

Safety Data Sheet
acc. to OSHA HCS

Printing Date 04/07/2017

Revision Number 5

Revision Date 04/07/2017

1 Identification

- **Product identifier**
- **Trade name:** 13011 Silaprene Adhesive
- **Article number:** 13011
- **Relevant identified uses of the substance or mixture.**
Adhesive
Sealant
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Royal Adhesives And Sealants, LLC
2001 W. Washington Street
South Bend IN 46628-2023
Information Phone Number: 574-246-5000
- **Information department:** Environment protection department.
- **Emergency telephone number:**
ChemTrec: Day or Night within USA and Canada: 1-800-424-9300.
Outside USA and Canada: +1 703-527-3887 (collect calls accepted)

2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS02 Flame

Flam. Liq. 3 H226 Flammable liquid and vapor.



GHS08 Health hazard

Carc. 2 H351 Suspected of causing cancer.

STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.



GHS07

Skin Irrit. 2 H315 Causes skin irritation.

- **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** Warning

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- **Hazard statements**

Flammable liquid and vapor.

Causes skin irritation.

Suspected of causing cancer.

May cause damage to organs through prolonged or repeated exposure.

- **Precautionary statements**

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

Wear protective gloves/protective clothing/eye protection/face protection.

Keep container tightly closed.

Use only non-sparking tools.

Take precautionary measures against static discharge.

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

Specific treatment (see on this label).

IF exposed or concerned: Get medical advice/attention.

If skin irritation occurs: Get medical advice/attention.

Get medical advice/attention if you feel unwell.

In case of fire: Use for extinction: CO2, powder or water spray.

Take off contaminated clothing and wash it before reuse.

Store locked up.

Store in a well-ventilated place. Keep cool.

Dispose of contents/container in accordance with local/regional/national/international regulations.

- **Classification system:**

- **NFPA ratings (scale 0 - 4)**



Health = 2

Fire = 3

Reactivity = 0

- **HMIS-ratings (scale 0 - 4)**

| | |
|-----------------|---|
| HEALTH | 2 |
| FIRE | 3 |
| PHYSICAL HAZARD | 0 |

Health = 2

Fire = 3

Physical Hazard = 0

- **Other hazards**

- **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.

- **vPvB:** Not applicable.

3 Composition/information on ingredients

- **Chemical characterization: Mixtures**

- **Description:** Adhesive

- **Hazardous components:**

| | | |
|------------|---|---------|
| 64742-47-8 | Distillates (petroleum), hydrotreated light | 5-20% |
| 1330-20-7 | xylene | 5-20% |
| 100-41-4 | ethylbenzene | 2.5-10% |
| 13463-67-7 | titanium dioxide | ≤1.0% |

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4 First-aid measures

- **Description of first aid measures**

- **After inhalation:**

Supply fresh air or oxygen; call for doctor.

In case of unconsciousness place patient stably in side position for transportation.

- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.

- **After eye contact:**

Rinse opened eye for 20 minutes under running water. If eye becomes irritated, obtain medical treatment.

- **After swallowing:**

Rinse out mouth with water. Drink 1 - 2 glasses of water but **DO NOT** induce vomiting. Do not give liquids to a drowsy, convulsing or unconscious person. If vomiting occurs spontaneously, keep head below hips to prevent aspiration.

Seek medical treatment.

- **Information for doctor:**

- **Most important symptoms and effects, both acute and delayed** No further relevant information available.

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

No further relevant information available.

5 Fire-fighting measures

- **Extinguishing media**

- **Suitable extinguishing agents:**

CO₂, extinguishing powder or water spray. Fight larger fires with water spray.

Use fire fighting measures that suit the environment.

- **Special hazards arising from the substance or mixture** No further relevant information available.

- **Advice for firefighters**

Firefighters use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

- **Protective equipment:** Protective clothing and respiratory protective device.

6 Accidental release measures

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

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

- **Environmental precautions:** 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 of contaminated material as waste in accordance with federal state and local regulations.

