Section 1. Identification of the substance/preparation and of the company/undertaking

Product name: BONDERITE C-AK NC20 ALKALINE CLEANER known as NOVACLEAN 20 25KG

Intended use: Alkaline Cleaner for Industrial Application

Supplier:
Henkel Australia Pty Ltd
135-141 Canterbury Road
Kilsyth, Victoria, 3137
Australia

Phone: +61 (3) 9724 6444

Emergency information: 24 HOUR EMERGENCY CONTACT NUMBER: 1800 032 379

Section 2. Hazards identification

Classification of the substance or mixture
Hazardous according to the criteria of Safe Work Australia.

GHS Classification:

<table>
<thead>
<tr>
<th>Hazard Class</th>
<th>Hazard Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corrosive to metals</td>
<td>Category 1</td>
</tr>
<tr>
<td>Skin corrosion</td>
<td>Category 1A</td>
</tr>
<tr>
<td>Serious eye damage/eye irritation</td>
<td>Category 1</td>
</tr>
<tr>
<td>Chronic hazards to the aquatic environment</td>
<td>Category 3</td>
</tr>
</tbody>
</table>

Hazard pictogram:

Signal word: Danger
Hazard statement(s):
H290 May be corrosive to metals.
H314 Causes severe skin burns and eye damage.
H412 Harmful to aquatic life with long lasting effects.

Precautionary Statement(s):
Prevention:
P234 Keep only in original container.
P260 Do not breathe dusts or mists.
P264 Wash hands thoroughly after handling.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P273 Avoid release to the environment.

Response:
P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing.
Rinse skin with water/shower.
P304+P340+P310 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or physician.
P305+P351+P338+P315 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical advice/attention.
P390 Absorb spillage to prevent material damage.
P363 Wash contaminated clothing before reuse.

Storage:
P405 Store locked up.
P406 Store in corrosive resistant container with a resistant inner liner.

Disposal:
P501 Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations.

Classification of material C - Corrosive N - Dangerous for the environment

Risk phrases:
R35 Causes severe burns.
R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety phrases:
S22 Do not breathe dust.
S24/25 Avoid contact with skin and eyes.
S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S28 After contact with skin, wash immediately with plenty of water.
S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
S45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
S46 If swallowed, seek medical advice immediately and show this container or label.
S60 This material and its container must be disposed of as hazardous waste.

Dangerous Goods information:
Classified as Dangerous Goods according to the criteria of the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG Code).

Signal word:
HAZARDOUS

Section 3. Composition / information on ingredients

General chemical description: Mixture
Identity of ingredients:

<table>
<thead>
<tr>
<th>Chemical ingredients</th>
<th>CAS-No.</th>
<th>Proportion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium hydroxide</td>
<td>1310-73-2</td>
<td>30– 60 %</td>
</tr>
<tr>
<td>Disodium metasilicate</td>
<td>6834-92-0</td>
<td>&lt; 20 %</td>
</tr>
<tr>
<td>sodium carbonate</td>
<td>497-19-8</td>
<td>&lt; 20 %</td>
</tr>
<tr>
<td>Poly(oxy-1,2-ethanediyl), a-(4-nonylphenyl)-w-hydroxy-, branched</td>
<td>127087-87-0</td>
<td>&lt; 5 %</td>
</tr>
<tr>
<td>Benzenesulfonic acid, mono-C(10-16-alkyl) derivs., sodium salts</td>
<td>68081-81-2</td>
<td>&lt; 5 %</td>
</tr>
<tr>
<td>non hazardous ingredients~</td>
<td></td>
<td>10– 30 %</td>
</tr>
</tbody>
</table>

Section 4. First aid measures

**Ingestion:**
Do not induce vomiting. Have victim rinse mouth thoroughly with water. Get immediate medical attention.

**Skin:**
In case of contact, immediately remove contaminated clothing and flush skin with copious amounts of water. Get immediate medical attention.

**Eyes:**
Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get immediate medical attention.

**Inhalation:**
Immediately remove victim to fresh air. Keep warm and in a quiet place. Get immediate medical attention.

**First Aid facilities:**
Eye wash and safety shower
Normal washroom facilities

**Medical attention and special treatment:**
Treat symptomatically.

Section 5. Fire fighting measures

**Suitable extinguishing media:**
Water spray (fog), foam, dry chemical or carbon dioxide.

**Improper extinguishing media:**
High pressure waterjet

**Combustion behaviour:**
Non-combustible.

**Decomposition products in case of fire:**
Thermal decomposition can lead to release of irritating gases and vapors. Carbon monoxide. Carbon dioxide. phosphorus oxides Decomposition products include oxides of sodium.

