1. Product and Company Identification

Product Name: VIVID® - Color Safe Bleach
UPC CODES: Refer to Section 16
CAS #: Mixture
Product use: Bleach
Manufacturer: Reckitt Benckiser
Morris Corporate Center IV
399 Interpace Parkway
P.O. Box 225
Parsippany, NJ 07054-0225

In Case of Emergency: 1-800-228-4722
Transportation Emergencies: 24 Hour Number:
North America: CHEMTREC: 1-800-424-9300
Outside North America: 1-703-527-3887

2. Hazards Identification

Emergency overview

WARNING
RISK OF SERIOUS DAMAGE TO EYES. SKIN IRRITANT. AVOID CONTACT WITH EYES AND SKIN.

KEEP OUT OF REACH OF CHILDREN.

Potential short term health effects

Routes of exposure
Eye, Skin contact, Inhalation, Ingestion.

Eyes
Risk of serious damage to eyes.

Skin
Irritating to skin.

Inhalation
None expected during normal conditions of use.

Ingestion
Health injuries are not known or expected under normal use.

Target organs
Eyes. Respiratory system. Skin.

Chronic effects
The finished product is not expected to have chronic health effects.

Signs and symptoms
Symptoms may include redness, edema, drying, defatting and cracking of the skin.

3. Composition / Information on Ingredients

<table>
<thead>
<tr>
<th>Ingredient(s)</th>
<th>CAS #</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alcohols, C12-16, ethoxylated</td>
<td>68551-12-2</td>
<td>2.5 - 10</td>
</tr>
<tr>
<td>Benzenesulfonic acid, C10-16-alkyl derivatives</td>
<td>68584-22-5</td>
<td>2.5 - 10</td>
</tr>
<tr>
<td>Hydrogen peroxide</td>
<td>7722-84-1</td>
<td>2.5 - 10</td>
</tr>
<tr>
<td>Magnesium sulfate heptahydrate</td>
<td>10034-99-8</td>
<td>1 - 2.5</td>
</tr>
</tbody>
</table>

4. First Aid Measures

First aid procedures

Eye contact
In case of eye contact, IMMEDIATELY rinse eyes with water. Remove any contact lenses and continue rinsing eyes for a least 15 minutes.
Skin contact
After contact with skin, wash immediately with plenty of water. If irritation persists, get medical attention.

Inhalation
Move to fresh air.

Ingestion
If swallowed, rinse mouth with water (only if the person is conscious). Do not induce vomiting. Call a physician or Poison Control Centre immediately.

Notes to physician

General advice
If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Avoid contact with eyes and skin. Keep out of reach of children.

5. Fire Fighting Measures

<table>
<thead>
<tr>
<th>Flammable properties</th>
<th>Not flammable by OSHA criteria.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extinguishing media</td>
<td></td>
</tr>
<tr>
<td>Suitable extinguishing media</td>
<td>Treat for surrounding material.</td>
</tr>
<tr>
<td>Unsuitable extinguishing media</td>
<td>Not available</td>
</tr>
<tr>
<td>Protection of firefighters</td>
<td></td>
</tr>
<tr>
<td>Specific hazards arising from the chemical</td>
<td>Not available</td>
</tr>
<tr>
<td>Protective equipment for firefighters</td>
<td>Firefighters should wear full protective clothing including self contained breathing apparatus.</td>
</tr>
<tr>
<td>Hazardous combustion products</td>
<td>May include and are not limited to: Oxides of carbon.</td>
</tr>
<tr>
<td>Explosion data</td>
<td></td>
</tr>
<tr>
<td>Sensitivity to mechanical impact</td>
<td>Not available</td>
</tr>
<tr>
<td>Sensitivity to static discharge</td>
<td>Not available</td>
</tr>
</tbody>
</table>

6. Accidental Release Measures

<table>
<thead>
<tr>
<th>Personal precautions</th>
<th>Keep unnecessary personnel away. Do not touch or walk through spilled material. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep people away from and upwind of spill/leak.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methods for containment</td>
<td>Stop leak if you can do so without risk. Prevent entry into waterways, sewers, basements or confined areas.</td>
</tr>
<tr>
<td>Methods for cleaning up</td>
<td>Before attempting clean up, refer to hazard data given above. Small spills may be absorbed with non-reactive absorbent and placed in suitable, covered, labelled containers. Prevent large spills from entering sewers or waterways. Contact emergency services and supplier for advice. Never return spills in original containers for re-use.</td>
</tr>
</tbody>
</table>

