SAFETY DATA SHEET

Powerase

This Safety Data Sheet contains information concerning the potential risks to those involved in handling, transporting and working with the material, as well as describing potential risks to the consumer and the environment. This information must be made available to those who may come into contact with the material or are responsible for the use of the material. This Safety Data Sheet is prepared in accordance with formatting described in the REACH Regulation (EC) No 1907/2006, and described in CLP Regulation (EC) No 1272/2008.

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

1.1 Product identifier
Powerase

1.2 Relevant identified uses of the substance or mixture and uses advised against
High alkalinity water based heavy duty tile and grout cleaner

1.3 Details of the supplier of the safety data sheet
United Stonecare Ltd
Unit B Prospect Commercial Park
4 Prospect Road
Alresford
Hampshire
SO24 9QF
Alresford, England, U.K.
Tel: + 44 (0)1962 732433

1.4 Emergency telephone number
Tel. +44 (0) 1244 819939

SECTION 2: Hazards Identification

2.1 Classification of the substance or mixture
Classification in accordance with the Dangerous Preparations Directive 1999/45/EC
Corrosive, C; R35 Causes severe burns.

2.2 Label elements
Labelling in accordance with the Dangerous Preparations Directive 1999/45/EC
Corrosive
R35  Causes severe burns.
S1/2  Keep locked up and out of the reach of children.
S26  In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S37/39 Wear suitable gloves and eye/face protection.
S45  In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

2.3 Other hazards
Contact with skin and eyes may cause severe damage without rapid first aid. Inhalation of spray may cause irritation to the respiratory tract. Ingestion will cause damage to the GI tract.
There are no known long-term health effects resulting from exposure.
The product is not considered as Dangerous to the Environment, although due to the alkaline nature of the product, care should be taken to avoid direct loss to the environment.

SECTION 3: Composition

3.1 Substances
Not relevant – the product is a mixture

3.2 Mixtures

<table>
<thead>
<tr>
<th>Name</th>
<th>CAS No</th>
<th>Concentration</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Hydroxide</td>
<td>1310-73-2</td>
<td>5 – 8</td>
<td>C; R35 in accordance with DSD 67/548/EEC Skin Corr. 1A; H314 In accordance with CLP 1272/2008</td>
</tr>
<tr>
<td>Ethyleneglycol monobutyl ether (2-butoxyethanol)</td>
<td>111-76-2</td>
<td>3 - 5</td>
<td>Xn; R20/21/22; Xi; R36/38 in accordance with DSD 67/548/EEC Acute Tox. 4 H332, Acute Tox. 4 H312, Acute Tox. 4 H302, Eye Irrit. 2 H319, Skin Irrit. 2 H315 In accordance with CLP 1272/2008</td>
</tr>
</tbody>
</table>

Balance: Water and other ingredients.
The other ingredients are each present in less than 1 percent concentration in this product and do not contribute any significant, additional hazards

See section 16 for full description of R phrases and H statements.

SECTION 4: First Aid Measures

4.1 Description of first aid measures

<table>
<thead>
<tr>
<th>EYE CONTACT:</th>
<th>Flush eyes immediately and thoroughly with plenty of water for at least 15 minutes. Seek immediate medical attention.</th>
</tr>
</thead>
<tbody>
<tr>
<td>INHALATION:</td>
<td>If exposed to spray or vapour, move to area of fresh air. If any signs of adverse effect, obtain medical advice.</td>
</tr>
<tr>
<td>SKIN CONTACT:</td>
<td>Wash skin immediately with water and keep affected areas under flowing water. Obtain medical advice if continued signs of irritation or discomfort are noted. Wash clothing before re-use.</td>
</tr>
<tr>
<td>INGESTION:</td>
<td>If swallowed, rinse mouth thoroughly and drink small quantity of water (500 ml). Obtain immediate medical advice.</td>
</tr>
</tbody>
</table>
4.2 Most important symptoms and effects, both acute and delayed

<table>
<thead>
<tr>
<th>EYE CONTACT:</th>
<th>May cause burns.</th>
</tr>
</thead>
<tbody>
<tr>
<td>INHALATION:</td>
<td>Inhalation of sprays and mists may cause severe irritation of the respiratory tract (nose, throat), coughing, breathing difficulties.</td>
</tr>
<tr>
<td>SKIN CONTACT:</td>
<td>May cause burns.</td>
</tr>
<tr>
<td>INGESTION:</td>
<td>May cause burns to the mouth, throat and gastrointestinal tract, pain, vomiting.</td>
</tr>
</tbody>
</table>

4.3 Indication of any immediate medical attention and special treatments needed
Symptomatic treatment as required. Treatment should be consistent with effects from exposure to strong alkali.

