# SAFETY DATA SHEET

**BMR-8294001**

## Section 1. Identification

<table>
<thead>
<tr>
<th>Product code / Name</th>
<th>BMR-8294001</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product description</td>
<td>Quix Plus Sanitizing Towel - Pink</td>
</tr>
</tbody>
</table>

**Relevant identified uses of the substance or mixture and uses advised against**

<table>
<thead>
<tr>
<th>Identified uses</th>
<th>Not applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uses advised against</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Supplier/Manufacturer</th>
<th>Berkely Medical Resources 700 Mountain View Dr. Smithfield, PA 15478 USA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Email</td>
<td><a href="mailto:regulatoryaffairs@berryplastics.com">regulatoryaffairs@berryplastics.com</a></td>
</tr>
<tr>
<td>Emergency telephone number (with hours of operation)</td>
<td>+1 724-564-5002</td>
</tr>
</tbody>
</table>

## Section 2. Hazards identification

**OSHA/HCS status**

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

**Classification of the substance or mixture**

<table>
<thead>
<tr>
<th>SIGNAL WORD</th>
<th>WARNING</th>
</tr>
</thead>
<tbody>
<tr>
<td>HAZARD STATEMENTS</td>
<td>CAUSES SERIOUS EYE IRRITATION. CAUSES SKIN IRRITATION.</td>
</tr>
<tr>
<td>PRECAUTIONARY STATEMENTS</td>
<td></td>
</tr>
<tr>
<td>PREVENTION</td>
<td>WEAR PROTECTIVE GLOVES. WEAR EYE OR FACE PROTECTION. WASH HANDS THOROUGHLY AFTER HANDLING.</td>
</tr>
<tr>
<td>RESPONSE</td>
<td>IF ON SKIN: WASH WITH PLENTY OF SOAP AND WATER. TAKE OFF CONTAMINATED CLOTHING AND WASH IT BEFORE REUSE. IF SKIN IRRITATION OCCURS: GET MEDICAL ATTENTION. IF IN EYES: RINSE CAUTIOUSLY WITH WATER FOR SEVERAL MINUTES. REMOVE CONTACT LENSES, IF PRESENT AND EASY TO DO. CONTINUE RINISING. IF EYE IRRITATION PERSISTS: GET MEDICAL ATTENTION.</td>
</tr>
<tr>
<td>STORAGE</td>
<td>NOT APPLICABLE.</td>
</tr>
<tr>
<td>DISPOSAL</td>
<td>NOT APPLICABLE.</td>
</tr>
<tr>
<td>HAZARDS NOT OTHERWISE CLASSIFIED</td>
<td>NONE KNOWN.</td>
</tr>
</tbody>
</table>

## Section 3. Composition/information on ingredients

**Substance/mixture**

Mixture
Section 3. Composition/information on ingredients

<table>
<thead>
<tr>
<th>Hazardous ingredients Name</th>
<th>%</th>
<th>CAS number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Propylene Glycol</td>
<td>≥5 - &lt;10</td>
<td>57-55-6</td>
</tr>
<tr>
<td>Quaternary ammonium compounds, benzyl-C8-18-alkyldimethyl, chlorides</td>
<td>≥1 - &lt;3</td>
<td>68391-01-5</td>
</tr>
<tr>
<td>Rayon</td>
<td>25 - 50</td>
<td>9004-34-6</td>
</tr>
<tr>
<td>Polyester</td>
<td>10 - 25</td>
<td>25038-59-9</td>
</tr>
<tr>
<td>Binder</td>
<td>10 - 25</td>
<td>-</td>
</tr>
<tr>
<td>Additive</td>
<td>0.3 - 1</td>
<td>-</td>
</tr>
<tr>
<td>Coloring agents</td>
<td>0 - 0.1</td>
<td>25956-17-6</td>
</tr>
</tbody>
</table>

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.

Inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Skin contact: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion: Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact: Causes serious eye irritation.

Inhalation: No known significant effects or critical hazards.

Skin contact: Causes skin irritation.

Ingestion: No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact: Adverse symptoms may include the following:
- Pain or irritation
- Watering
- Redness

Inhalation: No specific data.

Skin contact: Adverse symptoms may include the following:
- Irritation
- Redness

Ingestion: No specific data.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician: Treat symptomatically.
Section 4. First aid measures

**Protection of first-aiders**: No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

**Extinguishing media**
- Suitable extinguishing media: Use an extinguishing agent suitable for the surrounding fire.
- Unsuitable extinguishing media: None known.

