1 Identification

· Product identifier

· Trade name: Signature Series 4099 (Parabond)
· Relevant identified uses of the substance or mixture. Adhesive

· Details of the supplier of the safety data sheet
· Manufacturer/Supplier:
  Royal Adhesives & Sealants, LLC
  863 South East Main Street
  Simpsonville, SC 29681
  (864) 967-7691

· 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
  The product does not meet the criteria for classification as hazardous under the GHS and 29 CFR 1910.1200

· Label elements
  · GHS label elements Void
  · Hazard pictograms Void
  · Signal word Void
  · Hazard statements Void
  · Classification system:
    · NFPA ratings (scale 0 - 4)
      Health = 1
      Fire = 0
      Reactivity = 0
  · HMIS-ratings (scale 0 - 4)

- HEALTH
  - HEALTH = 1
  - Fire = 0
  - 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

(Contd. on page 2)
Trade name: Signature Series 4099 (Parabond)

- **Hazardous components:** No hazardous/reportable components.

### 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**
- **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:** No special measures required.
- **Methods and material for containment and cleaning up:**
  Wash area thoroughly with water.
  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.

(Contd. of page 1)

(Contd. on page 3)
7 Handling and storage

- Handling:
  - Precautions for safe handling
    Avoid prolonged or repeated contact with skin.
    Avoid contact with eyes.
    Wash thoroughly after handling.
    Open containers in a well ventilated area and avoid breathing headspace vapors.
    Prevent formation of aerosols.
  - Information about protection against explosions and fires: No special measures required.

- Conditions for safe storage, including any incompatibilities

- Storage:
  - Requirements to be met by storerooms and receptacles:
    Store above 40F. Freeze-thaw stable up to five cycles at 20F.
  - Information about storage in one common storage facility: Store away from oxidizing agents.

- Further information about storage conditions:
  - Protect product from freezing.
  - 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 product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
  - 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:
  The usual precautionary measures for handling chemicals should be followed.

- Breathing equipment: Not necessary if room is well-ventilated.

- 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.
9 Physical and chemical properties

- General Information
  - Appearance:
    - Form: Fluid/Paste
    - Color: Straw
    - Odor: Characteristic
    - Odour threshold: Not determined.
  - pH-value at 20 °C (68 °F): 9.6

- Change in condition
  - Melting point: Undetermined.
  - Boiling point: 100 °C (212 °F)

- Flash point: Not applicable.

- Flammability (solid, gaseous): Not applicable.

- Ignition temperature:
  - Decomposition temperature: Not determined.

- Auto igniting: Product is not selfigniting.

- Danger of explosion: Product does not present an explosion hazard.

- Vapor pressure at 20 °C (68 °F): 23 hPa (17 mm Hg)

- Specific gravity at 20 °C (68 °F): 1.15 g/cm³ (9.597 lbs/gal)
  - Relative density: Not determined.
  - Vapour 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:
  - Organic solvents: 0.0 %
  - Water: 33.5 %
  - VOC (Per EPA 24) Not Available GMS/L

(Contd. on page 5)
**Trade name:** Signature Series 4099 (Parabond)

<table>
<thead>
<tr>
<th>Solids content:</th>
<th>66.5 %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other information</td>
<td>California VOC Compliance:</td>
</tr>
<tr>
<td></td>
<td>Solvent Free Product</td>
</tr>
<tr>
<td></td>
<td>SCAQMD Rule 1168: VOC Compliant</td>
</tr>
<tr>
<td></td>
<td>SCAQMD Rule 443.1: Grams per Liter of Material &lt; 1 gram/liter</td>
</tr>
<tr>
<td></td>
<td>Grams per Liter of Coating &lt; 1 gram/liter</td>
</tr>
</tbody>
</table>

### 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:** Strong oxidizing agents
  - **Hazardous decomposition products:** Carbon monoxide and carbon dioxide

### 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:** No sensitizing effects known.
  - **Additional toxicological information:**
    The product is not subject to classification according to internally approved calculation methods for preparations:
    When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

- **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.
  - **Additional ecological information:**
    - **General notes:** At present there are no ecotoxicological assessments.
Trade name: Signature Series 4099 (Parabond)

- 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 not be disposed of together with household garbage. Do not allow product to reach sewage system. 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, ADN, IMDG, IATA: not regulated
- UN proper shipping name
  - DOT, ADR, ADN, IMDG, IATA: not regulated
- Transport hazard class(es)
  - DOT, ADR, ADN, IMDG, IATA: not regulated
- Packing group
  - DOT, ADR, IMDG, IATA: not regulated
- Environmental hazards: Not applicable.
- Special precautions for user: Not applicable.
- Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: Not applicable.
- Transport/Additional information: DOT, ADR, IMDG, IATA - Not regulated in transport. Not dangerous according to the above specifications.
- UN "Model Regulation": -

### 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):
    - None of the ingredients is listed.
  - TSCA (Toxic Substances Control Act):
    - All components of this product are on the TSCA Inventory or are exempt from TSCA Inventory requirements.
Trade name: Signature Series 4099 (Parabond)

- **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.

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

- **Cancerogenity categories**

  - **EPA (Environmental Protection Agency)**
    
    None of the ingredients is listed.
  
  - **TLV (Threshold Limit Value established by ACGIH)**
    
    None of the ingredients listed.
  
  - **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:** Generally not 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:** 09/09/2011
- **Date of preparation / last revision** 10/13/2015
- **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 Roa (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)
  
  - PBT: Persistent, Bioaccumulative and Toxic
  
  - vPvB: very Persistent and very Bioaccumulative