**Particular danger in case of fire:**
May react with metals to form flammable hydrogen gas.

**Special protective equipment for fire-fighters:**
Wear protective equipment.
Fire fighters should wear positive pressure self-contained breathing apparatus (SCBA).

**Additional fire fighting advice:**
In case of fire, keep containers cool with water spray. Collect contaminated fire fighting water separately. It must not enter drains.

**Hazchem code:**
2X
Section 6. Accidental release measures

Personal precautions:
- Avoid dust formation.
- Avoid skin and eye contact.
- Wear appropriate personal protective equipment.
- Keep unprotected persons away.
- Avoid contact with incompatible materials.

Environmental precautions:
- Do not empty into drains / surface water / ground water.

Clean-up methods:
- Sweep up spilled material and place in a closed container for disposal. Avoid creating dust.
- Dispose of according to Federal, State and local governmental regulations.

Section 7. Handling and storage

Precautions for safe handling:
- Use only in well-ventilated areas.
- Do not breathe dust.
- Avoid skin and eye contact.
- Wear suitable protective clothing, safety glasses and gloves.

Conditions for safe storage:
- Ensure adequate ventilation.
- Store in sealed original container.
- Store in a cool, well-ventilated place.
- Avoid moisture
- Store away from acids

Section 8. Exposure controls / personal protection

National exposure standards:

<table>
<thead>
<tr>
<th>Ingredient [Regulated substance]</th>
<th>form of exposure</th>
<th>TWA (ppm)</th>
<th>TWA (mg/m³)</th>
<th>Peak Limit. (ppm)</th>
<th>Peak Limit. (mg/m³)</th>
<th>STEL (ppm)</th>
<th>STEL (mg/m³)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SODIUM HYDROXIDE 1310-73-2</td>
<td>-</td>
<td>-</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Engineering controls:
- Use local exhaust ventilation if the potential for airborne exposure exists.

Eye protection:
- For eye protection, use tightly fitted safety goggles and a face-shield

Skin protection:
- Protective clothing that covers arms and legs.
- Impervious gloves should be used at all times when handling this product.
- Wear PVC, butyl, neoprene or nitrile rubber gloves.

Please note that in practice the working life of chemical resistant gloves may be considerably reduced as a result of many influencing factors (e.g. temperature). Suitable risk assessment should be carried out by the end user. If signs of wear and tear are noticed then the gloves should be replaced.

Respiratory protection:
- If inhalation risk exists, wear a respirator or air supplied mask complying with the requirements of AS/NZS 1715 and AS/NZS 1716.

Section 9. Physical and chemical properties
Appearance: Tan powder
Odor: Mild surfactant
pH: Alkaline
Solubility in water: Soluble

Section 10. Stability and reactivity

Stability: Stable under normal conditions of temperature and pressure.
Conditions to avoid: Avoid moisture. Extremes of temperature.

Hazardous decomposition products: Thermal decomposition can lead to release of irritating gases and vapors. Carbon monoxide. Carbon dioxide. Phosphorus oxides. Decomposition products include oxides of sodium.

Section 11. Toxicological information
Health Effects:

**Ingestion:** Irritation and corrosive action can occur in the mouth, stomach tissue and digestive tract if swallowed.

Ingestion can cause gastrointestinal irritation, nausea, vomiting and diarrhea.

**Skin:** Corrosive to skin.

This product is severely irritating to the skin and may cause burns.

Contact can cause severe, slow-healing burns and redness itching, pain, swelling and rash.

**Eyes:** Causes serious eye damage.

Corrosive to the eyes and may cause severe damage including blindness.

Contact with the eyes may cause moderate to severe eye injury. Eye contact may result in corneal injury. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva.

**Inhalation:** May cause severe irritation.

Inhalation of dusts of this product may cause severe irritation and burns to the respiratory tract.