Ensure adequate ventilation.

- **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**

- **PAC-1:**

| | | |
|-------------|------------------|----------------------|
| 1330-20-7 | xylene | 130 ppm |
| 112945-52-5 | Amorphous Silica | 18 mg/m ³ |
| 100-41-4 | ethylbenzene | 33 ppm |

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| · PAC-2: | | |
|-------------|------------------|-----------------------|
| 1330-20-7 | xylene | 920* ppm |
| 112945-52-5 | Amorphous Silica | 100 mg/m ³ |
| 100-41-4 | ethylbenzene | 1100* ppm |
| · PAC-3: | | |
| 1330-20-7 | xylene | 2500* ppm |
| 112945-52-5 | Amorphous Silica | 630 mg/m ³ |
| 100-41-4 | ethylbenzene | 1800* ppm |

7 Handling and storage

- **Handling:**
- **Precautions for safe handling**
*Open and handle receptacle with care.
 Ensure good ventilation/exhaustion 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.
 Keep container closed when not in use.*
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** *Store in a cool location away from direct heat.*
- **Information about storage in one common storage facility:** *Store away from oxidizing agents.*
- **Further information about storage conditions:** *Keep receptacle tightly sealed.*
- **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 remaining constituent has no known exposure limits.*

| 1330-20-7 xylene | |
|------------------------------|---|
| PEL | Long-term value: 435 mg/m ³ , 100 ppm |
| REL | Short-term value: 655 mg/m ³ , 150 ppm Long-term value: 435 mg/m ³ , 100 ppm |
| TLV | Short-term value: 651 mg/m ³ , 150 ppm Long-term value: 434 mg/m ³ , 100 ppm |
| BEI | |
| 100-41-4 ethylbenzene | |
| PEL | Long-term value: 435 mg/m ³ , 100 ppm |
| REL | Short-term value: 545 mg/m ³ , 125 ppm Long-term value: 435 mg/m ³ , 100 ppm |

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| | |
|--|---|
| TLV | Long-term value: 87 mg/m ³ , 20 ppm BEI |
| 13463-67-7 titanium dioxide | |
| PEL | Long-term value: 15* mg/m ³ *total dust |
| REL | See Pocket Guide App. A |
| TLV | Long-term value: 10 mg/m ³ withdrawn from NIC |
| · Ingredients with biological limit values: | |
| 1330-20-7 xylene | |
| BEI | 1.5 g/g creatinine Medium: urine Time: end of shift Parameter: Methylhippuric acids |
| 100-41-4 ethylbenzene | |
| BEI | 0.7 g/g creatinine Medium: urine Time: end of shift at end of workweek Parameter: Sum of mandelic acid and phenylglyoxylic acid (nonspecific, semi-quantitative) |
| | - Medium: end-exhaled air Time: not critical Parameter: Ethyl benzene (semi-quantitative) |

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

· **Exposure controls**

· **Personal protective equipment (see listings below)**

· **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.

· **Breathing equipment:**

Use approved respiratory protection equipment when airborne exposure is excessive. Consult the respirator manufacturer to determine the appropriate type of equipment for a given application. Observe respirator use limitations specified by the manufacturer.

· **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

· **Material of gloves**

Nitrile rubber, NBR

Chloroprene rubber, CR

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.

· **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.

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- **Eye protection:**
Safety glasses with side shields.



Tightly sealed goggles

- **Body protection:** Protective work clothing

9 Physical and chemical properties

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

- **General Information**

- **Appearance:**

| | |
|------------------------|-----------------|
| Form: | Paste |
| Color: | White |
| Odor: | Characteristic |
| Odor threshold: | Not determined. |

- **pH-value:** Not determined.

- **Change in condition**

| | |
|-----------------------|-----------------|
| Melting point: | Undetermined. |
| Boiling point: | 137 °C (279 °F) |

- **Flash point:** 30 °C (86 °F)

- **Flammability (solid, gaseous):** Not applicable.

- **Ignition temperature:** 230 °C (446 °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.

