**Revision Number:** 004.2

**Issue date:** 03/20/2019

## 1. PRODUCT AND COMPANY IDENTIFICATION

**Product name:** **BONDERITE C-AK 4008 AERO ALKALINE CLEANER known as TURCO 4008**

**IDH number:** 597296

**Product type/use:** Cleaners for Aeroplanes

**Restriction of Use:** None identified

**Region:** United States

**Company address:**
Henkel Corporation
One Henkel Way
Rocky Hill, Connecticut 06067

**Contact information:**
Telephone: +1 (860) 571-5100
MEDICAL EMERGENCY Phone: Poison Control Center
1-877-671-4608 (toll free) or 1-303-592-1711
TRANSPORT EMERGENCY Phone: CHEMTREC
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.<br>HARMFUL IF SWALLOWED.<br>CAUSES SEVERE SKIN BURNS AND EYE DAMAGE.<br>SUSPECTED OF CAUSING GENETIC DEFECTS.<br>MAY CAUSE DAMAGE TO ORGANS THROUGH PROLONGED OR REPEATED EXPOSURE. |

| HAZARD CLASS | HAZARD CATEGORY |
|---|---|
| CORROSIVE TO METALS | 1 |
| ACUTE TOXICITY ORAL | 4 |
| SKIN CORROSION | 1B |
| SERIOUS EYE DAMAGE | 1 |
| GERM CELL MUTAGENICITY | 2 |
| SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE | 2 |

**PICTOGRAM(S)**

**Precautionary Statements**

**Prevention:** Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep only in original packaging. Do not breathe vapors, mist, or spray. Wash affected area thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves, clothing, eye and face protection.

**Response:** IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. If on skin (or hair): Take off immediately all contaminated clothing. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or physician. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF exposed or concerned: Get medical attention. Wash contaminated clothing before reuse. Absorb spillage to prevent material damage.

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

**Disposal:** 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* |
|---|---|---|
| Potassium hydroxide | 1310-58-3 | 20 - 30 |
| Triethanolamine | 102-71-6 | 10 - 20 |
| Phenol | 108-95-2 | 1 - 5 |
| 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

**Inhalation:** If mist or vapor of this product is inhaled, remove person immediately to fresh air. Seek medical attention if symptoms develop or persist.

**Skin contact:** In case of contact, immediately remove contaminated clothing and flush skin with copious amounts of water. If irritation persists, repeat flushing and get medical attention. Discard any shoes or clothing items that cannot be decontaminated. Get medical attention.

**Eye contact:** In case of contact with the eyes, rinse immediately with plenty of water for 15 minutes, and seek immediate medical attention.

**Ingestion:** Get immediate medical attention. DO NOT induce vomiting unless directed to do so by medical personnel. Give one to two glasses of water or milk. Never give anything by mouth to a victim who is unconscious or is having convulsions.

**Symptoms:** See Section 11.

**Notes to physician:** If cyanosis is severe, intravenous injection of methylene blue, 1 mg/kg body weight, may be of value.

## 5. FIRE FIGHTING MEASURES

**Extinguishing media:** Use media appropriate for surrounding material.

**Special firefighting procedures:** Wear full protective clothing. Wear self-contained breathing apparatus.

**Unusual fire or explosion hazards:** This product is an aqueous mixture which will not burn. May react with metals to form flammable hydrogen gas.

**Hazardous combustion products:** Irritating and toxic gases or fumes may be released during a fire.

## 6. ACCIDENTAL RELEASE MEASURES

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

**Environmental precautions:** Prevent further leakage or spillage if safe to do so. Wear appropriate protective equipment and clothing during clean-up. Do not allow product to enter sewer or waterways.

**Clean-up methods:** Absorb spill with inert material. Shovel material into appropriate container for disposal. Flush area with water to remove trace residue. Dispose of according to Federal, State and local governmental regulations.

## 7. HANDLING AND STORAGE

**Handling:** Avoid contact with eyes, skin and clothing. Avoid breathing mists or aerosols of this product. Provide adequate ventilation. Wash thoroughly after handling. NEVER ADD WATER TO PRODUCT. For dilutions, add product slowly to water while stirring. Use caution; heat may be generated.

**Storage:** For safe storage, store between 40 °F (4.4 °C) and 100 °F (37.8 °C) Keep container tightly closed and in a cool, well-ventilated place away from incompatible materials.

**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 |
|---|---|---|---|---|
| Potassium hydroxide | 2 mg/m3 Ceiling | None | None | None |
| Triethanolamine | 5 mg/m3 TWA | None | None | None |
| Phenol | 5 ppm TWA (SKIN) | 5 ppm (19 mg/m3) PEL (SKIN) | None | None |
| Diethanolamine | 1 mg/m3 TWA Inhalable fraction and vapor. (SKIN) Inhalable 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; face shield (if splashing is possible).

**Skin protection:** Chemical resistant, impermeable gloves. Use of impervious apron and boots are recommended.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Physical state:** Liquid
**Color:** Amber
**Odor:** Mild amine
**Odor threshold:** Not available.

| | |
|---|---|
| **pH:** | > 13.0 |
| **Vapor pressure:** | 25 mm hg |
| **Boiling point/range:** | > 100 °C (> 212°F) |
| **Melting point/ range:** | Not determined |
| **Specific gravity:** | 1.42 - 1.44 |
| **Vapor density:** | > 1 |
| **Flash point:** | Not applicable |
| **Flammable/Explosive limits - lower:** | Not available. |
| **Flammable/Explosive limits - upper:** | Not available. |
| **Autoignition temperature:** | Not applicable |
| **Flammability:** | Not applicable |
| **Evaporation rate:** | < 1 (Butyl acetate = 1) |
| **Solubility in water:** | Complete |
| **Partition coefficient (n-octanol/water):** | Not determined |
| **VOC content:** | 5 g/l |
| **Viscosity:** | Not available. |
| **Decomposition temperature:** | Not available. |

## 10. STABILITY AND REACTIVITY

**Stability:** Stable at normal conditions.

**Hazardous reactions:** None under normal processing.

**Hazardous decomposition products:** Irritating and toxic gases or fumes may be released during a fire.

**Incompatible materials:** This product reacts with acids. Adding water to this product may cause localized overheating and splattering.

