



Revision Number: 003.0

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**1. PRODUCT AND COMPANY IDENTIFICATION**

<b>Product name:</b>	<b>BONDERITE C-AK 5578-GL AERO known as TURCO 5578-GL</b>	<b>IDH number:</b>	599004
<b>Product type:</b>	Etching Agents for Metals	<b>Region:</b>	United States
<b>Restriction of Use:</b>	None identified	<b>Contact information:</b>	
<b>Company address:</b>	Henkel Corporation One Henkel Way Rocky Hill, Connecticut 06067	Telephone:	(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.  
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 remove. 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	10 - 30
Triethanolamine	102-71-6	5 - 10
Diethanolamine	111-42-2	1 - 5

\* Exact percentage is a 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>	In case of contact, immediately remove contaminated clothing and flush skin with copious amounts of water. Get medical attention. Discard any shoes or clothing items that cannot be decontaminated.
<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>	Seek medical advice. 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.
<b>Symptoms:</b>	See Section 11.
<b>Notes to physician:</b>	Treat symptomatically and supportively.

### 5. FIRE FIGHTING MEASURES

<b>Extinguishing media:</b>	Use media appropriate for surrounding material.
<b>Special firefighting procedures:</b>	Wear self-contained breathing apparatus and full protective clothing, such as turn-out gear.
<b>Unusual fire or explosion hazards:</b>	This product is an aqueous mixture which will not burn.
<b>Hazardous combustion products:</b>	Upon decomposition, this product may yield gaseous nitrogen oxides, 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. Contain spill. Ventilate area. Do not allow product to enter sewer or waterways. Isolate area. Keep unnecessary personnel away.
<b>Clean-up methods:</b>	Collect spilled material with an inert absorbent such as sand or vermiculite. Place in properly labeled closed container. Flush area with water to remove trace residue. Dispose of according to Federal, State and local governmental regulations.

## 7. HANDLING AND STORAGE

<b>Handling:</b>	Avoid contact with eyes, skin and clothing. Avoid breathing vapors or mists of this product. Provide adequate ventilation. Do not take internally. Wash thoroughly after handling. Do not reuse the empty container. Do not mix this product with fluids which contain NITRITES/NITRATES. NITROSAMINE may be formed.
<b>Storage:</b>	For safe storage, store between 40 °F (4.4 °C) and 131 °F (55°C) Keep the container tightly closed and in a cool, well-ventilated place. Ship and store above 40° F. 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
Triethanolamine	5 mg/m3 TWA	None	None	None
Diethanolamine	1 mg/m3 TWA Inhalable fraction and vapor. (SKIN) Inhalable fraction and vapor.	None	None	None

<b>Engineering controls:</b>	Provide local and general exhaust ventilation to effectively remove and prevent buildup of any vapors or mists generated from the handling of this product.
<b>Respiratory protection:</b>	If ventilation is not sufficient to effectively prevent buildup of aerosols, mists or vapors, appropriate NIOSH/MSHA respiratory protection must be provided.
<b>Eye/face protection:</b>	Wear chemical goggles; face shield (if splashing is possible).
<b>Skin protection:</b>	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>	Pale yellow
<b>Odor:</b>	Mild
<b>Odor threshold:</b>	Not available.
<b>pH:</b>	> 12.0
<b>Vapor pressure:</b>	Not determined
<b>Boiling point/range:</b>	> 100 °C (> 212°F) None
<b>Melting point/ range:</b>	Not determined
<b>Specific gravity:</b>	1.29 - 1.32 at 39.4 °C (102.92 °F)
<b>Vapor density:</b>	Not determined
<b>Flash point:</b>	Not applicable
<b>Flammable/Explosive limits - lower:</b>	Not applicable
<b>Flammable/Explosive limits - upper:</b>	Not applicable
<b>Autoignition temperature:</b>	Not applicable
<b>Evaporation rate:</b>	Not determined
<b>Solubility in water:</b>	Complete
<b>Partition coefficient (n-octanol/water):</b>	Not determined
<b>VOC content:</b>	Not available.
<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>	Reacts with acids.
<b>Reactivity:</b>	Not available.
<b>Conditions to avoid:</b>	Avoid contact with acids and oxidizing agents. Do not mix this product with fluids which contain NITRITES/NITRATES. NITROSAMINE may be formed.

## 11. TOXICOLOGICAL INFORMATION

**Relevant routes of exposure:** Not available.

### Potential Health Effects/Symptoms

<b>Inhalation:</b>	Inhalation of vapors or mists of the product may be irritating to the respiratory system.
<b>Skin contact:</b>	Corrosive to the skin. Contact with the skin or mucous membranes may cause severe irritation and burns. This product may cause an allergic skin reaction. A component in this product may be absorbed through the skin in harmful amounts.
<b>Eye contact:</b>	This product is severely irritating to the eyes and may cause irreversible damage including burns and blindness.
<b>Ingestion:</b>	This product may produce corrosive damage to the gastrointestinal tract if it is swallowed.

Hazardous Component(s)	LD50s and LC50s	Immediate and Delayed Health Effects
Sodium hydroxide	None	Irritant, Corrosive, Eyes
Triethanolamine	Oral LD50 (RAT) = 8.0 g/kg Dermal LD50 (RABBIT) = > 20,000 mg/kg	Irritant, Allergen
Diethanolamine	Oral LD50 (RAT) = 710 mg/kg Oral LD50 (RAT) = 1.82 g/kg	Allergen, Blood, Brain, Central nervous system, Corrosive, Heart, Irritant, Kidney, Liver, Respiratory, Spleen

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

## 12. ECOLOGICAL INFORMATION

**Ecological information:** No data available.

## 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).

## 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:** Sodium hydroxide solution  
**Hazard class or division:** 8  
**Identification number:** UN 1824  
**Packing group:** II  
**DOT Hazardous Substance(s):** Sodium hydroxide, Diethanolamine

### International Air Transportation (ICAO/IATA)

**Proper shipping name:** Sodium hydroxide solution  
**Hazard class or division:** 8  
**Identification number:** UN 1824  
**Packing group:** II

### Water Transportation (IMO/IMDG)

**Proper shipping name:** SODIUM HYDROXIDE SOLUTION  
**Hazard class or division:** 8  
**Identification number:** UN 1824  
**Packing group:** II

## 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:** None above reporting de minimis  
**CERCLA/SARA Section 311/312:** Immediate Health, Delayed Health  
**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). Diethanolamine (CAS# 111-42-2).

**CERCLA Reportable quantity:** Sodium hydroxide (CAS# 1310-73-2) 1,000 lbs. (454 kg)  
Diethanolamine (CAS# 111-42-2) 100 lbs. (45.4 kg)

**California Proposition 65:** This product contains a chemical known in the State of California to cause cancer.

**Export Restrictions:** 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/NDL 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 Material Safety Data Sheet format.

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