1. Product and Company Identification

<table>
<thead>
<tr>
<th>Product Name</th>
<th>Professional VANI-SOL® High Acid Bowl Cleanse Ready-to-use</th>
</tr>
</thead>
<tbody>
<tr>
<td>UPC CODES</td>
<td>Refer to Section 16</td>
</tr>
<tr>
<td>CAS #</td>
<td>Mixture</td>
</tr>
<tr>
<td>Product use</td>
<td>Toilet bowl cleaner</td>
</tr>
<tr>
<td>Distributed by</td>
<td>Reckitt Benckiser</td>
</tr>
<tr>
<td></td>
<td>Morris Corporate Center IV</td>
</tr>
<tr>
<td></td>
<td>399 Interpace Parkway</td>
</tr>
<tr>
<td></td>
<td>P.O. Box 225</td>
</tr>
<tr>
<td></td>
<td>Parsippany, NJ 07054-0225</td>
</tr>
<tr>
<td>In Case of Emergency:</td>
<td>1-800-228-4722</td>
</tr>
<tr>
<td>Transportation Emergencies:</td>
<td>24 Hour Number:</td>
</tr>
<tr>
<td></td>
<td>North America: CHEMTREC: 1-800-424-9300</td>
</tr>
<tr>
<td></td>
<td>Outside North America: 1-703-527-3887</td>
</tr>
</tbody>
</table>

2. Hazards Identification

**Emergency overview**
DANGER -- POISON CORROSIVE
FATAL IF SWALLOWED. DO NOT breathe vapor or fumes. Produces chemical burns. Do not get in eyes, on skin or on clothing. Wear goggles or face shield and rubber gloves when handling. DO NOT USE WITH CHLORINE BLEACH OR ANY OTHER CHEMICAL PRODUCTS. Contains 23% hydrochloric acid.

**Potential short term health effects**

- **Routes of exposure**
  - Eye, Skin contact, Inhalation, Ingestion.
- **Eyes**
  - Corrosive to eyes. May cause chemical burns.
- **Skin**
  - Corrosive to skin. May cause chemical burns.
- **Inhalation**
  - Vapor may cause irritation of nose, throat and upper respiratory tract. Do not breathe vapor or fumes.
- **Ingestion**
  - This product may be harmful or fatal if swallowed.
- **Target organs**
  - Eyes. Respiratory system. Skin.
- **Chronic effects**
  - Prolonged or repeated exposure to dilutions can cause drying, defatting and dermatitis.
- **Signs and symptoms**
  - The product causes burns of eyes, skin and mucous membranes.

3. Composition / Information on Ingredients

<table>
<thead>
<tr>
<th>Ingredient(s)</th>
<th>CAS #</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrochloric acid</td>
<td>7647-01-0</td>
<td>20 - 40</td>
</tr>
</tbody>
</table>

4. First Aid Measures

**First aid procedures**

- **Eye contact**
  - In case of eye contact, IMMEDIATELY flush eyes thoroughly with water, remove any contact lenses and continue to flush eyes with plenty of water for at least 15 minutes. Get medical attention immediately.

- **Skin contact**
  - If on skin, IMMEDIATELY flood the surface with water. If irritation persists, get medical attention.
Inhalation
Remove to fresh air. If irritation persists or there is any trouble breathing, get immediate medical attention.

Ingestion
If swallowed, do NOT induce vomiting. IMMEDIATELY drink a glass of water. Get medical attention immediately.

Notes to physician
If the product is ingested, probable mucosal damage may contraindicate the use of gastric lavage. Treat the affected person appropriately. Symptoms may be delayed.

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

Flammable properties
Combustible by OSHA criteria.

Extinguishing media
Suitable extinguishing media

Unsuitable extinguishing media
Not available

Protection of firefighters
Specific hazards arising from the chemical
Not available

Protective equipment for firefighters
Firefighters should wear full protective clothing including self contained breathing apparatus.

Hazardous combustion products
May include and are not limited to: Hydrochloric acid. Oxides of carbon.

Explosion data
Sensitivity to mechanical impact
Not available

Sensitivity to static discharge
Not available

6. Accidental Release Measures

Personal precautions
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.

Methods for containment
Stop leak if you can do so without risk. Prevent entry into waterways, sewers, basements or confined areas.

Methods for cleaning up
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. Large Spills: Wet down with water and dike for later disposal. After removal flush contaminated area thoroughly with water.

7. Handling and Storage

Handling
DANGER
POISON.
Corrosive material. Contains 23% hydrochloric acid. Produces chemical burns. Combustible liquid.
FATAL IF SWALLOWED.
Wear goggles or face shield and rubber gloves when handling. DO NOT USE WITH CHLORINE BLEACH OR ANY OTHER CHEMICAL PRODUCTS.

Storage
Store in original container in areas inaccessible to small children. Keep securely closed away from heat or open flame in a well ventilated area away from food and feed. Fumes are corrosive to metal. Store containers upright and closed.

