

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

Printing date 07/17/2018

Version 6

Reviewed on 07/17/2018

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

· **Product identifier** Polyken 1027 Liquid Adhesive

· **Trade name: Polyken 1027 Liquid Adhesive**

· **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™

· **Contact details**

Seal For Life Industries LLC, 9335 Harris Corners Parkway, Suite 300, Charlotte NC, 28269 USA  
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· **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, CCN22955; Outside USA/Canada +1 703-527-3887 (collect calls accepted)

**\* 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. Route of exposure: Inhalation.

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

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

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GHS09 Environment

Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.



GHS07

Skin Irrit. 2 H315 Causes skin irritation.

STOT SE 3 H336 May cause drowsiness or dizziness.

Aquatic Acute 2 H401 Toxic to aquatic life.

**Label elements**

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

**Hazard pictograms**



GHS02



GHS07



GHS08



GHS09

**Signal word** Danger

**Hazard-determining components of labeling:**

Distillates (petroleum), light distillate hydrotreating process, low-boiling methanol  
 toluene  
 ethylbenzene

**Hazard statements**

H225 Highly flammable liquid and vapor.  
 H315 Causes skin irritation.  
 H361 Suspected of damaging fertility or the unborn child. Route of exposure: Inhalation.  
 H336 May cause drowsiness or dizziness.  
 H373 May cause damage to the central nervous system through prolonged or repeated exposure. Route of exposure: Inhalation.  
 H304 May be fatal if swallowed and enters airways.  
 H401 Toxic to aquatic life.  
 H411 Toxic to aquatic life with long lasting effects.

**Precautionary statements**

P201 Obtain special instructions before use.  
 P202 Do not handle until all safety precautions have been read and understood.  
 P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.  
 P240 Ground/bond container and receiving equipment.  
 P241 Use explosion-proof electrical/ventilating/lighting/equipment.  
 P242 Use only non-sparking tools.  
 P243 Take precautionary measures against static discharge.  
 P260 Do not breathe dust/fume/gas/mist/vapors/spray.  
 P264 Wash thoroughly after handling.  
 P271 Use only outdoors or in a well-ventilated area.  
 P273 Avoid release to the environment.  
 P280 Wear protective gloves/protective clothing/eye protection/face protection.

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P301+P310	If swallowed: Immediately call a poison center/doctor.
P321	Specific treatment (see on this label).
P331	Do NOT induce vomiting.
P303+P361+P353	If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P308+P313	IF exposed or concerned: Get medical advice/attention.
P312	Call a poison center/doctor if you feel unwell.
P314	Get medical advice/attention if you feel unwell.
P362+P364	Take off contaminated clothing and wash it before reuse.
P332+P313	If skin irritation occurs: Get medical advice/attention.
P370+P378	In case of fire: Use for extinction: CO2, powder or water spray.
P391	Collect spillage.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P403+P235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.
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:**

68410-97-9	Distillates (petroleum), light distillate hydrotreating process, low-boiling ⚠ Flam. Liq. 2, H225; ⚠ Repr. 2, H361; ⚠ Asp. Tox. 1, H304; ⚠ Aquatic Chronic 2, H411; ⚠ Skin Irrit. 2, H315; STOT SE 3, H336; Aquatic Acute 2, H401	50-100%
108-88-3	toluene ⚠ Flam. Liq. 2, H225; ⚠ Repr. 2, H361; STOT RE 2, H373; ⚠ Asp. Tox. 1, H304; ⚠ Skin Irrit. 2, H315; STOT SE 3, H336	10-25%
67-56-1	methanol ⚠ Flam. Liq. 2, H225; ⚠ Acute Tox. 3, H301; ⚠ Acute Tox. 3, H311; ⚠ Acute Tox. 3, H331; ⚠ STOT SE 1, H370	1-2.5%
1314-13-2	zinc oxide ⚠ Aquatic Acute 1, H400; Aquatic Chronic 1, H410	0.1-0.5%
140-66-9	4-(1,1,3,3-tetramethylbutyl)phenol ⚠ Eye Dam. 1, H318; ⚠ Aquatic Acute 1, H400; Aquatic Chronic 1, H410; ⚠ Skin Irrit. 2, H315	≤0.1%

**4 First-aid measures**

· **Description of first aid measures**

· **General information:**

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

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· **After inhalation:**

- Supply fresh air or oxygen; call for doctor.
- Do not use mouth to mouth or mouth to nose resuscitation.
- Use a respiration bag or breathing device.
- Take affected persons into fresh air and keep quiet.
- In case of unconsciousness place patient stably in side position for transportation.