### Acute toxicity:

<table>
<thead>
<tr>
<th>Hazardous components</th>
<th>Value type</th>
<th>Value</th>
<th>Route of application</th>
<th>Exposure time</th>
<th>Species</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium hydroxide 1310-73-2</td>
<td>LDLo</td>
<td>500 mg/kg</td>
<td>oral</td>
<td>2 h</td>
<td>rabbit</td>
<td>Expert judgement</td>
</tr>
<tr>
<td>sodium carbonate 497-19-8</td>
<td>LD50</td>
<td>2,800 mg/kg</td>
<td>oral inhalation</td>
<td>2 h</td>
<td>rat</td>
<td></td>
</tr>
<tr>
<td></td>
<td>acute toxicity estimate (ATE) LC50 LD50</td>
<td>&gt; 2,000 mg/kg</td>
<td>inhalation dermal</td>
<td></td>
<td>rat</td>
<td></td>
</tr>
<tr>
<td>Sodium hydroxide 1310-73-2</td>
<td>LDLo</td>
<td>500 mg/kg</td>
<td>oral</td>
<td>2 h</td>
<td>rabbit</td>
<td>Expert judgement</td>
</tr>
<tr>
<td>sodium carbonate 497-19-8</td>
<td>LD50</td>
<td>2,800 mg/kg</td>
<td>oral inhalation</td>
<td>2 h</td>
<td>rat</td>
<td></td>
</tr>
<tr>
<td></td>
<td>acute toxicity estimate (ATE) LC50 LD50</td>
<td>&gt; 2,000 mg/kg</td>
<td>inhalation dermal</td>
<td></td>
<td>rat</td>
<td></td>
</tr>
</tbody>
</table>

### Skin corrosion/irritation:

<table>
<thead>
<tr>
<th>Hazardous components</th>
<th>Result</th>
<th>Exposure time</th>
<th>Species</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disodium metasilicate 6834-92-0</td>
<td>corrosive</td>
<td>4 h</td>
<td>rabbit</td>
<td>OECD Guideline 404 (Acute Dermal Irritation / Corrosion)</td>
</tr>
<tr>
<td>sodium carbonate 497-19-8</td>
<td>not irritating</td>
<td>4 h</td>
<td>rabbit</td>
<td>OECD Guideline 404 (Acute Dermal Irritation / Corrosion)</td>
</tr>
</tbody>
</table>

### Serious eye damage/irritation:

<table>
<thead>
<tr>
<th>Hazardous components</th>
<th>Result</th>
<th>Exposure time</th>
<th>Species</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium hydroxide 1310-73-2</td>
<td>corrosive</td>
<td></td>
<td>rabbit</td>
<td>OECD Guideline 405 (Acute Eye Irritation / Corrosion)</td>
</tr>
<tr>
<td>sodium carbonate 497-19-8</td>
<td>irritating</td>
<td></td>
<td>rabbit</td>
<td></td>
</tr>
</tbody>
</table>

### Respiratory or skin sensitization:

<table>
<thead>
<tr>
<th>Hazardous components</th>
<th>Result</th>
<th>Test type</th>
<th>Species</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium hydroxide 1310-73-2</td>
<td>not sensitising</td>
<td>Patch-Test</td>
<td>human</td>
<td></td>
</tr>
</tbody>
</table>
Germ cell mutagenicity:

<table>
<thead>
<tr>
<th>Hazardous components</th>
<th>Result</th>
<th>Type of study / Route of administration</th>
<th>Metabolic activation / Exposure time</th>
<th>Species</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium hydroxide</td>
<td>negative</td>
<td>bacterial reverse mutation assay (e.g. Ames test)</td>
<td>no data</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disodium metasilicate</td>
<td>negative</td>
<td>bacterial reverse mutation assay (e.g. Ames test)</td>
<td>with and without</td>
<td></td>
<td>OECD Guideline 471 (Bacterial Reverse Mutation Assay)</td>
</tr>
<tr>
<td>Sodium carbonate</td>
<td>negative</td>
<td>bacterial reverse mutation assay (e.g. Ames test)</td>
<td>with</td>
<td></td>
<td>Ames Test</td>
</tr>
</tbody>
</table>

Repeated dose toxicity:

<table>
<thead>
<tr>
<th>Hazardous components</th>
<th>Result</th>
<th>Route of application</th>
<th>Exposure time / Frequency of treatment</th>
<th>Species</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disodium metasilicate</td>
<td>NOAEL=792 mg/kg</td>
<td>oral: drinking water</td>
<td>2 years continuous</td>
<td>rat</td>
<td></td>
</tr>
</tbody>
</table>
General ecological information: Because of the high pH of this product, it would be expected to produce significant ecotoxicity upon exposure to aquatic organisms and aquatic systems. Do not empty into drains / surface water / ground water.

