

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

Printing Date 09/11/2018

Revision Number 9

Revision Date 09/11/2018

**1 Identification**

- **Product identifier**
- **Trade name:** 12232 SolidSeal (Black)
- **Article number:** 12232
- **Relevant identified uses of the substance or mixture.** Sealant
- **Application of the substance / the mixture** 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**



GHS08 Health hazard

Resp. Sens. 1 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Carc. 2 H351 Suspected of causing cancer.

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



GHS07

Skin Sens. 1 H317 May cause an allergic skin reaction.

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



GHS08

- **Signal word** Danger
- **Hazard statements**  
May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
May cause an allergic skin reaction.  
Suspected of causing cancer.  
May cause damage to organs through prolonged or repeated exposure.

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- **Precautionary statements**

Obtain special instructions before use.  
 Do not handle until all safety precautions have been read and understood.  
 Do not breathe dust/fume/gas/mist/vapors/spray.  
 Contaminated work clothing must not be allowed out of the workplace.  
 Wear protective gloves/protective clothing/eye protection/face protection.  
 [In case of inadequate ventilation] wear respiratory protection.  
 If on skin: Wash with plenty of water.  
 If inhaled: If breathing is difficult, remove person to fresh air and keep comfortable for breathing.  
 IF exposed or concerned: Get medical advice/attention.  
 Specific treatment (see on this label).  
 Get medical advice/attention if you feel unwell.  
 If skin irritation or rash occurs: Get medical advice/attention.  
 If experiencing respiratory symptoms: Call a poison center/doctor.  
 Wash contaminated clothing before reuse.  
 Store locked up.  
 Dispose of contents/container in accordance with local/regional/national/international regulations.

- **Classification system:**

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



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



- **Other hazards**

- **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.

- **vPvB:** Not applicable.

### \* 3 Composition/information on ingredients

- **Chemical characterization: Mixtures**

- **Description:** Mixture

- **Hazardous components:**

59675-67-1	polyurethane prepolymer	25-50%
1330-20-7	xylene	2.5-10%
90622-57-4	C9-12-Iso-alkanes	≤2.5%
100-41-4	ethylbenzene	≤1%
1333-86-4	Carbon black	≤1%

### \* 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.

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- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:** Rinse opened eye for several minutes under running water. Then 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** 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:**  
CO<sub>2</sub>, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.  
Use fire fighting measures that suit the environment.
- **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:**  
Pick up mechanically.  
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
100-41-4	ethylbenzene	33 ppm
67-56-1	methanol	530 ppm

### · PAC-2:

1330-20-7	xylene	920* ppm
100-41-4	ethylbenzene	1100* ppm
67-56-1	methanol	2,100 ppm

### · PAC-3:

1330-20-7	xylene	2500* ppm
100-41-4	ethylbenzene	1800* ppm
67-56-1	methanol	7200* ppm

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### 7 Handling and storage

- **Handling:**
- **Precautions for safe handling**  
Open and handle receptacle with care.  
Ensure good ventilation/exhaustion at the workplace.
- **Information about protection against explosions and fires:** Keep ignition sources away - Do not smoke.
- **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.  
Protect from heat and direct sunlight.  
Protect product from freezing.  
Store in dry conditions.
- **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.

#### 1330-20-7 xylene

PEL	Long-term value: 435 mg/m <sup>3</sup> , 100 ppm
REL	Short-term value: 655 mg/m <sup>3</sup> , 150 ppm Long-term value: 435 mg/m <sup>3</sup> , 100 ppm
TLV	Short-term value: 651 mg/m <sup>3</sup> , 150 ppm Long-term value: 434 mg/m <sup>3</sup> , 100 ppm
BEI	

#### 100-41-4 ethylbenzene

PEL	Long-term value: 435 mg/m <sup>3</sup> , 100 ppm
REL	Short-term value: 545 mg/m <sup>3</sup> , 125 ppm Long-term value: 435 mg/m <sup>3</sup> , 100 ppm
TLV	Long-term value: 87 mg/m <sup>3</sup> , 20 ppm
BEI	

#### 1333-86-4 Carbon black

PEL	Long-term value: 3.5 mg/m <sup>3</sup>
REL	Long-term value: 3.5* mg/m <sup>3</sup> *0.1 in presence of PAHs; See Pocket Guide Apps.A+C
TLV	Long-term value: 3* mg/m <sup>3</sup> *inhalable fraction

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· **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.  
 Wash hands before breaks and at the end of work.