· **After skin contact:**

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

· **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.
- A person vomiting while lying on his/her back should be turned onto his/her side.
- Rinse out mouth and then drink plenty of water.

· **Information for doctor:**

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

- Asthma attacks
- Breathing difficulty
- Allergic reactions
- Dizziness
- Dizziness
- Unconsciousness
- Disorientation

· **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:**

- Water haze
- Foam
- Fire-extinguishing powder
- Carbon dioxide

· **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.
- Collect contaminated fire fighting water separately. It must not enter the sewage system.
- Disposal of fire debris and contaminated fire fighting water in accordance with official regulations.

\* **6 Accidental release measures**

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

- Keep away from ignition sources
- Ensure adequate ventilation
- Mount respiratory protective device.

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Wear protective equipment. Keep unprotected persons away.

· **Environmental precautions:**

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

Do not allow to penetrate the ground/soil.

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.

· **Protective Action Criteria for Chemicals**

· <b>PAC-1:</b>		
108-88-3	toluene	67 ppm
67-56-1	methanol	530 ppm
1330-20-7	xylene	130 ppm
1314-13-2	zinc oxide	10 mg/m <sup>3</sup>
100-41-4	ethylbenzene	33 ppm
· <b>PAC-2:</b>		
108-88-3	toluene	560 ppm
67-56-1	methanol	2,100 ppm
1330-20-7	xylene	920* ppm
1314-13-2	zinc oxide	15 mg/m <sup>3</sup>
100-41-4	ethylbenzene	1100* ppm
· <b>PAC-3:</b>		
108-88-3	toluene	3700* ppm
67-56-1	methanol	7200* ppm
1330-20-7	xylene	2500* ppm
1314-13-2	zinc oxide	2,500 mg/m <sup>3</sup>
100-41-4	ethylbenzene	1800* ppm

**\* 7 Handling and storage**

· **Handling:**

· **Precautions for safe handling**

Store in cool, dry place in tightly closed receptacles.

Keep away from heat and direct sunlight.

Ensure appropriate ventilation/exhaust at the workplace.

Open and handle receptacle with care.

Prevent formation of aerosols.

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

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

Keep respiratory protective device available.

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**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.

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

- Store away from oxidizing agents.
- Store away from reducing agents.

**Further information about storage conditions:**

- Store receptacle in fume compartment.
- Store under lock and key and out of the reach of children.
- Keep receptacle tightly sealed.
- Store in cool, dry conditions in well sealed receptacles.
- 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:**

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit.  
 At this time, the other constituents have no known exposure limits.

<b>108-88-3 toluene</b>		
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 <sup>3</sup> , 150 ppm Long-term value: 375 mg/m <sup>3</sup> , 100 ppm	
TLV	Long-term value: 75 mg/m <sup>3</sup> , 20 ppm BEI	
<b>67-56-1 methanol</b>		
PEL	Long-term value: 260 mg/m <sup>3</sup> , 200 ppm	
REL	Short-term value: 325 mg/m <sup>3</sup> , 250 ppm Long-term value: 260 mg/m <sup>3</sup> , 200 ppm Skin	
TLV	Short-term value: 328 mg/m <sup>3</sup> , 250 ppm Long-term value: 262 mg/m <sup>3</sup> , 200 ppm Skin; BEI	
<b>DNELs</b>		
<b>108-88-3 toluene</b>		
Oral	DNEL - Systemic effect, long term exposure	8.13 mg/kg bw/day (General population)
Dermal	DNEL - Systemic effect, long term exposure	226 mg/kg bw/day (General population) 384 mg/kg bw/day (Workers)
Inhalative	DNEL - Systemic effect, acute/short term exposure	226 mg/m <sup>3</sup> (General population) 384 mg/m <sup>3</sup> (Workers)
	DNEL - Local effect, acute/short term exposure	226 mg/m <sup>3</sup> (General population)