Ecotoxicity: Harmful to aquatic life with long lasting effects.

Toxicity:

<table>
<thead>
<tr>
<th>Hazardous components CAS-No.</th>
<th>Value type</th>
<th>Value</th>
<th>Acute Toxicity Study</th>
<th>Exposure time</th>
<th>Species</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium hydroxide 1310-73-2</td>
<td>LC50</td>
<td>189 mg/l</td>
<td>Fish</td>
<td>48 h</td>
<td>Leuciscus idus melanotus</td>
<td>OECD Guideline 203 (Fish, Acute Toxicity Test)</td>
</tr>
<tr>
<td>Sodium hydroxide 1310-73-2</td>
<td>EC50</td>
<td>&gt; 100 mg/l</td>
<td>Daphnia</td>
<td>48 h</td>
<td>Daphnia sp.</td>
<td>OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)</td>
</tr>
<tr>
<td>Sodium hydroxide 1310-73-2</td>
<td>EC0</td>
<td>&gt; 100 mg/l</td>
<td>Bacteria</td>
<td>30 min</td>
<td></td>
<td>DIN 38412, part 27 (Bacterial oxygen consumption test)</td>
</tr>
<tr>
<td>Disodium metasilicate 6834-92-0</td>
<td>LC50</td>
<td>210 mg/l</td>
<td>Fish</td>
<td>96 h</td>
<td>Brachydanio rerio (new name: Danio rerio)</td>
<td>OECD Guideline 203 (Fish, Acute Toxicity Test)</td>
</tr>
<tr>
<td>Disodium metasilicate 6834-92-0</td>
<td>EC50</td>
<td>1,700 mg/l</td>
<td>Daphnia</td>
<td>48 h</td>
<td>Daphnia magna</td>
<td>OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)</td>
</tr>
<tr>
<td>Disodium metasilicate 6834-92-0</td>
<td>EC0</td>
<td>36 mg/l</td>
<td>Algae</td>
<td>72 h</td>
<td>Scenedesmus subspicatus (new name: Desmodesmus subspicatus)</td>
<td>DIN 38412-09</td>
</tr>
<tr>
<td>Disodium metasilicate 6834-92-0</td>
<td>EC50</td>
<td>213 mg/l</td>
<td>Algae</td>
<td>72 h</td>
<td>Scenedesmus subspicatus (new name: Desmodesmus subspicatus)</td>
<td>DIN 38412-09</td>
</tr>
<tr>
<td>Disodium metasilicate 6834-92-0</td>
<td>EC0</td>
<td>1,000 mg/l</td>
<td>Bacteria</td>
<td>30 min</td>
<td></td>
<td>OECD Guideline 203 (Fish, Acute Toxicity Test)</td>
</tr>
<tr>
<td>Sodium carbonate 497-19-8</td>
<td>LC50</td>
<td>300 mg/l</td>
<td>Fish</td>
<td>96 h</td>
<td>Lepomis macrochirus</td>
<td>OECD Guideline 201 (Alga, Growth Inhibition Test)</td>
</tr>
<tr>
<td>sodium carbonate 497-19-8</td>
<td>EC50</td>
<td>200 - 227 mg/l</td>
<td>Daphnia</td>
<td>48 h</td>
<td>Ceriodaphnia sp.</td>
<td>OECD Guideline 201 (Alga, Growth Inhibition Test)</td>
</tr>
<tr>
<td>sodium carbonate 497-19-8</td>
<td>EC50</td>
<td>137 mg/l</td>
<td>Algae</td>
<td>5 d</td>
<td>Nitzschia sp.</td>
<td>OECD Guideline 201 (Alga, Growth Inhibition Test)</td>
</tr>
<tr>
<td>sodium carbonate 497-19-8</td>
<td>EC 50</td>
<td>300 mg/l</td>
<td>Bacteria</td>
<td>30 min</td>
<td></td>
<td>OECD Guideline 201 (Alga, Growth Inhibition Test)</td>
</tr>
<tr>
<td>Benzenesulfonic acid, mono-C10-16-alkyl derivs., sodium salts 68081-81-2</td>
<td>LC50</td>
<td>5.9 mg/l</td>
<td>Fish</td>
<td>96 h</td>
<td>Brachydanio rerio (new name: Danio rerio)</td>
<td>OECD Guideline 203 (Fish, Acute Toxicity Test)</td>
</tr>
<tr>
<td>Benzenesulfonic acid, mono-C10-16-alkyl derivs., sodium salts 68081-81-2</td>
<td>EC50</td>
<td>4.4 mg/l</td>
<td>Daphnia</td>
<td>48 h</td>
<td>Daphnia magna</td>
<td>OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)</td>
</tr>
<tr>
<td>Benzenesulfonic acid, mono-C10-16-alkyl derivs., sodium salts 68081-81-2</td>
<td>NOEC</td>
<td>2.2 mg/l</td>
<td>Algae</td>
<td>72 h</td>
<td>Scenedesmus subspicatus (new name: Desmodesmus subspicatus)</td>
<td>EU Method C.3 (Algal Inhibition test)</td>
</tr>
<tr>
<td>Benzenesulfonic acid, mono-C10-16-alkyl derivs., sodium salts 68081-81-2</td>
<td>EC50</td>
<td>43.2 mg/l</td>
<td>Algae</td>
<td>72 h</td>
<td>Scenedesmus subspicatus (new name: Desmodesmus subspicatus)</td>
<td>EU Method C.3 (Algal Inhibition test)</td>
</tr>
</tbody>
</table>