SECTION 5: Firefighting Measures

5.1 Extinguishing media
Non-flammable aqueous solution. No known adverse reactions to any normal extinguishing media. Use extinguishing media appropriate to surrounding conditions.

5.2 Special hazards arising from the substance or mixture
Keep fire-exposed containers cool with water spray to prevent rupture due to excessive heat. Prevent run-off from entering streams and watercourses.

5.3 Advice for fire fighters
Fire fighters should wear thermal and chemical protective clothing as appropriate.

SECTION 6: Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures
Wear protective clothing including overall, gloves and eye protection to prevent skin and eye contact. Spillage area may be very slippery. In case of large spill (> 1 litre) remove unnecessary personnel away from area of spill or contamination.

6.2 Environmental precautions
Prevent spilled material or washings entering water courses or storm-water drainage systems. Diluted product and washings may be discharged into foul-water systems leading to waste water treatment plants.

6.3 Methods and materials for containment and clearing up
Spills of up to 1 litre can be rinsed away to waste water drains with large quantities of water. Spills of over 1 litre should be contained and absorbed onto sand, sawdust or other suitable material. Residues should be collected and disposed of as hazardous chemical waste in suitably labelled containers. Careful neutralisation with weak acids may be attempted under expert supervision. The area contaminated by the spill should be washed with water.

6.4 References to other sections
See sections 8 and 13 for further advice on precautions and disposal.
SECTION 7: Handling and Storage

7.1 Precautions for safe handling
Open containers slowly, on a stable surface. Avoid contact with skin and eyes. Do not breathe sprays or mists. Use only in a well-ventilated location. Eye protection, alkaline resistant gloves and coveralls recommended when handling the product. See section 8 for more details. Wash hands with soap and water after handling this material. Do not eat or drink while handling this material.

7.2 Conditions for safe storage, including any incompatibilities
Store containers in a cool, dry location, away from direct sunlight, sources of intense heat, or where freezing is possible. Store containers away from incompatible chemicals. Keep container tightly closed when not in use.

7.3 Specific end uses(s)
Do not spray this product.

SECTION 8. Exposure Controls/Personal Protection

8.1 Control parameters

<table>
<thead>
<tr>
<th>Substance</th>
<th>Long-term exposure limit (8-hr TWA reference period)</th>
<th>Short-term exposure limit (15 minute reference period)</th>
<th>Source, Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-butoxyethanol</td>
<td>25 ppm (123 mg/m³)</td>
<td>50 ppm (246 mg/m³)</td>
<td>EH40, 2007</td>
</tr>
<tr>
<td>Sodium hydroxide</td>
<td>—</td>
<td>2 mg/m³</td>
<td>EH40, 2007</td>
</tr>
</tbody>
</table>

8.2 Exposure controls
Normal chemical handling procedures should be observed. Do not eat, drink or smoke when handling this product. Wash thoroughly after handling.

<table>
<thead>
<tr>
<th>Engineering</th>
<th>Not usually required. Use in well ventilated areas and avoid formation of spray, aerosols or vapours.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respiratory</td>
<td>None required during normal handling.</td>
</tr>
<tr>
<td>Hand protection</td>
<td>Suitable chemical resistant gloves recommended for use with strong alkali. Change gloves in accordance with manufacturer recommendations. If gloves are damaged during use, remove immediately and wash hands before replacing with new gloves.</td>
</tr>
<tr>
<td>Eye Protection</td>
<td>Goggles must be worn when handling this product. Faceshield recommended if splashing is likely.</td>
</tr>
<tr>
<td>Skin protection</td>
<td>Coveralls recommended. These should be changed after use or if contaminated. Wash before re-use.</td>
</tr>
<tr>
<td>Environmental</td>
<td>When handling small quantities (less than 5 litres), no special precautions required. If handling bulk material, precautions should be taken to avoid accidental release to water courses.</td>
</tr>
</tbody>
</table>

