

Safety Data Sheet
acc. to OSHA HCS

Printing Date 07/24/2015

Revision Number 5

Revision Date 07/24/2015

1 Identification

- **Product identifier**
- **Trade name:** 12880 (DC12880 SILAPRENE ADHESIVE)
- **Article number:** 12880
- **Relevant identified uses of the substance or mixture.** Adhesive
- **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**



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



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



Skin Irrit. 2 H315 Causes skin irritation.
Eye Irrit. 2A H319 Causes serious eye 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**



- **Signal word** Danger

(Contd. on page 2)

Safety Data Sheet

acc. to OSHA HCS

Printing Date 07/24/2015

Revision Number 5

Revision Date 07/24/2015

Trade name: 12880 (DC12880 SILAPRENE ADHESIVE)

(Contd. of page 1)

· **Hazard statements**

- Highly flammable liquid and vapor.
- Causes skin irritation.
- Causes serious eye irritation.
- May cause drowsiness or dizziness.
- May be fatal if swallowed and enters airways.

· **Precautionary statements**

- Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
- Use explosion-proof electrical/ventilating/lighting/equipment.
- Avoid breathing dust/fume/gas/mist/vapors/spray
- Wear protective gloves / eye protection / face protection.
- Ground/bond container and receiving equipment.
- Use only non-sparking tools.
- Take precautionary measures against static discharge.
- Wash thoroughly after handling.
- Use only outdoors or in a well-ventilated area.
- If swallowed: Immediately call a poison center/doctor.
- IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
- If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- Specific treatment (see on this label).
- IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- Call a poison center/doctor if you feel unwell.
- If skin irritation occurs: Get medical advice/attention.
- If eye irritation persists: Get medical advice/attention.
- Do NOT induce vomiting.
- 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 container tightly closed.
- 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 = 1
Fire = 3
Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**



Health = 1
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: Mixture**

(Contd. on page 3)

USA

Safety Data Sheet

acc. to OSHA HCS

Printing Date 07/24/2015

Revision Number 5

Revision Date 07/24/2015

Trade name: 12880 (DC12880 SILAPRENE ADHESIVE)

(Contd. of page 2)

· Hazardous components:		
142-82-5	heptane	30.5%
67-64-1	acetone	30.0%
110-82-7	cyclohexane	4.5%

4 First-aid measures

- **Description of first aid measures**
- **After inhalation:** Supply fresh air or oxygen; call for doctor.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:** Rinse opened eye for 20 minutes under running water. Call a Doctor immediately.
- **After swallowing:** Do not induce vomiting; immediately call for medical help.
- **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.
- **For safety reasons unsuitable extinguishing agents:** Do not use direct water stream.
- **Advice for firefighters**
- **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.

7 Handling and storage

- **Handling:**
- **Precautions for safe handling**
Avoid prolonged or repeated contact with skin.
Avoid contact with eyes.
Wash thoroughly after handling.

(Contd. on page 4)

-USA-

Safety Data Sheet

acc. to OSHA HCS

Printing Date 07/24/2015

Revision Number 5

Revision Date 07/24/2015

Trade name: 12880 (DC12880 SILAPRENE ADHESIVE)

(Contd. of page 3)

- Ensure good ventilation/exhaustion at the workplace.
 Open containers in a well ventilated area and avoid breathing headspace vapors.
 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 as flammable liquid.
 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:**

142-82-5 heptane

PEL	Long-term value: 2000 mg/m ³ , 500 ppm
REL	Long-term value: 350 mg/m ³ , 85 ppm Ceiling limit value: 1800* mg/m ³ , 440* ppm *15-min
TLV	Short-term value: 2050 mg/m ³ , 500 ppm Long-term value: 1640 mg/m ³ , 400 ppm

67-64-1 acetone

PEL	Long-term value: 2400 mg/m ³ , 1000 ppm
REL	Long-term value: 590 mg/m ³ , 250 ppm
TLV	Short-term value: 1187 mg/m ³ , 500 ppm Long-term value: 594 mg/m ³ , 250 ppm BEI

110-82-7 cyclohexane

PEL	Long-term value: 1050 mg/m ³ , 300 ppm
REL	Long-term value: 1050 mg/m ³ , 300 ppm
TLV	Long-term value: 344 mg/m ³ , 100 ppm

· **Ingredients with biological limit values:**

67-64-1 acetone

BEI	50 mg/L Medium: urine Time: end of shift Parameter: Acetone (nonspecific)
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- **Additional information:** The lists that were valid during the creation were used as basis.

(Contd. on page 5)

Safety Data Sheet

acc. to OSHA HCS

Printing Date 07/24/2015

Revision Number 5

Revision Date 07/24/2015

Trade name: 12880 (DC12880 SILAPRENE ADHESIVE)

(Contd. of page 4)

- **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.
 Avoid contact with the eyes and skin.
- **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
 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.
- **Eye protection:**
 Safety glasses with side shields.



Tightly sealed goggles

Use full face shield over protective eye wear when there is a risk of a splash.

- **Body protection:** Protective work clothing

9 Physical and chemical properties

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

- **General Information**

- **Appearance:**

Form:	Liquid
Color:	Amber colored
Odor:	Characteristic
Odour threshold:	Not determined.