**Specific hazards arising from the chemical**
- Decomposition products may include the following materials:
  - Carbon dioxide
  - Carbon monoxide

**Special protective actions for fire-fighters**: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

**Special protective equipment for fire-fighters**: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

**Personal precautions, protective equipment and emergency procedures**
- For non-emergency personnel: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders: If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials.

**Environmental precautions**: Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

**Methods and materials for containment and cleaning up**
- Spill: Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

**Precautions for safe handling**
- Protective measures: Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
- Advice on general occupational hygiene: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
Section 7. Handling and storage

Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

Control parameters

Ingredient name | Exposure limits
--- | ---
Propylene Glycol | AIHA WEEL (United States, 10/2011).
TWA: 10 mg/m³ 8 hours.

Appropriate engineering controls

Environmental exposure controls

Exposure limits

Appropriate engineering controls

Environmental exposure controls

Individual protection measures

Hygiene measures

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection

Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

Skin protection

Hand protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Body protection

Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin protection

Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection

Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
Section 9. Physical and chemical properties

Physical state: Solid.
Color: Pink
Odor: Not available.
Odor threshold: Not available.
pH: Not available.
Melting point: >260°C (>500°F)
Boiling point: Not applicable.
Flash point: Not available.
Evaporation rate: Not applicable.
Flammability (solid, gas): Not applicable.
Lower and upper explosive (flammable) limits: Not applicable.
Vapor pressure: Not applicable.
Vapor density: Not applicable.
Relative density: Not available.
Solubility: Not available.
Partition coefficient: n-octanol/water: Not applicable.
Auto-ignition temperature: Not available.
Decomposition temperature: Not available.
Viscosity: Not applicable.

Section 10. Stability and reactivity

Reactivity: No specific test data related to reactivity available for this product or its ingredients.

Chemical stability: The product is stable.

Possibility of hazardous reactions: Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid: No specific data.

Incompatible materials: No specific data.

Hazardous decomposition products: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Dose</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Propylene Glycol</td>
<td>LD50 Dermal</td>
<td>Rabbit</td>
<td>20800 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>20 g/kg</td>
<td>-</td>
</tr>
</tbody>
</table>

Irritation/Corrosion
Section 11. Toxicological information

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Score</th>
<th>Exposure</th>
<th>Observation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Propylene Glycol</td>
<td>Eyes - Mild irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>24 hours 500 milligrams</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Eyes - Mild irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>100 milligrams</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Skin - Moderate irritant</td>
<td>Child</td>
<td>-</td>
<td>96 hours 30 Percent continuous</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Skin - Mild irritant</td>
<td>Human</td>
<td>-</td>
<td>168 hours 500 milligrams</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Skin - Moderate irritant</td>
<td>Human</td>
<td>-</td>
<td>72 hours 104 milligrams Intermittent</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Skin - Mild irritant</td>
<td>Woman</td>
<td>-</td>
<td>96 hours 30 Percent</td>
<td>-</td>
</tr>
</tbody>
</table>

**Sensitization**
No known significant effects or critical hazards.

**Mutagenicity**
No known significant effects or critical hazards.

**Carcinogenicity**

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>OSHA</th>
<th>IARC</th>
<th>NTP</th>
</tr>
</thead>
<tbody>
<tr>
<td>titanium dioxide</td>
<td>-</td>
<td>2B</td>
<td>-</td>
</tr>
</tbody>
</table>

**Reproductive toxicity**
No known significant effects or critical hazards.

**Teratogenicity**
No known significant effects or critical hazards.

**Specific target organ toxicity (single exposure)**
No known significant effects or critical hazards.

**Specific target organ toxicity (repeated exposure)**
No known significant effects or critical hazards.

**Aspiration hazard**
Not applicable.

**Symptoms related to the physical, chemical and toxicological characteristics**

- **Eye contact**
  Adverse symptoms may include the following:
  - pain or irritation
  - watering
  - redness

- **Inhalation**
  No specific data.

- **Skin contact**
  Adverse symptoms may include the following:
  - irritation
  - redness

- **Ingestion**
  No specific data.

**Delayed and immediate effects and also chronic effects from short and long term exposure**

**Short term exposure**

- **Potential immediate effects**
  Not applicable.

- **Potential delayed effects**
  Not applicable.
Section 11. Toxicological information

**Long term exposure**
- **Potential immediate effects**: Not applicable.
- **Potential delayed effects**: Not applicable.
- **Potential chronic health effects**: No known significant effects or critical hazards.