SECTION 9: Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Appearance:</th>
<th>Milky light amber liquid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Odour:</td>
<td>Very slight</td>
</tr>
<tr>
<td>Odour threshold:</td>
<td>Not determined</td>
</tr>
<tr>
<td>pH:</td>
<td>13.25 – 13.75</td>
</tr>
<tr>
<td>Melting point:</td>
<td>Similar to water – approximately 0°C</td>
</tr>
</tbody>
</table>
Boiling point: Similar to water – approximately 100°C
Flashpoint: None
Evaporation rate: Similar to water
Flammability: Not applicable
Upper/lower flammability limits: Not applicable
Vapour pressure: Similar to water
Vapour density: Similar to water
Relative density: 1.04°C
Solubility in water: Completely miscible
Solubility in other solvents: Not determined
Partition coefficient (log Kow): Not determined
Autoignition temperature: Not determined
Decomposition temperature: Not determined
Viscosity: No viscous
Explosive properties: Not classified as explosive
Oxidising properties: Not classified as oxidising

9.2 Other information
None

SECTION 10: Stability and Reactivity

10.1 Reactivity
Not considered to be reactive.

10.2 Chemical stability
Stable under normal conditions.

10.3 Possibility of hazardous reactions
May react violently with strong acids, water-reactive materials, organic peroxides and other catalysts.

10.4 Conditions to avoid
Avoid extreme temperatures.

10.5 Incompatible materials
Acids, water-reactive materials, organic peroxides and other catalysts.

10.6 Hazardous decomposition products
None expected under normal conditions of use.

SECTION 11: Toxicological Information

11.1 Information on toxicological effects
This product has not been tested. Judgements on the expected toxicity of this product have been made based upon consideration of its major components.

(a) acute toxicity
Acute effects are expected to be due to the corrosive nature of the sodium hydroxide in this product. 2-butoxyethanol may be absorbed through skin, but the concentration in this product is below levels of concern.
<table>
<thead>
<tr>
<th><strong>(b) skin corrosion/irritation</strong></th>
<th>Considered to be corrosive due to the concentration of sodium hydroxide in the product.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>(c) serious eye damage/irritation</strong></td>
<td>Will cause severe eye damage corrosive due to the concentration of sodium hydroxide in the product.</td>
</tr>
<tr>
<td><strong>(d) respiratory/skin sensitisation</strong></td>
<td>Not considered to be a sensitiser.</td>
</tr>
<tr>
<td><strong>(e) germ cell mutagenicity</strong></td>
<td>Contains no components known to be mutagenic.</td>
</tr>
<tr>
<td><strong>(f) carcinogenicity</strong></td>
<td>Contains no components known to be carcinogenic.</td>
</tr>
<tr>
<td><strong>(g) reproductive toxicity</strong></td>
<td>Contains no components known to be toxic to reproduction.</td>
</tr>
<tr>
<td><strong>(h) STOT-single exposure</strong></td>
<td>Inhalation of spray or aerosol may cause severe irritation to respiratory tract.</td>
</tr>
<tr>
<td><strong>(i) STOT-repeated exposure</strong></td>
<td>None of the components are known to cause specific target organ toxicity effects.</td>
</tr>
<tr>
<td><strong>(j) aspiration hazard</strong></td>
<td>Not classified as hazardous for aspiration toxicity.</td>
</tr>
</tbody>
</table>

**SECTION 12: Ecological Information**

The preparation has not been tested but there are no components present at concentrations that will cause the preparation to be classified as Dangerous to the Environment.

**12.1 Toxicity**
Not considered to be acutely toxic, however releases of significant quantities may cause adverse effects due to change in pH.

LC₅₀s for sodium hydroxide have been reported for fish in the range 35-189 mg/l and for crustaceans in the range 33-450 mg/l. These effects are attributed to the change in pH, and the actual effects of release to the environment will depend upon a variety of factors such as the buffering capacity of the receiving water, and species sensitivity.

**12.2 Persistence and degradability**
None of the components are expected to be persistent. The organic components are all considered to be biodegradable.

**12.3 Bioaccumulative potential**
None of the components are expected to bioaccumulate.

**12.4 Mobility in soil**
The components are all soluble in water.

**12.5 Results of PBT and vPvB assessment**
There are no components considered to be persistent or bioaccumulative.

**12.6 Other adverse effects**
None known.
SECTION 13: Disposal Considerations

13.1 Waste treatment methods
It is recommended to dispose of small quantities of this material (< 5 litres) by flushing with an excess of water to foul drainage. A dilution factor of 100 is recommended. Larger quantities of waste should be treated as chemical waste in a manner that complies with local regulations. Advice should be sought from local agencies. Careful neutralisation with weak acids may be attempted under expert supervision.