7. Handling and Storage

<table>
<thead>
<tr>
<th>Handling</th>
<th>Avoid contact with eyes and skin. Use good industrial hygiene practices in handling this material. When using do not eat or drink. Use according to package label instructions.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Storage</td>
<td>Keep out of reach of children. Store in a cool dry place inaccessible to children and pets.</td>
</tr>
</tbody>
</table>
## 8. Exposure Controls / Personal Protection

<table>
<thead>
<tr>
<th>Ingredient(s)</th>
<th>Exposure Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Alcohols, C12-16, ethoxylated</strong></td>
<td>ACGIH-TLV Not established</td>
</tr>
<tr>
<td></td>
<td>OSHA-PEL Not established</td>
</tr>
<tr>
<td><strong>Benzenesulfonic acid, C10-16-alkyl derivatives</strong></td>
<td>ACGIH-TLV Not established</td>
</tr>
<tr>
<td></td>
<td>OSHA-PEL Not established</td>
</tr>
<tr>
<td><strong>Hydrogen peroxide</strong></td>
<td>ACGIH-TLV TWA: 1 ppm</td>
</tr>
<tr>
<td></td>
<td>OSHA-PEL TWA: 1 ppm</td>
</tr>
<tr>
<td><strong>Magnesium sulfate heptahydrate</strong></td>
<td>ACGIH-TLV Not established</td>
</tr>
<tr>
<td></td>
<td>OSHA-PEL Not established</td>
</tr>
</tbody>
</table>

**Engineering controls**

General ventilation normally adequate.

**Personal protective equipment**

**Eye / face protection**

No special requirements under normal use conditions. Avoid contact with eyes. If splashes are likely to occur, wear: tightly fitting safety goggles. Emergency responders should wear full eye and face protection.

**Hand protection**

No special requirements under normal use conditions. Avoid contact with the skin. For sensitive skin or prolonged use, wear rubber gloves. Emergency responders should wear impermeable gloves.

**Skin and body protection**

Follow label directions carefully. Emergency responders should wear impermeable clothing and footwear when responding to a situation where contact with the liquid is possible.

**Respiratory protection**

No special requirements under normal use conditions. Emergency responders should wear self-contained breathing apparatus (SCBA) to avoid inhalation of vapours generated by this product during a spill or other clean-up operations.

**General hygiene considerations**

Avoid contact with eyes. Avoid contact with skin. Washing with soap and water after use is recommended as good hygienic practice to prevent possible eye irritation from hand contact.

## 9. Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Clear</td>
</tr>
<tr>
<td>Color</td>
<td>Colorless</td>
</tr>
<tr>
<td>Form</td>
<td>Liquid</td>
</tr>
<tr>
<td>Odor</td>
<td>Floral</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>Not available</td>
</tr>
<tr>
<td>Physical state</td>
<td>Liquid</td>
</tr>
<tr>
<td>pH</td>
<td>3.4 - 4.4</td>
</tr>
<tr>
<td>Freezing point</td>
<td>Not available</td>
</tr>
<tr>
<td>Pour point</td>
<td>Not available</td>
</tr>
<tr>
<td>Boiling point</td>
<td>Not available</td>
</tr>
<tr>
<td>Flash point</td>
<td>&gt; 200 °F (&gt; 93.33 °C)</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Not available</td>
</tr>
</tbody>
</table>
Flammability limits in air, lower, % by volume: Not available
Flammability limits in air, upper, % by volume: Not available
Vapor pressure: Not determined
Vapor density: Not available
Specific gravity: 1.02
Octanol/water coefficient: Not available
Solubility (H2O): Complete
Auto-ignition temperature: Not available

10. Stability and Reactivity

Chemical stability: Stable under recommended storage conditions.
Conditions to avoid: Do not mix with other chemicals. Heat, flames and sparks. Exposure to moisture.
Hazardous decomposition products: May include and are not limited to: Oxides of carbon.
Possibility of hazardous reactions: Hazardous polymerization does not occur.