- **Flammable limits:**

| | |
|---------------|-----------|
| Lower: | 1.1 Vol % |
| Upper: | 7.0 Vol % |

- **Vapor pressure at 20 °C (68 °F):** 6.7 hPa (5 mm Hg)

- **Specific gravity at 20 °C (68 °F):** 0.971 g/cm³ (8.103 lbs/gal)

- **Relative density** Not determined.

- **Vapor density** Not determined.

- **Evaporation rate** Not determined.

- **Solubility in / Miscibility with**

- **Water:** Not miscible or difficult to mix.

- **Partition coefficient (n-octanol/water):** Not determined.

- **Viscosity:**

| | |
|-------------------|-----------------|
| Dynamic: | Not determined. |
| Kinematic: | Not determined. |

- **Solvent content:**

- **VOC (Per EPA 24)** not available GMS/L

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| | |
|--------------------------|----------------|
| Solids content: | 65.3 % |
| Other information | VOC 334.9 gm/l |

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** Heat, flames, sparks.
- **Incompatible materials:** Strong oxidizers, acids, and bases.
- **Hazardous decomposition products:**
Carbon monoxide and carbon dioxide
Aldehydes
Hydrocarbons

11 Toxicological information

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

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

1330-20-7 xylene

| | | |
|--------|------|---------------------|
| Oral | LD50 | 4300 mg/kg (rat) |
| Dermal | LD50 | 2000 mg/kg (rabbit) |

- **Primary irritant effect:**
- **on the skin:** Skin irritant.
- **on the eye:** May irritate the eye.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**
The product is not subject to classification according to internally approved calculation methods for preparations:
- **Carcinogenic categories**

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

| | | |
|------------|------------------|----|
| 1330-20-7 | xylene | 3 |
| 100-41-4 | ethylbenzene | 2B |
| 13463-67-7 | titanium dioxide | 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:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.

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- **Behavior in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:** At present there are no ecotoxicological assessments.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

* 13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:** Must be specially treated adhering to official regulations.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

* 14 Transport information

- | | |
|---|----------------------------|
| · UN-Number | |
| · DOT, IMDG, IATA | UN1133 |
| · UN proper shipping name | |
| · DOT, IMDG, IATA | ADHESIVES |
| · Transport hazard class(es) | |
| · DOT | |
|  | |
| · Class | 3 Flammable liquids |
| · Label | 3 |
| | |
| · IMDG, IATA | |
|  | |
| · Class | 3 Flammable liquids |
| · Label | 3 |
| · Packing group | |
| · DOT, IMDG, IATA | III |
| · Environmental hazards: | Not applicable. |
| · Special precautions for user | Warning: Flammable liquids |
| · Danger code (Kemler): | 30 |
| · EMS Number: | F-E,S-D |

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- | | |
|--|---------------------------|
| · Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code | Not applicable. |
| · UN "Model Regulation": | UN1133, ADHESIVES, 3, III |

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): | |
|--|--|

| | |
|-----------|--------|
| 1330-20-7 | xylene |
|-----------|--------|

| | |
|----------|--------------|
| 100-41-4 | ethylbenzene |
|----------|--------------|

| | |
|---|--|
| · TSCA (Toxic Substances Control Act): | |
|---|--|

| | |
|--|--|
| All components of this product are on the TSCA Inventory or are exempt from TSCA Inventory requirements. | |
|--|--|

| | |
|-------------------------|--|
| · Proposition 65 | |
|-------------------------|--|

| | |
|---|--|
| · Chemicals known to cause cancer: | |
|---|--|

| | |
|----------|--------------|
| 100-41-4 | ethylbenzene |
|----------|--------------|

| | |
|--|--|
| · Chemicals known to cause reproductive toxicity for females: | |
|--|--|

| | |
|------------------------------------|--|
| None of the ingredients is listed. | |
|------------------------------------|--|

| | |
|--|--|
| · Chemicals known to cause reproductive toxicity for males: | |
|--|--|