**Reactivity:** Not available.

**Conditions to avoid:** Store away from incompatible materials.

## 11. TOXICOLOGICAL INFORMATION

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

**Potential Health Effects/Symptoms**

**Inhalation:** Mists, vapors or liquid may cause severe irritation or burns. Repeated inhalation may be harmful; lung irritation and serious central nervous system disorders may result.

**Skin contact:** Contact with the skin or mucous membranes will cause severe burns and possible ulceration. This product may cause an allergic skin reaction. A component in this product may be absorbed through the skin in harmful amounts.

**Eye contact:** Contact with the eyes can cause severe burns and permanent eye damage.

**Ingestion:** Not a likely route of entry. Ingestion may produce burns to the lips, oral cavity, upper airway, esophagus and possibly the digestive tract. This product may cause methemoglobinemia characterized by a reduction in oxygen carrying capacity of the blood with symptoms including headache, dizziness, flushed face, fatigue, nausea, vomiting, drowsiness, stupor, tremors, uneven heart action, coma and rarely death.

| Hazardous Component(s) | LD50s and LC50s | Immediate and Delayed Health Effects |
|---|---|---|
| Potassium hydroxide | Oral LD50 (Rat) = 273 mg/kg<br>Oral LD50 (Rat) = 1.23 g/kg | Corrosive, Irritant |
| Triethanolamine | Oral LD50 (Rat) = 8.0 g/kg<br>Dermal LD50 (Rabbit) = > 20,000 mg/kg | Irritant, Allergen |
| Phenol | Oral LD50 (Mouse) = 270 mg/kg<br>Oral LD50 (Rat) = 317 mg/kg<br>Oral LD50 (Rat) = 530 mg/kg<br>Dermal LD50 (Rat) = 669 mg/kg<br>Dermal LD50 (Rabbit) = 850 mg/kg | Blood, Cardiac, Corrosive, Developmental, Eyes, Irritant, Kidney, Liver, Mutagen, Nervous System, Skin, Vascular |
| 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) |
|---|---|---|---|
| Potassium hydroxide | No | No | No |
| Triethanolamine | No | No | No |
| Phenol | No | No | No |
| Diethanolamine | No | Group 2B | No |

## 12. ECOLOGICAL INFORMATION

**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.

## 13. DISPOSAL CONSIDERATIONS

**Information provided is for unused product only.**

**Recommended method of disposal:** Follow all local, state, federal and provincial regulations for disposal.

**Hazardous waste number:** This product, if discarded directly, would be a characteristic RCRA corrosive waste (D002). Wastes must be tested using methods described in 40 CFR Part 261 to determine if it meets applicable definitions of hazardous wastes.

## 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)**

**Proper shipping name:** Corrosive liquids, n.o.s. (Potassium hydroxide, Phenol)
**Hazard class or division:** 8
**Identification number:** UN 1760
**Packing group:** II
**DOT Hazardous Substance(s):** Potassium hydroxide, Diethanolamine

**International Air Transportation (ICAO/IATA)**

| | |
|---|---|
| **Proper shipping name:** | Corrosive liquid, n.o.s. (Potassium hydroxide, Phenol) |
| **Hazard class or division:** | 8 |
| **Identification number:** | UN 1760 |
| **Packing group:** | II |

**Water Transportation (IMO/IMDG)**

| | |
|---|---|
| **Proper shipping name:** | CORROSIVE LIQUID, N.O.S. (Potassium hydroxide, Phenol) |
| **Hazard class or division:** | 8 |
| **Identification number:** | UN 1760 |
| **Packing group:** | II |
| Additional information: | IMDG-Code: Segregation group 18- Alkalis |

## 15. REGULATORY INFORMATION

**United States Regulatory Information**

| | |
|---|---|
| **TSCA 8 (b) Inventory Status:** | All components are listed or are exempt from listing on the Toxic Substances Control Act Inventory. |
| **TSCA 12 (b) Export Notification:** | None above reporting de minimis |
| **CERCLA/SARA Section 302 EHS:** | Phenol (CAS# 108-95-2). |
| **CERCLA/SARA Section 311/312:** | Immediate Health, Delayed Health, Reactive |
| **CERCLA/SARA Section 313:** | 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). Phenol (CAS# 108-95-2). Diethanolamine (CAS# 111-42-2). |
| **CERCLA Reportable quantity:** | Potassium hydroxide (CAS# 1310-58-3) 1,000 lbs. (454 kg)<br>Phenol (CAS# 108-95-2) 1,000 lbs. (454 kg) |
| **California Proposition 65:** | This product contains a chemical known in the State of California to cause cancer. |
| **Additional Regulatory Information:** | 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**

| | |
|---|---|
| **CEPA DSL/NDSL Status:** | 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:** New Safety Data Sheet format.

**Prepared by:** Regulatory Affairs

**Issue date:** 03/20/2019

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