11. Toxicological Information

Component analysis - LC50

<table>
<thead>
<tr>
<th>Ingredient(s)</th>
<th>LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alcohols, C12-16, ethoxylated</td>
<td>Not available</td>
</tr>
<tr>
<td>Benzenesulfonic acid, C10-16-alkyl derivatives</td>
<td>Not available</td>
</tr>
<tr>
<td>Hydrogen peroxide</td>
<td>Not available</td>
</tr>
<tr>
<td>Magnesium sulfate heptahydrate</td>
<td>Not available</td>
</tr>
</tbody>
</table>

Component analysis - Oral LD50

<table>
<thead>
<tr>
<th>Ingredient(s)</th>
<th>LD50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alcohols, C12-16, ethoxylated</td>
<td>1380 mg/kg rat</td>
</tr>
<tr>
<td>Benzenesulfonic acid, C10-16-alkyl derivatives</td>
<td>530 mg/kg rat</td>
</tr>
<tr>
<td>Hydrogen peroxide</td>
<td>75 mg/kg rat; 2000 mg/kg mouse</td>
</tr>
<tr>
<td>Magnesium sulfate heptahydrate</td>
<td>Not available</td>
</tr>
</tbody>
</table>

Effects of acute exposure

- Eye: Risk of serious damage to eyes.
- Skin: Irritating to skin.
- Inhalation: None expected during normal conditions of use.
- Ingestion: Health injuries are not known or expected under normal use.
- Sensitization: The finished product is not expected to have chronic health effects.
- Chronic effects: The finished product is not expected to have chronic health effects.
- Carcinogenicity: The finished product is not expected to have chronic health effects.

ACGIH - Threshold Limit Values - Carcinogens

<table>
<thead>
<tr>
<th>Substance</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrogen peroxide</td>
<td>A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans</td>
</tr>
</tbody>
</table>

IARC - Group 3 (Not Classifiable)

<table>
<thead>
<tr>
<th>Substance</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrogen peroxide</td>
<td>Monograph 71 [1999]; Supplement 7 [1987]; Monograph 36 [1985]</td>
</tr>
</tbody>
</table>

Mutagenicity

The finished product is not expected to have chronic health effects.

Reproductive effects

The finished product is not expected to have chronic health effects.

Teratogenicity

The finished product is not expected to have chronic health effects.

Synergistic Materials

Not available
12. Ecological Information

Ecotoxicity - Freshwater Algae Data
Hydrogen peroxide 7722-84-1 72 Hr EC50 Chlorella vulgaris: 2.5 mg/L

Ecotoxicity - Freshwater Fish Species Data
Benzenesulfonic acid, C10-16-alkyl derivatives 68584-22-5 96 Hr LC50 Oncorhynchus mykiss: 3 mg/L [static]
Hydrogen peroxide 7722-84-1 96 Hr LC50 Pimephales promelas: 16.4 mg/L; 96 Hr LC50 Lepomis macrochirus: 18-56 mg/L [static]; 96 Hr LC50 Oncorhynchus mykiss: 10.0-32.0 mg/L [static]

Ecotoxicity - Microtox Data
Benzenesulfonic acid, C10-16-alkyl derivatives 68584-22-5 6 Hr EC50 Pseudomonas fluorescens: 5 mg/L

Ecotoxicity - Water Flea Data
Benzenesulfonic acid, C10-16-alkyl derivatives 68584-22-5 48 Hr EC50 Daphnia magna: 2.9 mg/L
Hydrogen peroxide 7722-84-1 24 Hr EC50 Daphnia magna: 7.7 mg/L; 48 Hr EC50 Daphnia magna: 18 - 32 mg/L [Static]

Environmental effects
Not available
Aquatic toxicity
Not available
Persistence / degradability
Not available
Bioaccumulation / accumulation
Not available
Partition coefficient
Not available
Mobility in environmental media
Not available
Chemical fate information
Not available

13. Disposal Considerations

Waste codes
Not available
Disposal instructions
Dispose in accordance with all applicable regulations. Empty liquid container can be discarded in the trash or recycled where appropriate.