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	DNEL - Systemic effect, long term exposure	384 mg/m <sup>3</sup> (Workers) 56.5 mg/m <sup>3</sup> (General population)
	DNEL - Local effect, long term exposure	192 mg/m <sup>3</sup> (Workers) 56.5 mg/m <sup>3</sup> (General population) 192 mg/m <sup>3</sup> (Workers)
<b>67-56-1 methanol</b>		
Oral	DNEL - Systemic effect, acute/short term exposure	8 mg/kg bw/day (General population)
	DNEL - Systemic effect, long term exposure	8 mg/kg bw/day (General population)
Dermal	DNEL - Systemic effect, acute/short term exposure	8 mg/kg bw/day (General population) 40 mg/kg bw/day (Workers)
	DNEL - Systemic effect, long term exposure	8 mg/kg bw/day (General population) 40 mg/kg bw/day (Workers)
Inhalative	DNEL - Systemic effect, acute/short term exposure	50 mg/m <sup>3</sup> (General population) 260 mg/m <sup>3</sup> (Workers)
	DNEL - Local effect, acute/short term exposure	50 mg/m <sup>3</sup> (General population) 260 mg/m <sup>3</sup> (Workers)
	DNEL - Systemic effect, long term exposure	50 mg/m <sup>3</sup> (General population) 260 mg/m <sup>3</sup> (Workers)
	DNEL - Local effect, long term exposure	50 mg/m <sup>3</sup> (General population) 260 mg/m <sup>3</sup> (Workers)
<b>1314-13-2 zinc oxide</b>		
Oral	DNEL - Systemic effect, long term exposure	0.83 mg/kg bw/day (General population)
Dermal	DNEL - Systemic effect, long term exposure	83 mg/kg bw/day (General population) 83 mg/kg bw/day (Workers)
Inhalative	DNEL - Systemic effect, long term exposure	5 mg/m <sup>3</sup> (Workers)
	DNEL - Local effect, long term exposure	2.5 mg/m <sup>3</sup> (General population) 0.5 mg/m <sup>3</sup> (Workers)
<b>140-66-9 4-(1,1,3,3-tetramethylbutyl)phenol</b>		
Oral	DNEL - Systemic effect, acute/short term exposure	0.5 mg/kg bw/day (General population)
	DNEL - Systemic effect, long term exposure	0.1 mg/kg bw/day (General population)
Dermal	DNEL - Systemic effect, acute/short term exposure	16.8 mg/kg bw/day (General population) 33 mg/kg bw/day (Workers)
	DNEL - Systemic effect, long term exposure	5.6 mg/kg bw/day (General population) 11.3 mg/kg bw/day (Workers)
Inhalative	DNEL - Systemic effect, acute/short term exposure	1.8 mg/m <sup>3</sup> (General population) 2.4 mg/m <sup>3</sup> (Workers)
	DNEL - Systemic effect, long term exposure	0.6 mg/m <sup>3</sup> (General population) 0.8 mg/m <sup>3</sup> (Workers)
<b>PNECs</b>		
<b>108-88-3 toluene</b>		
	PNEC - Marine water	0.68 mg/l (Aquatic organisms)
	PNEC - Fresh water, intermittent releases	0.68 mg/l (Aquatic organisms)
	PNEC - STP	13.61 mg/l (Aquatic organisms)
	PNEC - Sediment, fresh water	16.39 mg/kg sedim dw (Aquatic organisms)
	PNEC - Sediment, marine water	16.39 mg/kg sedim dw (Aquatic organisms)

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	PNEC - Soil	2.89 mg/kg soil dw (Terrestrial organisms)
<b>67-56-1 methanol</b>		
	PNEC - Fresh water	20.8 mg/l (Aquatic organisms)
	PNEC - Marine water	2.08 mg/l (Aquatic organisms)
	PNEC - Fresh water, intermittent releases	1,540 mg/l (Aquatic organisms)
	PNEC - STP	100 mg/l (Aquatic organisms)
	PNEC - Sediment, fresh water	77 mg/kg sedim dw (Aquatic organisms)
	PNEC - Sediment, marine water	7.7 mg/kg sedim dw (Aquatic organisms)
	PNEC - Soil	100 mg/kg soil dw (Terrestrial organisms)
<b>1314-13-2 zinc oxide</b>		
	PNEC - Fresh water	0.0206 mg/l (Aquatic organisms)
	PNEC - Marine water	0.0061 mg/l (Aquatic organisms)
	PNEC - STP	0.1 mg/l (Aquatic organisms)
	PNEC - Sediment, fresh water	117.8 mg/kg sedim dw (Aquatic organisms)
	PNEC - Sediment, marine water	56.5 mg/kg sedim dw (Aquatic organisms)
	PNEC - Soil	35.6 mg/kg soil dw (Terrestrial organisms)
<b>140-66-9 4-(1,1,3,3-tetramethylbutyl)phenol</b>		
Oral	PNEC - Oral	2.36 mg/kg food (Predators)
	PNEC - Fresh water	0.001 mg/l (Aquatic organisms)
	PNEC - Marine water	0.001 mg/l (Aquatic organisms)
	PNEC - STP	0.1 mg/l (Aquatic organisms)
	PNEC - Sediment, fresh water	4.62 mg/kg sedim dw (Aquatic organisms)
	PNEC - Sediment, marine water	1.23 mg/kg sedim dw (Aquatic organisms)
	PNEC - Soil	2.3 mg/kg soil dw (Terrestrial organisms)
<b>Ingredients with biological limit values:</b>		
<b>108-88-3 toluene</b>		
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)	
<b>67-56-1 methanol</b>		
BEI	15 mg/L Medium: urine Time: end of shift Parameter: Methanol (background, nonspecific)	