8. Exposure Controls / Personal Protection

<table>
<thead>
<tr>
<th>Exposure limits</th>
<th>Hydrochloric acid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ingredient(s)</td>
<td>Hydrochloric acid</td>
</tr>
<tr>
<td>ACGIH-TLV</td>
<td>Ceiling: 2 ppm</td>
</tr>
<tr>
<td>OSHA-PEL</td>
<td>Ceiling: 5 ppm</td>
</tr>
</tbody>
</table>
Engineering controls
General ventilation normally adequate.

Personal protective equipment
Eye / face protection
Avoid contact with eyes. Wear chemical goggles. Emergency responders should wear full eye and face protection.

Hand protection
Avoid contact with the skin. Rubber gloves. Confirm with a reputable supplier first. Emergency responders should wear impermeable gloves.

Skin and body protection
Emergency responders should wear impermeable clothing and footwear when responding to a situation where contact with the liquid is possible.

Respiratory protection
Avoid breathing mists or vapors. Where exposure guideline levels may be exceeded, use an approved NIOSH respirator. 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
Handle in accordance with good industrial hygiene and safety practice. When using do not eat or drink. 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>Opaque.</td>
</tr>
<tr>
<td>Color</td>
<td>White.</td>
</tr>
<tr>
<td>Form</td>
<td>Liquid</td>
</tr>
<tr>
<td>Odor</td>
<td>Not available</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>&lt; 1 (Acidic)</td>
</tr>
<tr>
<td>Freezing point</td>
<td>Not available</td>
</tr>
<tr>
<td>Boiling point</td>
<td>Not available</td>
</tr>
<tr>
<td>Pour point</td>
<td>Not available</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Not available</td>
</tr>
<tr>
<td>Flash point</td>
<td>142 - 200 °F (61.11 - 93.33 °C) Tagliabue</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>Not available</td>
</tr>
<tr>
<td>Flammability limits in air, lower, % by volume</td>
<td>Not available</td>
</tr>
<tr>
<td>Flammability limits in air, upper, % by volume</td>
<td>Not available</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>Not available</td>
</tr>
<tr>
<td>Vapor density</td>
<td>Not available</td>
</tr>
<tr>
<td>Specific gravity</td>
<td>Not available</td>
</tr>
<tr>
<td>Octanol/water coefficient</td>
<td>Not available</td>
</tr>
<tr>
<td>Solubility (H2O)</td>
<td>Complete</td>
</tr>
</tbody>
</table>

10. Stability and Reactivity

Chemical stability
Stable under recommended storage conditions.

Conditions to avoid
DO NOT MIX WITH BLEACH or use in conjunction with other household products. Reacts violently with alkaline material. This product may react with reducing agents. Fumes are corrosive to metal.

Incompatible materials
Bases. Reducing agents.

Hazardous decomposition products
May include and are not limited to: Hydrochloric acid.

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>Hydrochloric acid</td>
<td>935 ppm mouse; 3124 mg/l/4h rat</td>
</tr>
</tbody>
</table>
Component analysis - Oral LD50

**Ingredient(s)**

<table>
<thead>
<tr>
<th>Component</th>
<th>LD50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrochloric acid</td>
<td>900 mg/kg rabbit; 700 mg/kg rat</td>
</tr>
</tbody>
</table>

**Effects of acute exposure**

- **Eye**: Corrosive to eyes. May cause chemical burns.
- **Skin**: Corrosive to skin. May cause chemical burns.
- **Inhalation**: Vapor may cause irritation of nose, throat and upper respiratory tract. Do not breathe vapor or fumes.
- **Ingestion**: This product may be harmful or fatal if swallowed.

**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>Component</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrochloric acid</td>
<td>A4 - Not Classifiable as a Human Carcinogen</td>
</tr>
</tbody>
</table>

**IARC - Group 3 (Not Classifiable)**

<table>
<thead>
<tr>
<th>Component</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrochloric acid</td>
<td>Monograph 54 [1992]</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

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**12. Ecological Information**

**Ecotoxicity**: Bulk quantities, if spilled, may be toxic to aquatic organisms, fish, birds and mammals. Control and clean up all exterior spills and prevent liquid from entering any streams, rivers, lakes and all other bodies of water.

<table>
<thead>
<tr>
<th>Ecotoxicity - Freshwater Fish Species Data</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrochloric acid</td>
<td>7647-01-0</td>
</tr>
</tbody>
</table>

**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

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**13. Disposal Considerations**

**Waste codes**: Not available

**Disposal instructions**: Dispose in accordance with all applicable regulations. Do not reuse empty container. Rinse container and offer for recycling where facilities exist.