Waste from residues / unused products
Not available
Contaminated packaging
Not available

14. Transport Information

UN/ID N.o.
Not applicable
U.S. Department of Transportation (DOT): Classification: Not regulated
Proper shipping name
Not applicable
U.S. DOT Hazard Class
Not applicable
Subsidiary Risk
Not applicable
Packing group
Not applicable
DOT RQ (lbs)
Not applicable
ERG NO
Not applicable
Transportation of Dangerous Goods (TDG - Canada): Classification: Not regulated
Proper shipping name  Not applicable
Status  Not applicable
Packing group  Not applicable

IMDG (Marine Transport): Classification: Not regulated
Proper shipping name  Not applicable
Class  Not applicable
Subsidiary Risk  Not applicable
Packing group  Not applicable
IMDG Page  Not applicable
Marine pollutant  Not applicable
EMS  Not applicable
MFAG  Not applicable
Maximum Quantity  Not applicable

IATA/ICAO (Air): Classification: Not regulated
Proper shipping name  Not applicable
Class  Not applicable
Subsidiary Risk:  Not applicable
Packing group  Not applicable
Maximum Quantity  Not applicable

15. Regulatory Information

US Federal regulations  This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances EPCRA RQs
Hydrogen peroxide  7722-84-1  1000 Lb EPCRA RQ (concentration >52%)

U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances TPQs
Hydrogen peroxide  7722-84-1  1000 Lb TPQ (concentration >52%)

Occupational Safety and Health Administration (OSHA)
29 CFR 1910.1200 hazardous chemical  Yes
Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories
- Immediate Hazard - Yes
- Delayed Hazard - No
- Fire Hazard - No
- Pressure Hazard - No
- Reactivity Hazard - No

Section 302 extremely hazardous substance - No
Section 311 hazardous chemical - Yes

Clean Air Act (CAA) - Not available
Clean Water Act (CWA) - Not available

State regulations
- This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

U.S. - California - 8 CCR Section 339 - Director's List of Hazardous Substances
- Hydrogen peroxide 7722-84-1 Present

U.S. - Massachusetts - Right To Know List
- Hydrogen peroxide 7722-84-1 Extraordinarily hazardous

U.S. - Minnesota - Hazardous Substance List
- Hydrogen peroxide 7722-84-1 Present (includes Hydrogen Peroxide [90%])

U.S. - New Jersey - Right to Know Hazardous Substance List
- Hydrogen peroxide 7722-84-1 sn 1015

U.S. - New York - Reporting of Releases Part 597 - List of Hazardous Substances
- Hydrogen peroxide 7722-84-1 1 Lb RQ (air); 1 lb RQ (land/water)

U.S. - Ohio - Extremely Hazardous Substances - Threshold Quantities
- Hydrogen peroxide 7722-84-1 500 Lb TQ (concentration >52%)

U.S. - Pennsylvania - RTK (Right to Know) List
- Hydrogen peroxide 7722-84-1 Environmental hazard (concentration >52%)

U.S. - Rhode Island - Hazardous Substance List
- Hydrogen peroxide 7722-84-1 Toxic; Flammable

U.S. - Texas - Tier II Chemical Reporting - Extremely Hazardous Substances - Reportable Quantities
- Hydrogen peroxide 7722-84-1 1000 Lb RQ

U.S. - Texas - Tier II Chemical Reporting - Extremely Hazardous Substances - Threshold Planning Quantities
- Hydrogen peroxide 7722-84-1 1000 Lb TPQ (concentration >52%)

Inventory status
- United States & Puerto Rico Toxic Substances Control Act (TSCA) Inventory - On inventory (yes/no)* Yes

A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s).

16. Other Information

Disclaimer
- This product should only be used as directed on the label and for the purpose intended. To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

Further information
- 62338-81993 - VIVID® - Color Safe Bleach - 40 oz. - 0191046
- 62338-81994 - VIVID® - Color Safe Bleach - 75 oz. - 0191046

Issue date
- 01-Feb-2010

Effective date
- 01-Feb-2010

Prepared by
- Reckitt Benckiser Regulatory Department 800-333-3899

Other information
- For an updated MSDS, please contact the supplier/manufacturer listed on the first page of the document.