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

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**Exposure controls**

**Personal protective equipment:**

**General protective and hygienic measures:**

- Keep away from foodstuffs, beverages and feed.
- Immediately remove all soiled and contaminated clothing.
- Wash hands before breaks and at the end of work.
- Store protective clothing separately.
- Avoid contact with the eyes and skin.
- Do not inhale gases / fumes / aerosols.
- Do not inhale dust / smoke / mist.

**Breathing equipment:**

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

**Protection of hands:**

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation



Protective gloves

**Material of gloves**

Butyl rubber, BR

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:** Petroleum-like
- Odor threshold:** Not determined.

**pH-value:** Not determined.

**Change in condition**

**Melting point/Melting range:** Undetermined.

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· <b>Boiling point/Boiling range:</b>	110-111 °C (230-231.8 °F)
· <b>Flash point:</b>	4 °C (39.2 °F)
· <b>Flammability (solid, gaseous):</b>	Not applicable.
· <b>Ignition temperature:</b>	>250 °C (>482 °F)
· <b>Decomposition temperature:</b>	Not determined.
· <b>Auto igniting:</b>	Product is not selfigniting.
· <b>Danger of explosion:</b>	Product is not explosive. However, formation of explosive air/vapor mixtures are possible.
· <b>Explosion limits:</b>	
· <b>Lower:</b>	1.2 Vol %
· <b>Upper:</b>	7 Vol %
· <b>Vapor pressure at 20 °C (68 °F):</b>	29 hPa (21.8 mm Hg)
· <b>Density at 20 °C (68 °F):</b>	0.83 g/cm <sup>3</sup> (6.93 lbs/gal)
· <b>Relative density</b>	Not determined.
· <b>Vapor density</b>	Not determined.
· <b>Evaporation rate</b>	Not determined.
· <b>Solubility in / Miscibility with</b>	
· <b>Water:</b>	Not miscible or difficult to mix.
· <b>Segregation coefficient (n-octanol/water):</b>	Not determined.
· <b>Viscosity:</b>	
· <b>Dynamic:</b>	Not determined.
· <b>Kinematic:</b>	Not determined.
· <b>Solvent content:</b>	
· <b>Organic solvents:</b>	69.9 %
· <b>VOC (US):</b>	69.90 % 580.2 g/l / 4.84 lb/gal
· <b>Other information</b>	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**  
Reacts with acids, alkalis and oxidizing agents.  
Reacts with reducing agents.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:**  
Reacts with strong acids.  
Reacts with oxidizing agents.
- **Hazardous decomposition products:**  
Flammable gases/vapors  
Poisonous gases/vapors

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Carbon monoxide and carbon dioxide

**\* 11 Toxicological information**

**Information on toxicological effects**

**Acute toxicity:**

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

**ATE (Acute Toxicity Estimate)**

Dermal	LD50	>3,457 mg/kg (rat)
Inhalative	LC50/4h	122 mg/l

**68410-97-9 Distillates (petroleum), light distillate hydrotreating process, low-boiling**

Oral	LD50	>5,000 mg/kg (rat)
Dermal	LD50	>2,000 mg/kg (rat)
Inhalative	LC50	2.18 mg/l (air) (rat)

**108-88-3 toluene**

Oral	LD50	>5,000 mg/kg (rat)
Dermal	LD50	>5,000 mg/kg (rabbit)
Inhalative	LC50/4h	28.1 mg/l (rat) (OECD 403)

**67-56-1 methanol**

Oral	LD50	5,628 mg/kg (rat)
Dermal	LD50	15,800 mg/kg (rabbit)
Inhalative	LC50/4h	3 mg/l (ATE)

