



Revision Number: 006.2

Issue date: 12/08/2016

**1. PRODUCT AND COMPANY IDENTIFICATION**

|                            |   |                             |   |
|----------------------------|---|-----------------------------|---|
| <b>Product name:</b>       | <b>BONDERITE C-AK 4181-L AERO</b>                                     | <b>IDH number:</b>          | 596905  |
| <b>Product type:</b>       | Cleaner   | <b>Region:</b>              | United States   |
| <b>Restriction of Use:</b> | None identified   | <b>Contact information:</b> |   |
| <b>Company address:</b>    | Henkel Corporation<br>One Henkel Way<br>Rocky Hill, Connecticut 06067 | Telephone:                  | (860) 571-5100  |
|                            |   | MEDICAL EMERGENCY Phone:    | Poison Control Center<br>1-877-671-4608 (toll free) or 1-303-592-1711 |
|                            |   | TRANSPORT EMERGENCY Phone:  | CHEMTREC<br>1-800-424-9300 (toll free) or 1-703-527-3887              |
|                            |   | Internet:                   | www.henkelna.com  |

**2. HAZARDS IDENTIFICATION**

**EMERGENCY OVERVIEW**

**DANGER:** MAY BE CORROSIVE TO METALS.  
CAUSES SEVERE SKIN BURNS AND EYE DAMAGE.  
MAY CAUSE AN ALLERGIC SKIN REACTION.

| HAZARD CLASS        | HAZARD CATEGORY |
|---------------------|-----------------|
| CORROSIVE TO METALS | 1               |
| SKIN CORROSION      | 1B              |
| SERIOUS EYE DAMAGE  | 1               |
| SKIN SENSITIZATION  | 1               |

**PICTOGRAM(S)**



**Precautionary Statements**

|                    |  |
|--------------------|--|
| <b>Prevention:</b> | Keep only in original container. Do not breathe vapors, mist, or spray. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves, eye protection, and face protection.  |
| <b>Response:</b>   | IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. If on skin (or hair): Take off immediately all contaminated clothing. IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison control center or physician. If skin irritation or rash occurs: Get medical attention. Wash contaminated clothing before reuse. Absorb spillage to prevent material damage. |
| <b>Storage:</b>    | Store locked up. Store in corrosive resistant container with a resistant inner liner.  |
| <b>Disposal:</b>   | Dispose of contents and/or container according to Federal, State/Provincial and local governmental regulations.  |

Classification complies with OSHA Hazard Communication Standard (29 CFR 1910.1200) and is consistent with the provisions of the United Nations Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

See Section 11 for additional toxicological information.

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

| Hazardous Component(s) | CAS Number | Percentage* |
|------------------------|------------|-------------|
| Sodium hydroxide       | 1310-73-2  | 20 - 30     |
| Diethanolamine         | 111-42-2   | 1 - 5       |

\* Exact percentages may vary or are trade secret. Concentration range is provided to assist users in providing appropriate protections.

### 4. FIRST AID MEASURES

|                      |  |
|----------------------|--|
| <b>Inhalation:</b>   | If mist or vapor of this product is inhaled, remove person immediately to fresh air. Seek medical attention if symptoms develop or persist.  |
| <b>Skin contact:</b> | For skin contact flush with large amounts of water. Obtain medical attention if irritation persists.   |
| <b>Eye contact:</b>  | In case of contact with the eyes, rinse immediately with plenty of water for 15 minutes, and seek immediate medical attention.   |
| <b>Ingestion:</b>    | Get immediate medical attention. Do not induce vomiting. Give one to two glasses of water or milk. Never give anything by mouth to a victim who is unconscious or is having convulsions. |
| <b>Symptoms:</b>     | See Section 11.  |

### 5. FIRE FIGHTING MEASURES

|   |  |
|---|--|
| <b>Extinguishing media:</b>               | Use media appropriate for surrounding material.  |
| <b>Special firefighting procedures:</b>   | Wear full protective clothing. Wear self-contained breathing apparatus.  |
| <b>Unusual fire or explosion hazards:</b> | This product is an aqueous mixture which will not burn. If evaporated to dryness, the solid residue may pose a moderate fire hazard. |
| <b>Hazardous combustion products:</b>     | Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.                     |

### 6. ACCIDENTAL RELEASE MEASURES

Use personal protection recommended in Section 8, isolate the hazard area and deny entry to unnecessary and unprotected personnel.