The containers should be rinsed thoroughly with water and can be disposed of as non-hazardous waste. Follow supplier recommendations.

SECTION 14: Transport Information

<table>
<thead>
<tr>
<th>UN Number</th>
<th>ADR</th>
<th>IMDG</th>
<th>ICAO</th>
</tr>
</thead>
<tbody>
<tr>
<td>3266</td>
<td>3266</td>
<td>3266</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Proper shipping name</th>
<th>ADR</th>
<th>IMDG</th>
<th>ICAO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corrosive Liquid, Basic Inorganic, n.o.s. (sodium hydroxide)</td>
<td>Corrosive Liquid, Basic Inorganic, n.o.s. (sodium hydroxide)</td>
<td>Corrosive Liquid, Basic Inorganic, n.o.s. (sodium hydroxide)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Transport hazard class(es)</th>
<th>ADR</th>
<th>IMDG</th>
<th>ICAO</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>8</td>
<td>8</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Packing group</th>
<th>ADR</th>
<th>IMDG</th>
<th>ICAO</th>
</tr>
</thead>
<tbody>
<tr>
<td>III</td>
<td>III</td>
<td>III</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Environmental hazards</th>
<th>ADR</th>
<th>IMDG</th>
<th>ICAO</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>None</td>
<td>None</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Special precautions for user</th>
<th>ADR</th>
<th>IMDG</th>
<th>ICAO</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>None</td>
<td>None</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</th>
<th>ADR</th>
<th>IMDG</th>
<th>ICAO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td></td>
</tr>
</tbody>
</table>

SECTION 15: Regulatory Information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
All components are listed as existing substances in Europe

15.2 Chemical Safety Assessment
A Chemical Safety Assessment has not been carried out for this product.

SECTION 16: Other Information

Revision information:
This is a new SDS.

List of Abbreviations used in this SDS:
CAS  Chemical Abstracts Service
CLP  Classification, Labelling and Packaging Regulation (EC) no 1272/2008
DSD  Dangerous Substances Directive 67/548/EEC
DPD  Dangerous Preparations Directive 1999/45/EC
EC  European Community/Commission
PBT Persistent, Bioaccumulative and Toxic
REACH Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) no 1907/2006
vPvB  very Persistent, very Bioaccumulative
References:
Suppliers Safety Data Sheet
ESIS database

Method used for classification of mixtures:
Ingredient based approaches

R Phrases and H Statements used in Section 3
R20/21/22   Harmful by inhalation, in contact with skin and if swallowed.
R35         Causes severe burns
R36/38      Irritating to eyes and skin.
H302        Harmful if swallowed.
H312        Harmful in contact with skin.
H314        Causes severe skin burns and eye damage.
H315        Causes skin irritation.
H319        Causes serious eye irritation.
H332        Harmful if inhaled.

Training requirements for workers
No special training requirements.

For Information Only – forthcoming CLP information:

Classification in accordance with the Classification Labelling and Packaging Regulation EC (no) 1272/2008
Skin Corr. 1A; H314 Causes severe skin burns and eye damage.

Labelling in accordance with the Classification Labelling and Packaging Regulation EC (no) 1272/2008

<table>
<thead>
<tr>
<th>Danger</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>H314</td>
<td>Causes severe skin burns and eye damage.</td>
</tr>
<tr>
<td>P280</td>
<td>Wear protective gloves, protective clothing, eye protection, face protection</td>
</tr>
<tr>
<td>P301</td>
<td>IF SWALLOWED: rinse mouth. Do NOT induce vomiting</td>
</tr>
<tr>
<td>P330</td>
<td>If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing</td>
</tr>
<tr>
<td>P331</td>
<td>If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing</td>
</tr>
<tr>
<td>P310</td>
<td>Immediately call a POISON CENTER or doctor/physician</td>
</tr>
<tr>
<td>P405</td>
<td>Store locked up</td>
</tr>
<tr>
<td>P501</td>
<td>Dispose of contents/container to hazardous waste facility.</td>
</tr>
</tbody>
</table>