**1314-13-2 zinc oxide**

Oral	LD50	>5,000 mg/kg (rat)
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**140-66-9 4-(1,1,3,3-tetramethylbutyl)phenol**

Oral	LD50	4,040 mg/kg (rat) (OECD 401)
Dermal	LD50	>2,000 mg/kg (rabbit) (OECD 402)

**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
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.

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**\* 12 Ecological information**

· **Toxicity**

· <b>Aquatic toxicity:</b>	
<b>68410-97-9 Distillates (petroleum), light distillate hydrotreating process, low-boiling</b>	
NOELR	0.5 mg/l (Algae - Pseudokirchnerella subcapitata)
LL50/96h	8.2 mg/l (Fish - Pimephales promelas)
EL50/48h	4.5 mg/l (Daphnia magna)
<b>108-88-3 toluene</b>	
LC50/96h	5.5 mg/l (Fish - Oncorhynchus kisutch) (Publ: Transactions A. Fish. Soc. 110, 430-43)
LC50/48h	3.78 mg/l (Ceriodaphnia dubia) (US EPA 600/4-91-003)
<b>1314-13-2 zinc oxide</b>	
LC50	0.169 mg/l (Fish - Oncorhynchus mykiss) 0.78 mg/l (Fish - Pimephales promelas)
LC50/48h	0.5 mg/l (Ceriodaphnia dubia) 1.22 mg/l (Daphnia magna)
NOEC/72h	0.024 mg/l (Algae - Pseudokirchnerella subcapitata)
<b>140-66-9 4-(1,1,3,3-tetramethylbutyl)phenol</b>	
LC50/96h	0.26 mg/l (Fish - Leuciscus idus) (OECD 203) 0.0196 mg/l (Gammarus pulex) (EPA OPPTS 850.1020)
EC50/96h	1.9 mg/l (Algae - Pseudokirchnerella subcapitata) (EPA OPPTS 850.1020)

· **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.

· **Ecotoxicological effects:**

· **Remark:** Toxic for fish

· **Additional ecological information:**

· **General notes:**

Also poisonous for fish and plankton in water bodies.

Toxic for aquatic organisms

Water hazard class 3 (Self-assessment): extremely hazardous for water

Do not allow product to reach ground water, water course or sewage system, even in small quantities.

Danger to drinking water if even extremely 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.

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- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

**\* 14 Transport information**

· <b>UN-Number</b> · DOT, ADR, IMDG, IATA	UN1133
· <b>UN proper shipping name</b> · DOT · ADR · IMDG · IATA	Adhesives 1133 Adhesives, MARINE POLLUTANT/ENVIRONMENTALLY HAZARDOUS ADHESIVES (Distillates (petroleum), light distillate hydrotreating process, low-boiling, zinc oxide), MARINE POLLUTANT ADHESIVES
· <b>Transport hazard class(es)</b>  · DOT  · Class · Label	3 Flammable liquids 3
· <b>ADR, IMDG</b>  · Class · Label	3 Flammable liquids 3
· <b>IATA</b>  · Class · Label	3 Flammable liquids 3
· <b>Packing group</b> · DOT, ADR, IMDG, IATA	II
· <b>Environmental hazards:</b>  · <b>Marine pollutant:</b>	Product contains environmentally hazardous substances: zinc oxide, Distillates (petroleum), light distillate hydrotreating process, low-boiling Yes (DOT) Symbol (fish and tree)

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· <b>Special marking (ADR):</b>	Symbol (fish and tree)
· <b>Special precautions for user</b>	Warning: Flammable liquids
· <b>Danger code (Kemler):</b>	33
· <b>EMS Number:</b>	F-E,S-D
· <b>Stowage Category</b>	B
· <b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b>	Not applicable.
· <b>Transport/Additional information:</b>	
· <b>DOT</b>	
· <b>Remarks:</b>	Special marking with the symbol (fish and tree).
· <b>ADR</b>	
· <b>Excepted quantities (EQ)</b>	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· <b>IMDG</b>	
· <b>Limited quantities (LQ)</b>	5L
· <b>Excepted quantities (EQ)</b>	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· <b>UN "Model Regulation":</b>	UN 1133 ADHESIVES, 3, II, MARINE POLLUTANT/ ENVIRONMENTALLY HAZARDOUS

**\* 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.

· **Section 313 (Specific toxic chemical listings):**

108-88-3	toluene
67-56-1	methanol
1330-20-7	xylene
1314-13-2	zinc oxide
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
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· **Chemicals known to cause reproductive toxicity for females:**

108-88-3	toluene
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· <b>Chemicals known to cause reproductive toxicity for males:</b>	
None of the ingredients is listed.	