|                                   |  |
|-----------------------------------|--|
| <b>Environmental precautions:</b> | Prevent further leakage or spillage if safe to do so. Dike the spilled material, where this is possible. Ventilate area. Do not allow product to enter sewer or waterways.                           |
| <b>Clean-up methods:</b>          | Collect spilled material with an inert absorbent such as sand or vermiculite. Place in properly labeled closed container. Dispose of according to Federal, State and local governmental regulations. |

### 7. HANDLING AND STORAGE

|                  |  |
|------------------|--|
| <b>Handling:</b> | Avoid contact with eyes, skin and clothing. Provide adequate ventilation. Avoid breathing vapors or mists of this product. Wash thoroughly after handling. |
| <b>Storage:</b>  | For safe storage, store at or above 40 °F (4.4 °C)<br>Keep the container tightly closed and in a cool, well-ventilated place. Protect from freezing.       |

For information on product shelf life, please review labels on container or check the Technical Data Sheet.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Employers should complete an assessment of all workplaces to determine the need for, and selection of, proper exposure controls and protective equipment for each task performed.

| Hazardous Component(s) | ACGIH TLV  | OSHA PEL    | AIHA WEEL | OTHER |
|------------------------|--|-------------|-----------|-------|
| Sodium hydroxide       | 2 mg/m3 Ceiling  | 2 mg/m3 PEL | None      | None  |
| Diethanolamine         | 1 mg/m3 TWA<br>Inhalable fraction and<br>vapor.<br>(SKIN) Inhalable<br>fraction and vapor. | None        | None      | None  |

**Engineering controls:**

Provide local and general exhaust ventilation to effectively remove and prevent buildup of any vapors or mists generated from the handling of this product.

**Respiratory protection:**

If ventilation is not sufficient to effectively prevent buildup of aerosols, mists or vapors, appropriate NIOSH/MSHA respiratory protection must be provided.

**Eye/face protection:**

Wear chemical goggles.

**Skin protection:**

Chemical resistant, impermeable gloves. Use of impervious apron and boots are recommended.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

|   |                             |
|---|-----------------------------|
| <b>Physical state:</b>                          | Liquid                      |
| <b>Color:</b>                                   | Straw                       |
| <b>Odor:</b>                                    | Mild                        |
| <b>Odor threshold:</b>                          | Not available.              |
| <b>pH:</b>                                      | > 12.0                      |
| <b>pH:</b>                                      | > 12.0                      |
| <b>Vapor pressure:</b>                          | Not determined              |
| <b>Boiling point/range:</b>                     | > 212 °F (> 100°C)          |
| <b>Melting point/ range:</b>                    | Not determined              |
| <b>Specific gravity:</b>                        | 1.30 - 1.32 at 25 °C (77°F) |
| <b>Vapor density:</b>                           | Not determined              |
| <b>Flash point:</b>                             | Aqueous. Does not flash.    |
| <b>Flammable/Explosive limits - lower:</b>      | Not available.              |
| <b>Flammable/Explosive limits - upper:</b>      | Not available.              |
| <b>Autoignition temperature:</b>                | Not determined              |
| <b>Flammability:</b>                            | Not applicable              |
| <b>Evaporation rate:</b>                        | Not applicable              |
| <b>Solubility in water:</b>                     | Complete                    |
| <b>Partition coefficient (n-octanol/water):</b> | Not determined              |
| <b>VOC content:</b>                             | 6.5 % (calculated)          |
| <b>Viscosity:</b>                               | Not available.              |
| <b>Decomposition temperature:</b>               | Not available.              |

## 10. STABILITY AND REACTIVITY

|  |  |
|--|--|
| <b>Stability:</b>                        | Stable at normal conditions.   |
| <b>Hazardous reactions:</b>              | Will not occur.  |
| <b>Hazardous decomposition products:</b> | Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons. |
| <b>Incompatible materials:</b>           | Nitrites may react with organic amines to form nitrosamines which can cause cancer. Reaction with strong acids.  |
| <b>Reactivity:</b>                       | This product reacts with acids. This product reacts with acids.  |
| <b>Conditions to avoid:</b>              | Avoid contact with acids.  |