Persistence and degradability:

<table>
<thead>
<tr>
<th>Hazardous components CAS-No.</th>
<th>Result</th>
<th>Route of application</th>
<th>Degradability</th>
<th>Method</th>
</tr>
</thead>
</table>


Section 13. Disposal considerations

Waste disposal of product: In consultation with the responsible local authority, must be subjected to special treatment: Neutralisation. Dispose of according to Federal, State and local governmental regulations.

Disposal for uncleaned package: Packaging that cannot be cleaned are to be disposed of in the same manner as the product.

Section 14. Transport information

Road and Rail Transport:

Dangerous Goods information: Classified as Dangerous Goods according to the criteria of the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG Code).

UN no.: 3262
Proper shipping name: CORROSIVE SOLID, BASIC, INORGANIC, N.O.S. (Sodium hydroxide, Sodium metasilicate)
Class or division: 8
Packing group: II
Hazchem code: 2X

Marine transport IMDG:

UN no.: 3262
Proper shipping name: CORROSIVE SOLID, BASIC, INORGANIC, N.O.S. (Sodium hydroxide, Sodium metasilicate)
Class or division: 8
Packing group: II
EmS: F-A .S-B
Seawater pollutant: -

Air transport IATA:

UN no.: 3262
Proper shipping name: Corrosive solid, basic, inorganic, n.o.s. (Sodium hydroxide, Sodium metasilicate)
Class or division: 8
Packing group: II
Packing instructions (passenger) 859
Packing instructions (cargo) 863

Section 15. Regulatory information

SUSMP Poisons Schedule 6
AICS: All components are listed or are exempt from listing on the Australian Inventory of Chemical Substances (AICS).

Section 16. Other information

Abbreviations/acronyms:
- ADGC - Australian Dangerous Goods Code
- IMDG: International Maritime Dangerous Goods code
- IATA-DGR: International Air Transport Association – Dangerous Goods Regulations
- STEL - Short term exposure limit
- TWA - Time weighted average

Reason for issue: Reviewed MSDS. Reissued with new date. Involved chapters: 1 - 16

Date of previous issue: 24.01.2014

Disclaimer:
The percentage weight (% w/w) of ingredients is not to be taken as a specification guaranteed by Henkel Australia Pty. Limited, but only as an approximate guide to the content of hazardous ingredients in the material. The information contained herein does not constitute a guarantee by Henkel Australia Pty. Limited concerning the properties of the material. The information contained in the Safety Data Sheet is offered in good faith and has been developed from what is believed to be accurate and reliable sources. The information is offered without warranty, representation, inducement or licence and Henkel Australia Pty. Limited assumes no legal responsibility for reliance upon same. Henkel Australia Pty. Limited disclaims any liability for loss, injury or damage incurred in connection with the use of the material or its associated Safety Data Sheet. This information is not to be construed as a representation that the material is suitable for any particular purpose or use except those conditions and warranties implied by either Commonwealth or State statutes. Customers are encouraged to make their own enquiries as to the material’s characteristics and, where appropriate, to conduct their own tests in the specific context of the material’s intended use.