· <b>Chemicals known to cause developmental toxicity:</b>	
108-88-3	toluene
67-56-1	methanol

· <b>New Jersey Right-to-Know List:</b>	
108-88-3	toluene
67-56-1	methanol
1330-20-7	xylene
1314-13-2	zinc oxide
100-41-4	ethylbenzene

· <b>New Jersey Special Hazardous Substance List:</b>		
108-88-3	toluene	TE, F3
67-56-1	methanol	TE, F3
1330-20-7	xylene	F3
100-41-4	ethylbenzene	CA, F3

· <b>Pennsylvania Right-to-Know List:</b>	
108-88-3	toluene
1330-20-7	xylene
1314-13-2	zinc oxide
100-41-4	ethylbenzene

· <b>Pennsylvania Special Hazardous Substance List:</b>		
108-88-3	toluene	E
1330-20-7	xylene	E
1314-13-2	zinc oxide	E
100-41-4	ethylbenzene	E

· **Carcinogenic categories**

· <b>EPA (Environmental Protection Agency)</b>		
108-88-3	toluene	II
1330-20-7	xylene	I
1314-13-2	zinc oxide	D, I, II
100-41-4	ethylbenzene	D

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

· <b>NIOSH-Ca (National Institute for Occupational Safety and Health)</b>	
None of the ingredients is listed.	

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



· **Signal word** Danger

· **Hazard-determining components of labeling:**

Distillates (petroleum), light distillate hydrotreating process, low-boiling methanol  
 toluene  
 ethylbenzene

· **Hazard statements**

H225 Highly flammable liquid and vapor.  
 H315 Causes skin irritation.  
 H361 Suspected of damaging fertility or the unborn child. Route of exposure: Inhalation.  
 H336 May cause drowsiness or dizziness.  
 H373 May cause damage to the central nervous system through prolonged or repeated exposure. Route of exposure: Inhalation.  
 H304 May be fatal if swallowed and enters airways.  
 H401 Toxic to aquatic life.  
 H411 Toxic to aquatic life with long lasting effects.

· **Precautionary statements**

P201 Obtain special instructions before use.  
 P202 Do not handle until all safety precautions have been read and understood.  
 P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.  
 P240 Ground/bond container and receiving equipment.  
 P241 Use explosion-proof electrical/ventilating/lighting/equipment.  
 P242 Use only non-sparking tools.  
 P243 Take precautionary measures against static discharge.  
 P260 Do not breathe dust/fume/gas/mist/vapors/spray.  
 P264 Wash thoroughly after handling.  
 P271 Use only outdoors or in a well-ventilated area.  
 P273 Avoid release to the environment.  
 P280 Wear protective gloves/protective clothing/eye protection/face protection.  
 P301+P310 If swallowed: Immediately call a poison center/doctor.  
 P321 Specific treatment (see on this label).  
 P331 Do NOT induce vomiting.  
 P303+P361+P353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.  
 P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
 P308+P313 IF exposed or concerned: Get medical advice/attention.  
 P312 Call a poison center/doctor if you feel unwell.  
 P314 Get medical advice/attention if you feel unwell.  
 P362+P364 Take off contaminated clothing and wash it before reuse.  
 P332+P313 If skin irritation occurs: Get medical advice/attention.  
 P370+P378 In case of fire: Use for extinction: CO2, powder or water spray.  
 P391 Collect spillage.  
 P403+P233 Store in a well-ventilated place. Keep container tightly closed.  
 P403+P235 Store in a well-ventilated place. Keep cool.  
 P405 Store locked up.  
 P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

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- **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** 07/17/2018 / 5

- **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)

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

BEL: Biological Exposure Limit

Flam. Liq. 2: Flammable liquids – Category 2

Acute Tox. 3: Acute toxicity – Category 3

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Dam. 1: Serious eye damage/eye irritation – Category 1

Repr. 2: Reproductive toxicity – Category 2

STOT SE 1: Specific target organ toxicity (single exposure) – Category 1

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2

Asp. Tox. 1: Aspiration hazard – Category 1

Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1

Aquatic Acute 2: Hazardous to the aquatic environment - acute aquatic hazard – Category 2

Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1

Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2

- **\* Data compared to the previous version altered.**