## 11. TOXICOLOGICAL INFORMATION

**Relevant routes of exposure:** Skin, Inhalation, Eyes

**Potential Health Effects/Symptoms**

|                      |   |
|----------------------|---|
| <b>Inhalation:</b>   | Mists, vapors or liquid may cause severe irritation or burns.   |
| <b>Skin contact:</b> | Contact with the skin or mucous membranes will cause severe burns and possible ulceration.                      |
| <b>Eye contact:</b>  | Contact with the eyes can cause severe burns and permanent eye damage.  |
| <b>Ingestion:</b>    | Ingestion may produce burns to the lips, oral cavity, upper airway, esophagus and possibly the digestive tract. |

| Hazardous Component(s) | LD50s and LC50s  | Immediate and Delayed Health Effects              |
|------------------------|--|---|
| Sodium hydroxide       | None   | Irritant, Corrosive, Eyes                         |
| Diethanolamine         | Oral LD50 (Rat) = 710 mg/kg<br>Oral LD50 (Rat) = 1.82 g/kg | Allergen, Corrosive, Irritant, Liver, Respiratory |

| Hazardous Component(s) | NTP Carcinogen | IARC Carcinogen | OSHA Carcinogen (Specifically Regulated) |
|------------------------|----------------|-----------------|--|
| Sodium hydroxide       | No             | No              | No                                       |
| Diethanolamine         | No             | Group 2B        | No                                       |

## 12. ECOLOGICAL INFORMATION

**Ecological information:** Not available.

## 13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

|  |   |
|--|---|
| <b>Recommended method of disposal:</b> | Dispose of according to Federal, State and local governmental regulations. This product contains a chelating agent. |
| <b>Hazardous waste number:</b>         | This product, if discarded directly, would be a characteristic RCRA corrosive waste (D002).                         |

## 14. TRANSPORT INFORMATION

The transport information provided in this section only applies to the material/formulation itself, and is not specific to any package/configuration.

### U.S. Department of Transportation Ground (49 CFR)

|                                    |                                  |
|------------------------------------|----------------------------------|
| <b>Proper shipping name:</b>       | Sodium hydroxide solution        |
| <b>Hazard class or division:</b>   | 8                                |
| <b>Identification number:</b>      | UN 1824                          |
| <b>Packing group:</b>              | II                               |
| <b>DOT Hazardous Substance(s):</b> | Sodium hydroxide, Diethanolamine |

### International Air Transportation (ICAO/IATA)

|                                  |                           |
|----------------------------------|---------------------------|
| <b>Proper shipping name:</b>     | Sodium hydroxide solution |
| <b>Hazard class or division:</b> | 8                         |
| <b>Identification number:</b>    | UN 1824                   |
| <b>Packing group:</b>            | II                        |

### Water Transportation (IMO/IMDG)

|                                  |                           |
|----------------------------------|---------------------------|
| <b>Proper shipping name:</b>     | SODIUM HYDROXIDE SOLUTION |
| <b>Hazard class or division:</b> | 8                         |
| <b>Identification number:</b>    | UN 1824                   |
| <b>Packing group:</b>            | II                        |

## 15. REGULATORY INFORMATION

### United States Regulatory Information

|   |  |
|---|--|
| <b>TSCA 8 (b) Inventory Status:</b>       | All components are listed or are exempt from listing on the Toxic Substances Control Act Inventory.  |
| <b>TSCA 12 (b) Export Notification:</b>   | None above reporting de minimis  |
| <b>CERCLA/SARA Section 302 EHS:</b>       | None above reporting de minimis.   |
| <b>CERCLA/SARA Section 311/312:</b>       | Immediate Health, Delayed Health   |
| <b>CERCLA/SARA Section 313:</b>           | This product contains the following toxic chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 (40 CFR 372). Diethanolamine (CAS# 111-42-2). |
| <b>CERCLA Reportable quantity:</b>        | Sodium hydroxide (CAS# 1310-73-2) 1,000 lbs. (454 kg)<br>Diethanolamine (CAS# 111-42-2) 100 lbs. (45.4 kg)   |
| <b>California Proposition 65:</b>         | This product contains a chemical known in the State of California to cause cancer.   |
| <b>Additional Regulatory Information:</b> | This product is controlled for export by the United States Department of Commerce. The Export Classification Control Number (ECCN) is 1C995.a.2.a  |

### Canada Regulatory Information

|                             |   |
|-----------------------------|---|
| <b>CEPA DSL/NDL Status:</b> | All components are listed on or are exempt from listing on the Canadian Domestic Substances List. |
|-----------------------------|---|

## 16. OTHER INFORMATION

**This safety data sheet contains changes from the previous version in sections: 3**

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