| | |
|------------------------------------|--|
| None of the ingredients is listed. | |
|------------------------------------|--|

| | |
|---|--|
| · Chemicals known to cause developmental toxicity: | |
|---|--|

| | |
|------------------------------------|--|
| None of the ingredients is listed. | |
|------------------------------------|--|

| | |
|---|--|
| · (DSL) Canada Domestic Substance List | |
|---|--|

| | |
|--|--|
| All components of this product are on the DSL(Canada Domestic Substance list) or are exempt from DSL requirements. | |
|--|--|

| | |
|---|--|
| · New Jersey Right-to-Know List: | |
|---|--|

| | |
|-----------|--------|
| 1330-20-7 | xylene |
|-----------|--------|

| | |
|-----------|-----------|
| 1317-65-3 | Limestone |
|-----------|-----------|

| | |
|----------|--------------|
| 100-41-4 | ethylbenzene |
|----------|--------------|

| | |
|------------|------------------|
| 13463-67-7 | titanium dioxide |
|------------|------------------|

| | |
|---|--|
| · New Jersey Special Hazardous Substance List: | |
|---|--|

| | | |
|-----------|--------|----|
| 1330-20-7 | xylene | F3 |
|-----------|--------|----|

| | | |
|----------|--------------|--------|
| 100-41-4 | ethylbenzene | CA, F3 |
|----------|--------------|--------|

| | |
|---|--|
| · Pennsylvania Right-to-Know List: | |
|---|--|

| | |
|-----------|--------|
| 1330-20-7 | xylene |
|-----------|--------|

| | |
|-----------|-----------|
| 1317-65-3 | Limestone |
|-----------|-----------|

| | |
|----------|--------------|
| 100-41-4 | ethylbenzene |
|----------|--------------|

| | |
|------------|------------------|
| 13463-67-7 | titanium dioxide |
|------------|------------------|

| | |
|---|--|
| · Pennsylvania Special Hazardous Substance List: | |
|---|--|

| | | |
|-----------|--------|---|
| 1330-20-7 | xylene | E |
|-----------|--------|---|

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| | | |
|---|------------------|----|
| 100-41-4 | ethylbenzene | E |
| · Cancerogenity categories | | |
| · EPA (Environmental Protection Agency) | | |
| 1330-20-7 | xylene | I |
| 100-41-4 | ethylbenzene | D |
| · TLV (Threshold Limit Value established by ACGIH) | | |
| 1330-20-7 | xylene | A4 |
| 100-41-4 | ethylbenzene | A3 |
| 13463-67-7 | titanium dioxide | A4 |
| · MAK (German Maximum Workplace Concentration) | | |
| 100-41-4 | ethylbenzene | 3A |
| 13463-67-7 | titanium dioxide | 3A |
| · NIOSH-Ca (National Institute for Occupational Safety and Health) | | |
| 13463-67-7 | titanium dioxide | |

· **National regulations:**

· **Information about limitation of use:**

Workers are not allowed to be exposed to the hazardous carcinogenic materials contained in this preparation. Exceptions can be made by the authorities in certain cases.

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

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

* 16 Other information

Although the information and recommendations set forth in this SDS are presented in good faith and are believed to be correct as of the date of this SDS, Royal Adhesives & Sealants makes no representations as to the completeness or accuracy thereof. Information is supplied on the condition that the persons receiving and using it will make their own determination as to the suitability for their purpose prior to use. In no event will Royal Adhesives & Sealants or any affiliate thereof be responsible for damages of any nature whatsoever resulting from the use or reliance on the information set forth in the SDS.

· **Department issuing SDS:** Environment protection department.

· **Creation Date:** 04/07/2017

· **Date of preparation / last revision** 04/07/2017 / 4

· **Abbreviations and acronyms:**

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)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

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

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*BEI: Biological Exposure Limit**Flam. Liq. 3: Flammable liquids – Category 3**Skin Irrit. 2: Skin corrosion/irritation – Category 2**Carc. 2: Carcinogenicity – Category 2**STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2*

USA