**Waste from residues / unused products**: Not available

**Contaminated packaging**: Not available
14. Transport Information

U.S. Department of Transportation (DOT)

UN 1789, Hydrochloric Acid Solution, Class 8, PG II,
Re-Classed as Consumer Commodity ORM-D

Transportation of Dangerous Goods (TDG - Canada)

UN 1789, Hydrochloric Acid Solution, Class 8, PG II,
Re-Classed as Consumer Commodity / Limited Quantity

IMDG (Marine Transport)

UN 1789, Hydrochloric Acid Solution, Class 8, PG II,
Limited Quantity

IATA/ICAO (Air)

UN 1789 - Hydrochloric Acid solution, Class 8, PG II
15. Regulatory Information

US Federal regulations
This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. All components are on the U.S. EPA TSCA Inventory List.

Product Registration: Not registered

U.S. - CERCLA/SARA - Hazardous Substances and their Reportable Quantities
Hydrochloric acid 7647-01-0 5000 Lb final RQ; 2270 kg final RQ

U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances EPCRA RQs
Hydrochloric acid 7647-01-0 5000 Lb EPCRA RQ (gas only)

U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances TPQs
Hydrochloric acid 7647-01-0 500 Lb TPQ (gas only)

U.S. - CERCLA/SARA - Section 313 - Emission Reporting
Hydrochloric acid 7647-01-0 1.0 % de minimis concentration (acid aerosols including mists, vapors, gas, fog, and other airborne forms of any particle size)

U.S. - CWA (Clean Water Act) - Hazardous Substances
Hydrochloric acid 7647-01-0 Present

Occupational Safety and Health Administration (OSHA)
29 CFR 1910.1200 hazardous chemical
CERCLA (Superfund) reportable quantity
Hydrochloric acid: 5000.0000

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.

<table>
<thead>
<tr>
<th>Country or region</th>
<th>Inventory name</th>
<th>On inventory (yes/no)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. - California - 8 CCR Section 339 - Director's List of Hazardous Substances</td>
<td>7647-01-0</td>
<td>Present</td>
</tr>
<tr>
<td>U.S. - Illinois - Toxic Air Contaminants</td>
<td>7647-01-0</td>
<td>Present (aerosol)</td>
</tr>
<tr>
<td>U.S. - Louisiana - Reportable Quantity List for Pollutants</td>
<td>7647-01-0</td>
<td>5000 Lb RQ (applies to unauthorized emissions based on total mass emitted into or onto all media within any consecutive 24-hour period); 1000 lb RQ (applies to unauthorized emissions based on total mass emitted into the atmosphere)</td>
</tr>
<tr>
<td>U.S. - Massachusetts - Right To Know List</td>
<td>7647-01-0</td>
<td>Extraordinarily hazardous</td>
</tr>
<tr>
<td>U.S. - Minnesota - Hazardous Substance List</td>
<td>7647-01-0</td>
<td>Present</td>
</tr>
<tr>
<td>U.S. - New Jersey - Right to Know Hazardous Substance List</td>
<td>7647-01-0</td>
<td>sn 1012</td>
</tr>
<tr>
<td>U.S. - New York - Reporting of Releases Part 597 - List of Hazardous Substances</td>
<td>7647-01-0</td>
<td>5000 Lb RQ (air); 100 lb RQ (land/water)</td>
</tr>
<tr>
<td>U.S. - North Carolina - Control of Toxic Air Pollutants</td>
<td>7647-01-0</td>
<td>0.7 mg/m³ (acute irritants)</td>
</tr>
<tr>
<td>U.S. - Ohio - Extremely Hazardous Substances - Threshold Quantities</td>
<td>7647-01-0</td>
<td>500 Lb TQ (gas only)</td>
</tr>
<tr>
<td>U.S. - Pennsylvania - RTK (Right to Know) List</td>
<td>7647-01-0</td>
<td>Environmental hazard</td>
</tr>
<tr>
<td>U.S. - Rhode Island - Hazardous Substance List</td>
<td>7647-01-0</td>
<td>Toxic; Flammable</td>
</tr>
<tr>
<td>U.S. - Texas - Tier II Chemical Reporting - Extremely Hazardous Substances - Reportable Quantities</td>
<td>7647-01-0</td>
<td>5000 Lb RQ</td>
</tr>
<tr>
<td>U.S. - Texas - Tier II Chemical Reporting - Extremely Hazardous Substances - Threshold Planning Quantities</td>
<td>7647-01-0</td>
<td>500 Lb TPQ (gas)</td>
</tr>
</tbody>
</table>

Inventory status

<table>
<thead>
<tr>
<th>Country(s) or region</th>
<th>Inventory name</th>
<th>On inventory (yes/no)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States &amp; Puerto Rico</td>
<td>Toxic Substances Control Act (TSCA) Inventory</td>
<td>Yes</td>
</tr>
</tbody>
</table>

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

36241-02212 - 32 oz. - Professional VANI-SOL® High Acid Bowl Cleanse Ready-to-use - 361765

Issue date

16-Jul-2010

Effective date

15-Jul-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.