1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Arm & Hammer 4X Ultra Power
Product Code(s): MSDS-117
Recommended Use: Laundry detergent
Product Type: Mixture
Synonyms: Detergent
Manufactured by: Church & Dwight Co., Inc.
469 N. Harrison Street
Princeton, NJ 08543

For further information, please also consult our Internet site: www.churchdwight.com

2. HAZARDS IDENTIFICATION

Appearance: Clear blue or colorless (dye-free) liquid
Physical State: Liquid
Odor: As described on product label

Potential Health Effects

Acute Toxicity

Eyes: Severe irritant. Can cause injury upon prolonged contact.
Skin: Irritant. Prolonged, repeated or occluded contact with concentrated product can cause irritation.
Inhalation: If mists are generated, they may cause mucous membrane and upper respiratory irritation.
Ingestion: Practically non-toxic due to high level of water dilution. Ingestion can cause irritation to mucous membranes and digestive tract, nausea, and abdominal discomfort.

Chronic Effects: None known.
Aggravated Medical Conditions: None known

Environmental Hazard: See Section 12 for additional Ecological Information
3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS-No</th>
<th>Weight %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium carbonate</td>
<td>497-19-8</td>
<td>1-3</td>
</tr>
<tr>
<td>Sodium hydroxide</td>
<td>1310-73-2</td>
<td>1-3</td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES

**Eye Contact**
Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician

**Inhalation**
Move to fresh air

**Skin Contact**
Wash skin with soap and water

**Ingestion**
Clean mouth with water and afterwards drink plenty of water

**Notes to Physician**
Treat symptomatically

5. FIRE-FIGHTING MEASURES

**Flammable Properties**
Not flammable

**Flash Point**
Not applicable

**Flammability Limits in Air**
Not flammable

**Suitable Extinguishing Media**
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment

**Hazardous Combustion Products**
Carbon oxides

**Explosion Data**
- Sensitivity to Mechanical Impact: Not sensitive
- Sensitivity to Static Discharge: Not sensitive

**Protective Equipment and Precautions for Firefighters**
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

**NFPA**
- Health Hazard: 2
- Flammability: 0
- Stability: 0
- Physical and Chemical Hazards: -

6. ACCIDENTAL RELEASE MEASURES

**Personal Precautions**
Avoid contact with the skin and the eyes. Close off area.

**Methods for Containment**
Close off area of spill to traffic and use caution during cleanup.

**Methods for Cleaning Up**
Contain spill and pick up with absorbent material. Make sure area is slip-free before re-opening to traffic. Keep in suitable and closed containers for disposal.

7. HANDLING AND STORAGE

**Handling**
Avoid contact with skin and eyes. Handle in accordance with good industrial hygiene and safety practice.
8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines
See below

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
<th>NIOSH IDLH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium hydroxide</td>
<td>TWA: 2 mg/m³</td>
<td>(vacated) Ceiling: 2 mg/m³</td>
<td>IDLH: 10 mg/m³</td>
</tr>
<tr>
<td></td>
<td>Ceiling: 2 mg/m³</td>
<td></td>
<td>Ceiling: 2 mg/m³</td>
</tr>
</tbody>
</table>

Engineering Measures
Showers
Eyewash stations
Ventilation systems

Personal Protective Equipment

| Eye/Face Protection    | No special protective equipment required |
| Skin and Body Protection | No special protective equipment required |
| Respiratory Protection | If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations |

Hygiene Measures
Handle in accordance with good industrial hygiene and safety practice

9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Appearance</th>
<th>Clear blue or colorless (dye-free) liquid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Odor Threshold</td>
<td>No information available</td>
</tr>
<tr>
<td>pH</td>
<td>11.9</td>
</tr>
<tr>
<td>Flash Point</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Decomposition Temperature</td>
<td>No information available</td>
</tr>
<tr>
<td>Melting Point/Range</td>
<td>NA</td>
</tr>
<tr>
<td>Flammability Limits in Air</td>
<td>Not flammable</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>1.035-1.045</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Density</td>
<td>1.037-1.047</td>
</tr>
<tr>
<td>VOC Content</td>
<td>None</td>
</tr>
<tr>
<td>Odor</td>
<td>As described on product label</td>
</tr>
<tr>
<td>Physical State</td>
<td>Liquid</td>
</tr>
<tr>
<td>Autoignition Temperature</td>
<td>No information available</td>
</tr>
<tr>
<td>Boiling Point/Range</td>
<td>No data available</td>
</tr>
<tr>
<td>Freezing Point</td>
<td>No information available</td>
</tr>
<tr>
<td>Explosion Limits</td>
<td>No information available</td>
</tr>
<tr>
<td>Solubility</td>
<td>Completely soluble</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosive Properties</td>
<td>NA</td>
</tr>
<tr>
<td>Explosive Properties</td>
<td>NA</td>
</tr>
</tbody>
</table>

10. STABILITY AND REACTIVITY

Stability
Stable.