· **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

· **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.

· **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.

· **For the permanent contact of a maximum of 15 minutes gloves made of the following materials are suitable:**

Viton

· **As protection from splashes gloves made of the following materials are suitable:** Nitrile rubber, NBR

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

· **Body protection:** Protective work clothing

## \* 9 Physical and chemical properties

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

· **General Information**

· **Appearance:**

Form: Paste

Color: Black

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· <b>Odor:</b>	Characteristic
· <b>Odor threshold:</b>	Not determined.
· <b>pH-value:</b>	Not determined.
· <b>Change in condition</b>	
<b>Melting point:</b>	Undetermined.
<b>Boiling point:</b>	Undetermined
· <b>Flash point:</b>	Not applicable.
· <b>Flammability (solid, gaseous):</b>	Not applicable.
· <b>Decomposition temperature:</b>	Not determined.
· <b>Auto igniting:</b>	Product is not selfigniting.
· <b>Danger of explosion:</b>	Product does not present an explosion hazard.
· <b>Flammable limits:</b>	
<b>Lower:</b>	Not Available
<b>Upper:</b>	Not Available
· <b>Vapor pressure:</b>	Not determined.
· <b>Specific gravity at 20 °C (68 °F):</b>	1.17 g/cm <sup>3</sup> (9.76365 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>	Insoluble
· <b>Partition 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>	Not available
<b>Solids content:</b>	Not available.
· <b>Other information</b>	VOC's - 69.3 grams/liter

### \* 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:**
  - Reacts with amines.
  - Reacts with alcohols.
  - Reacts with water
- **Hazardous decomposition products:**
  - Carbon monoxide and carbon dioxide
  - Nitrogen oxides
  - Sulfur oxides (SO<sub>x</sub>)

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Hydrogen chloride (HCl)  
Hydrocarbons

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### 11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** May irritate the skin.
- **on the eye:** May irritate the eye.
- **Sensitization:** Prolonged or repeated contact may cause sensitization to the skin and lungs.
- **Additional toxicological information:**  
The product shows the following dangers according to internally approved calculation methods for preparations:  
Harmful
- **Carcinogenic categories**

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

1330-20-7	xylene	3
100-41-4	ethylbenzene	2B
1333-86-4	Carbon black	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.
- **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.

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### 14 Transport information

- **UN-Number**  
· DOT, ADN, IMDG, IATA not regulated
- **UN proper shipping name**  
· DOT, ADN, IMDG, IATA not regulated
- **Transport hazard class(es)**  
· DOT, ADN, IMDG, IATA  
· Class not regulated
- **Packing group**  
· DOT, IMDG, IATA not regulated
- **Environmental hazards:** Not applicable.
- **Special precautions for user** Not applicable.
- **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** Not applicable.
- **UN "Model Regulation":** not regulated

### 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
67-56-1	methanol
- **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
28553-12-0	diisononyl phthalate
- **Chemicals known to cause reproductive toxicity for females:**

67-56-1	methanol
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- **Chemicals known to cause reproductive toxicity for males:**

67-56-1	methanol
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- **Chemicals known to cause developmental toxicity:**

67-56-1	methanol
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- **(DSL) Canada Domestic Substance List**  
All components of this product are on the DSL(Canada Domestic Substance list) or are exempt from DSL requirements.

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· **New Jersey Right-to-Know List:**

1330-20-7	xylene	
100-41-4	ethylbenzene	
1333-86-4	Carbon black	
67-56-1	methanol	

· **New Jersey Special Hazardous Substance List:**

1330-20-7	xylene	F3
100-41-4	ethylbenzene	CA, F3
1333-86-4	Carbon black	CA
67-56-1	methanol	TE, F3

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

1330-20-7	xylene	
100-41-4	ethylbenzene	

· **Pennsylvania Special Hazardous Substance List:**

1330-20-7	xylene	E
100-41-4	ethylbenzene	E

· **Carcinogenicity 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
1333-86-4	Carbon black	A4

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

100-41-4	ethylbenzene	3A
1333-86-4	Carbon black	3B

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

1333-86-4	Carbon black	
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· **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:** 09/11/2018

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**· Date of preparation / last revision** 09/11/2018 / 8**· 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)**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**BEI: Biological Exposure Limit**Resp. Sens. 1: Respiratory sensitisation – Category 1**Skin Sens. 1: Skin sensitisation – Category 1**Carc. 2: Carcinogenicity – Category 2**STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2*

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