- **Change in condition**

Melting point:	Undetermined.
Boiling point:	55 °C (131 °F)

- **Flash point:** -19 °C (-2 °F)

- **Ignition temperature:** 215.0 °C (419 °F)

- **Auto igniting:** Product is not selfigniting.

- **Danger of explosion:** Product is not explosive. However, formation of explosive air/vapor mixtures are possible.

(Contd. on page 6)

Safety Data Sheet

acc. to OSHA HCS

Printing Date 07/24/2015

Revision Number 5

Revision Date 07/24/2015

Trade name: 12880 (DC12880 SILAPRENE ADHESIVE)

(Contd. of page 5)

- **Flammable limits:**

Lower: 1.1 Vol %
Upper: 13.0 Vol %

- **Vapor pressure at 20 °C (68 °F):** 233.0 hPa (175 mm Hg)

- **Specific gravity:** 0.818

- **Solubility in / Miscibility with Water:** Not miscible or difficult to mix.

- **Viscosity:**

Dynamic: Not determined.
Kinematic: Not determined.

- **Solvent content:**

Organic solvents: 65.0 %

Solids content: 35.0 %

- **Other information** "NOTICE: This product does not comply with the requirements of Rule 1168 of California's South Coast Air Quality Management District".
VOC: = 285 G/L OR 2.38 LBS/GAL
414.9 G/L SCAQMD RULE 1168 METHOD
WEIGHT PER GALLON: = 6.81

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** Strong oxidizers, amines, reactive metals, acids and bases.
- **Conditions to avoid** Heat, flames, sparks, hot surfaces, ignition sources.
- **Incompatible materials:** Reacts with oxidizing agents.
- **Hazardous decomposition products:**
Oxides of carbon, phosgene, various hydrocarbon, and hydrogen bromide under burning conditions.

11 Toxicological information

- **Information on toxicological effects**

- **Acute toxicity:**

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

110-82-7 cyclohexane

Oral	LD50	12705 mg/kg (rat)
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- **Primary irritant effect:**

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

- **on the eye:**

Causes serious eye damage

Vapors may be irritating to the eyes.

- **Sensitization:** No sensitizing effects known.

- **Additional toxicological information:**

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

(Contd. on page 7)

Safety Data Sheet

acc. to OSHA HCS

Printing Date 07/24/2015

Revision Number 5

Revision Date 07/24/2015

Trade name: 12880 (DC12880 SILAPRENE ADHESIVE)

(Contd. of page 6)

· **Carcinogenic categories**

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

None of the ingredients is listed.

· **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.

· **Behavior in environmental systems:**

· **Bioaccumulative potential:** No further relevant information available.

· **Mobility in soil:** No further relevant information available.

· **Ecotoxicological effects:**

· **Remark:** Very toxic for fish

· **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, ADR, IMDG, IATA** UN1133

· **UN proper shipping name**

· **DOT, IMDG, IATA** ADHESIVES
· **ADR** 1133 ADHESIVES, ENVIRONMENTALLY HAZARDOUS

· **Transport hazard class(es)**

· **DOT**



· **Class**

3 Flammable liquids

(Contd. on page 8)

Safety Data Sheet

acc. to OSHA HCS

Printing Date 07/24/2015

Revision Number 5

Revision Date 07/24/2015

Trade name: 12880 (DC12880 SILAPRENE ADHESIVE)

(Contd. of page 7)

· **Label** 3· **ADR, IMDG**· **Class** 3 Flammable liquids· **Label** 3· **IATA**· **Class** 3 Flammable liquids· **Label** 3· **Packing group** II· **DOT, ADR, IMDG, IATA** II· **Environmental hazards:**· **Marine pollutant:** .
Symbol (fish and tree)· **Special marking (ADR):** Symbol (fish and tree)· **Special precautions for user** Warning: Flammable liquids· **Transport in bulk according to Annex II of
MARPOL73/78 and the IBC Code** Not applicable.· **UN "Model Regulation":** UN1133, ADHESIVES, ENVIRONMENTALLY HAZARDOUS, 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.

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

110-82-7 cyclohexane

· **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:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity:**

None of the ingredients is listed.

(Contd. on page 9)

USA

Safety Data Sheet

acc. to OSHA HCS

Printing Date 07/24/2015

Revision Number 5

Revision Date 07/24/2015

Trade name: 12880 (DC12880 SILAPRENE ADHESIVE)

(Contd. of page 8)

· **Cancerogenity categories**

· **EPA (Environmental Protection Agency)**

67-64-1 acetone

D

· **TLV (Threshold Limit Value established by ACGIH)**

67-64-1 acetone

A4

· **MAK (German Maximum Workplace Concentration)**

None of the ingredients is listed.

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

· **National regulations:**

- **Water hazard class:** Water hazard class 1 (Self-assessment): slightly 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:** 02/19/2003

· **Date of preparation / last revision** 07/24/2015 / 4

· **Abbreviations and acronyms:**

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organisation

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)

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

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

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

Eye Irrit. 2A: Serious eye damage/eye irritation, Hazard Category 2A

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

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