313 (Specific toxic chemical listings):	
108-88-3	toluene
7758-29-4	pentasodium triphosphate
1330-20-7	xylene
100-41-4	ethylbenzene

TSCA (Toxic Substances Control Act):	
All ingredients of this product are included, or are exempted from inclusion in the EPA Toxic Substances Control Act (TSCA) Chemical Substance Inventory	

Proposition 65

Chemicals known to cause cancer:	
100-41-4	ethylbenzene

Chemicals known to cause reproductive toxicity for females:	
108-88-3	toluene

Chemicals known to cause reproductive toxicity for males:	
None of the ingredients is listed.	

Chemicals known to cause developmental toxicity:	
108-88-3	toluene

Carcinogenic categories

EPA (Environmental Protection Agency)		
108-88-3	toluene	II
1330-20-7	xylene	I
100-41-4	ethylbenzene	D

TLV (Threshold Limit Value established by ACGIH)		
108-88-3	toluene	A4
1330-20-7	xylene	A4
100-41-4	ethylbenzene	A3

NIOSH-Ca (National Institute for Occupational Safety and Health)	
None of the ingredients is listed.	

GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).

Hazard pictograms



GHS02 GHS07 GHS08

Signal word Danger

Hazard-determining components of labeling:

toluene

Hazard statements

H225 Highly flammable liquid and vapor.

H315 Causes skin irritation.

H361 Suspected of damaging fertility or the unborn child.

H336 May cause drowsiness or dizziness.

H373 May cause damage to the central nervous system through prolonged or repeated exposure.

H304 May be fatal if swallowed and enters airways.

Precautionary statements

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P241 Use explosion-proof electrical/ventilating/lighting/equipment.

P260 Do not breathe dust/fume/gas/mist/vapors/spray.

P280 Wear protective gloves / eye protection / face protection.

(Contd. on page 11)

**Safety Data Sheet
acc. to OSHA HCS**

Printing date 06/25/2015

Version 2

Reviewed on 06/25/2015

Trade name: Polyken 1619 Liquid Adhesive

(Contd. of page 10)

P240	Ground/bond container and receiving equipment.
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
P264	Wash thoroughly after handling.
P271	Use only outdoors or in a well-ventilated area.
P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P301+P310	If swallowed: Immediately call a poison center/doctor.
P303+P361+P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P340	IF INHALED: Remove victim to fresh air and keep at rest in a position 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.
P321	Specific treatment (see on this label).
P312	Call a poison center/doctor if you feel unwell.
P308+P313	IF exposed or concerned: Get medical advice/attention.
P332+P313	If skin irritation occurs: Get medical advice/attention.
P314	Get medical advice/attention if you feel unwell.
P331	Do NOT induce vomiting.
P370+P378	In case of fire: Use for extinction: CO2, sand, extinguishing powder.
P362+P364	Take off contaminated clothing and wash it before reuse.
P405	Store locked up.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P403+P235	Store in a well-ventilated place. Keep cool.
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Department issuing SDS:** Occupational product safety department of Seal For Life Industries

· **Contact:**

Seal For Life Industries

Gasselterstraat 20, 9503JB Stadskanaal, the Netherlands

Tel: +31 599 696 170; Fax: +31 599 696 177; Email: info@sealforlife.com

· **Date of preparation / last revision** 06/25/2015 / 1

· **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

vPvB: very Persistent and very Bioaccumulative

Flam. Liq. 2: Flammable liquids, Hazard Category 2

Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2

Repr. 2: Reproductive toxicity, Hazard Category 2

STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3

STOT RE 2: Specific target organ toxicity - Repeated exposure, Hazard Category 2

Asp. Tox. 1: Aspiration hazard, Hazard Category 1