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

- **Product identifier**
  - **Trade name:** Double Bubble Epoxy Extra Fast Setting Red Pkg Part A (04001)
  - **Relevant identified uses of the substance or mixture and uses advised against**
  - **Application of the substance / the preparation** Epoxy resin 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

- **Emergency telephone number:** ChemTrec: UNITED STATES 1(800)424-9300  INTERNATIONAL 703-527-3887

2 Hazards identification

- **Classification of the substance or mixture**
  - **Skin Irrit.** 2 H315 Causes skin irritation.
  - **H319** Causes serious eye irritation.
  - **Skin Sens.** 1 H317 May cause an allergic skin reaction.

- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**
  - **Irritant**
    - Irritating to eyes and skin. May cause sensitisation by skin contact.
  - **Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.**

- **Classification system:**
  - The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.

- **Label elements**

- **Labelling according to EU guidelines:**
  - The product has been classified and marked in accordance with directives on hazardous materials.

- **Code letter and hazard designation of product:**
  - **Irritant**

- **Hazard-determining components of labelling:**
  - **Epoxy Resin**

- **Risk phrases:**
  - Irritating to eyes and skin.
  - May cause sensitisation by skin contact.
  - Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

- **Safety phrases:**
  - Keep out of the reach of children.
  - Avoid contact with skin and eyes.
  - Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point.
  - Wear suitable gloves and eyeface protection.
  - If swallowed, seek medical advice immediately and show this container or label.

- **Special labelling of certain preparations:**
  - Contains epoxy constituents. See information supplied by the manufacturer.

(Contd. on page 2)
Trade name: Double Bubble Epoxy Extra Fast Setting Red Pkg Part A (04001)

- Classification system:
  - NFPA ratings (scale 0 - 4)
    - Health = 2
    - Fire = 1
    - Reactivity = 0

- HMIS-ratings (scale 0 - 4)
  - HEALTH
    - Health = 2
  - FIRE
    - Fire = 1
  - PHYSICAL HAZARD
    - 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

<table>
<thead>
<tr>
<th>Chemical Components</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Epoxy Polymer</td>
<td>50-100%</td>
</tr>
<tr>
<td>&quot;Skin Irrit. 2, H315; H319; Skin Sens. 1, H317; Acute Tox. 5, H303&quot;</td>
<td></td>
</tr>
<tr>
<td>Epoxy</td>
<td>10-25%</td>
</tr>
<tr>
<td>&quot;Skin Irrit. 2, H315; H319; Skin Sens. 1, H317&quot;</td>
<td></td>
</tr>
<tr>
<td>25068-38-6 Epoxy Resin</td>
<td>10-25%</td>
</tr>
<tr>
<td>&quot;Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317&quot;</td>
<td></td>
</tr>
</tbody>
</table>

- Additional information: For the wording of the listed risk phrases refer to section 15.

4 First aid measures
- Description of first aid measures
  - After inhalation:
    Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist. In case of unconsciousness place patient stably in side position for transportation.
  - After skin contact: Immediately rinse with water.
  - 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.
  - 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 Firefighting measures
- Extinguishing media
- Suitable extinguishing agents:
  CO2, extinguishing powder or water spray. Fight larger fires with water spray.

(Contd. on page 3)
Trade name: Double Bubble Epoxy Extra Fast Setting Red Pkg Part A (04001)

Use fire fighting measures that suit the environment.

- **Advice for firefighters**
  - Protective equipment: Wear self-contained respiratory protective device.

### 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
  - Ensure adequate ventilation
  - Wear protective clothing.
- **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).
- **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**
  - Use only in well ventilated areas.
  - 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:** No special requirements.
  - **Information about storage in one common storage facility:**
    - Store away from flammable substances.
    - Store away from oxidizing agents.
  - **Further information about storage conditions:** 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 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 required.
- **Protection of hands:**
  - 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

- **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: Liquid
      - Color: Clear
      - Odor: Characteristic

  - **Change in condition**
    - Melting point: Undetermined.
    - Boiling point: Undetermined.

  - **Flash point:** 191°C (376 °F)

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

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

  - **Specific gravity at 20°C (68 °F):** 1.19 g/cm³ (9.931 lbs/gal)

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

  - **Solvent content:**
    - Organic solvents: 0.0 %
    - VOC (Per EPA 24): 5.04 GMS/L

  - **Solids content:** 100.0 %

  - **Other information:** No further relevant information available.

### 10 Stability and reactivity

- **Reactivity**

- **Chemical stability**

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.

- **Possibility of hazardous reactions** Reacts with strong oxidizing agents.

- **Conditions to avoid** No further relevant information available.

- **Incompatible materials:** Reacts with oxidizing agents.