**General**: No known significant effects or critical hazards.

**Carcinogenicity**: No known significant effects or critical hazards.

**Mutagenicity**: No known significant effects or critical hazards.

**Teratogenicity**: No known significant effects or critical hazards.

**Developmental effects**: No known significant effects or critical hazards.

**Fertility effects**: No known significant effects or critical hazards.

**Numerical measures of toxicity**

**Acute toxicity estimates**

<table>
<thead>
<tr>
<th>Route</th>
<th>ATE value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral</td>
<td>21413.3 mg/kg</td>
</tr>
<tr>
<td>Dermal</td>
<td>47109.2 mg/kg</td>
</tr>
</tbody>
</table>

Section 12. Ecological information

**Toxicity**

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Propylene Glycol</td>
<td>Acute EC50 &gt;110 ppm Fresh water</td>
<td>Daphnia - Daphnia magna</td>
<td>48 hours</td>
</tr>
<tr>
<td></td>
<td>Acute LC50 1020000 µg/l Fresh water</td>
<td>Crustaceans - Ceriodaphnia dubia</td>
<td>48 hours</td>
</tr>
<tr>
<td></td>
<td>Acute LC50 710000 µg/l Fresh water</td>
<td>Fish - Pimephales promelas</td>
<td>96 hours</td>
</tr>
</tbody>
</table>

**Persistence and degradability**

Not applicable.

**Bioaccumulative potential**

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>LogP&lt;sub&gt;ow&lt;/sub&gt;</th>
<th>BCF</th>
<th>Potential</th>
</tr>
</thead>
<tbody>
<tr>
<td>Propylene Glycol</td>
<td>-1.07</td>
<td>-</td>
<td>low</td>
</tr>
</tbody>
</table>

**Mobility in soil**

- **Soil/water partition coefficient (K<sub>oc</sub>)**: Not applicable.

**Other adverse effects**: No known significant effects or critical hazards.

Section 13. Disposal considerations

**Disposal methods**: The generation of waste should be avoided or minimized wherever possible. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. Dispose of according to all federal, state and local applicable regulations.
Section 14. Transport information

Not regulated.

Section 15. Regulatory information

U.S. Federal regulations

TSCA : All components are listed or exempted.
Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs) : Not listed
Clean Air Act Section 602 Class I Substances : Not listed
Clean Air Act Section 602 Class II Substances : Not listed
SARA 302/304

Composition/information on ingredients

No ingredients were found.

SARA 304 RQ : Not applicable.
SARA 311/312

Classification : Immediate (acute) health hazard

Composition/information on ingredients

<table>
<thead>
<tr>
<th>Name</th>
<th>%</th>
<th>Fire hazard</th>
<th>Sudden release of pressure</th>
<th>Reactive</th>
<th>Immediate (acute) health hazard</th>
<th>Delayed (chronic) health hazard</th>
</tr>
</thead>
</table>

EPA Registration Number : 62401-4

Food contact status : This product complies with 21 CFR 178.1010 (b)(11), 21 CFR 178.1010 (c)(8) and 21 CFR 178.1010 (d). Therefore, when activated by immersion in water, the towels create a sanitizing solution which may be safely used on cleaned and rinsed food-processing equipment and utensils, and on other non-porous food-contact articles.

Canada

WHMIS (Canada) : Not controlled under WHMIS (Canada).

Canadian lists

Canadian NPRI : None of the components are listed.
CEPA Toxic substances : None of the components are listed.

Canada inventory : All components are listed or exempted.

International lists

National inventory

Australia : All components are listed or exempted.
China : All components are listed or exempted.
Europe : All components are listed or exempted.
Japan : Not determined.
Malaysia : Not determined.
New Zealand : All components are listed or exempted.
Philippines : All components are listed or exempted.
Republic of Korea : All components are listed or exempted.
Taiwan : All components are listed or exempted.
Section 16. Other information

History

Date of issue/Date of revision : 12/8/2015
Date of previous issue : 12/8/2015
Version : 13
Key to abbreviations : ATE = Acute Toxicity Estimate
                        BCF = Bioconcentration Factor
                        GHS = Globally Harmonized System of Classification and Labelling of Chemicals
                        IATA = International Air Transport Association
                        IMDG = International Maritime Dangerous Goods
                        LogPow = logarithm of the octanol/water partition coefficient
                        UN = United Nations

Indicates information that has changed from previously issued version.

Notice to reader

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