Incompatible Products
None known.

Conditions to Avoid
None known.

Hazardous Decomposition Products
Carbon oxides.

Hazardous Reactions
Will not occur.

Hazardous Polymerization
Will not occur.
11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Product Information
Product does not present an acute toxicity hazard based on known or supplied information

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>LD50 Oral</th>
<th>LD50 Dermal</th>
<th>LC50 Inhalation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium carbonate</td>
<td>4090 mg/kg</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sodium hydroxide</td>
<td></td>
<td>1350 mg/kg</td>
<td>(Rabbit)</td>
</tr>
</tbody>
</table>

Chronic Toxicity

Chronic Toxicity
None known.

Target Organ Effects
None known.

12. ECOLOGICAL INFORMATION

Ecotoxicity
The environmental impact of this product has not been fully investigated

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Toxicity to Algae</th>
<th>Toxicity to Fish</th>
<th>Microtox</th>
<th>Daphnia Magna (Water Flea)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium carbonate</td>
<td>LC50= 300 mg/L</td>
<td>Lepomis macrochirus 96</td>
<td></td>
<td>EC50 = 265 mg/L 48 h</td>
</tr>
<tr>
<td>Sodium hydroxide</td>
<td>LC50= 45.4 mg/L</td>
<td>Oncorhynchus mykiss 96</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Persistence and Degradability
Product is biodegradable

Bioaccumulation/Accumulation
Not likely to bioaccumulate

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method
This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste. Consult the appropriate state, regional, or local regulations for additional requirements

Contaminated Packaging
Dispose of in accordance with local regulations

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>California Hazardous Waste Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium hydroxide</td>
<td>Corrosive</td>
</tr>
<tr>
<td></td>
<td>Toxic</td>
</tr>
<tr>
<td></td>
<td>Corrosive</td>
</tr>
</tbody>
</table>
14. TRANSPORT INFORMATION

DOT
Not regulated

TDG
Not regulated

ICAO
Not regulated

IATA
Not regulated

IMDG/IMO
Not regulated

15. REGULATORY INFORMATION

International Inventories

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>TSCA</th>
<th>DSL</th>
<th>EIN/ELN</th>
<th>ENCS</th>
<th>IECSC</th>
<th>KECL</th>
<th>PICCS</th>
<th>AICS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium carbonate</td>
<td>Present</td>
<td>X</td>
<td>X</td>
<td>1-164</td>
<td>X</td>
<td>KE-31380</td>
<td>X</td>
<td>-</td>
</tr>
<tr>
<td>Sodium hydroxide</td>
<td>Present</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>X</td>
<td>KE-31487</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

U.S. Federal Regulations

SARA 313
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories
- Acute Health Hazard: No
- Chronic Health Hazard: No
- Sudden Release of Pressure Hazard: No
- Fire Hazard: No
- Reactive Hazard: No

Clean Water Act
This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)
This product does not contain any substances regulated as hazardous air pollutants (HAPS) under Section 112 of the Clean Air Act Amendments of 1990

CERCLA
This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Hazardous Substances RQs</th>
<th>Extremely Hazardous Substances RQs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium hydroxide</td>
<td>1000 lb</td>
<td></td>
</tr>
</tbody>
</table>
U.S. State Regulations

California Proposition 65
This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Massachusetts</th>
<th>New Jersey</th>
<th>Pennsylvania</th>
<th>Illinois</th>
<th>Rhode Island</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium hydroxide</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

International Regulations

Mexico - Grade
No information available.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Carcinogen Status</th>
<th>Exposure Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium hydroxide</td>
<td></td>
<td>Mexico: Ceiling= 2 mg/m³</td>
</tr>
</tbody>
</table>

Canada

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

WHMIS Hazard Class
Not determined

16. OTHER INFORMATION

Prepared By
Church & Dwight Co. Inc.
Product Stewardship
469 North Harrison Street
Princeton, New Jersey 08543
609.279.7705

Revision Date
12-Oct-2012

Reason for Revision
No information available

Disclaimer
The information provided on this MSDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of MSDS