- **Hazardous decomposition products:**
  Carbon monoxide
  Carbon dioxide
11 Toxicological information

- Information on toxicological effects
  - Acute toxicity:
    - LD/LC50 values that are relevant for classification:
      - Epoxy Polymer
        - Oral LD50 >4000 mg/kg (rat)
  - Primary irritant effect:
    - on the skin: Irritant to skin and mucous membranes.
    - on the eye: Irritating effect.
  - Sensitization: Sensitizing effect by skin contact is possible with prolonged exposure.
  - 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)
      - None of the ingredients is listed.
    - NTP (National Toxicology Program)
      - 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: Harmful to fish
  - Additional ecological information:
    - General notes:
      - Water hazard class 2 (Self-assessment): hazardous for water
      - Do not allow product to reach ground water, water course or sewage system.
      - Harmful to aquatic organisms
    - 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.
### 14 Transport information

<table>
<thead>
<tr>
<th>Item</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>UN-Number</strong></td>
<td>Void</td>
</tr>
<tr>
<td><strong>DOT, ADR, ADN, IMDG, IATA</strong></td>
<td>Void</td>
</tr>
<tr>
<td><strong>UN proper shipping name</strong></td>
<td>Void</td>
</tr>
<tr>
<td><strong>DOT, ADR, ADN, IMDG, IATA</strong></td>
<td>Void</td>
</tr>
<tr>
<td><strong>Transport hazard class(es)</strong></td>
<td>Void</td>
</tr>
<tr>
<td><strong>DOT, ADR, ADN, IMDG, IATA</strong></td>
<td>Void</td>
</tr>
<tr>
<td><strong>Class</strong></td>
<td>Void</td>
</tr>
<tr>
<td><strong>Packing group</strong></td>
<td>Void</td>
</tr>
<tr>
<td><strong>DOT, ADR, IMDG, IATA</strong></td>
<td>Void</td>
</tr>
<tr>
<td><strong>Special precautions for user</strong></td>
<td>Not applicable.</td>
</tr>
<tr>
<td><strong>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</strong></td>
<td>Not applicable.</td>
</tr>
<tr>
<td><strong>Transport/Additional information:</strong></td>
<td>Not dangerous according to the above specifications.</td>
</tr>
<tr>
<td><strong>UN &quot;Model Regulation&quot;:</strong></td>
<td>-</td>
</tr>
</tbody>
</table>

### 15 Regulatory information

<table>
<thead>
<tr>
<th>Item</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Safety, health and environmental regulations/legislation specific for the substance or mixture</strong></td>
<td><strong>Sara</strong></td>
</tr>
<tr>
<td><strong>Section 355 (extremely hazardous substances):</strong></td>
<td>None of the ingredients is listed.</td>
</tr>
<tr>
<td><strong>Section 313 (Specific toxic chemical listings):</strong></td>
<td>None of the ingredients is listed.</td>
</tr>
<tr>
<td><strong>TSCA (Toxic Substances Control Act):</strong></td>
<td>All components of this product are on the TSCA Inventory or are exempt from TSCA Inventory requirements.</td>
</tr>
<tr>
<td><strong>Proposition 65</strong></td>
<td><strong>Chemicals known to cause cancer:</strong></td>
</tr>
<tr>
<td><strong>Chemicals known to cause reproductive toxicity:</strong></td>
<td>None of the ingredients is listed.</td>
</tr>
<tr>
<td><strong>(DSL) Canada Domestic Substance List</strong></td>
<td>All components of this product are on the DSL(Canada Domestic Substance list) or are exempt from DSL requirements.</td>
</tr>
<tr>
<td><strong>Cancerogenity categories</strong></td>
<td><strong>EPA (Environmental Protection Agency)</strong></td>
</tr>
<tr>
<td><strong>Chemicals known to cause cancer:</strong></td>
<td>None of the ingredients is listed.</td>
</tr>
<tr>
<td><strong>Chemicals known to cause reproductive toxicity:</strong></td>
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</table>
Material Safety Data Sheet
acc. to ISO/DIS 11014

Printing Date 10/10/2012
Revision Number 4
Reviewed on 05/12/2011

Trade name: Double Bubble Epoxy Extra Fast Setting Red Pkg Part A (04001)

· 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.

· OSHA-Ca (Occupational Safety & Health Administration)
  None of the ingredients is listed.

· Product related hazard informations:
  The product has been classified and marked in accordance with directives on hazardous materials.

· Hazard-determining components of labelling:
  Epoxy Resin

· Risk phrases:
  Irritating to eyes and skin.
  May cause sensitisation by skin contact.
  Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

· Special labeling of certain preparations:
  Contains epoxy constituents. See information supplied by the manufacturer.

· National regulations:
  · Water hazard class: Water hazard class 2 (Self-assessment): 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 MSDS are presented in good faith and are believed to be correct as of the date of this MSDS, 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 MSDS.

· Department issuing MSDS: Environment protection department.

· 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 Organization
  ADR: Accord européen sur le transport des marchandises dangereuses par Roate (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
  NFPA: National Fire Protection Association (USA)
  HMIS: Hazardous Materials Identification System (USA)
  LC50: Lethal concentration, 50 percent
  LD50: Lethal dose, 50 percent