



Revision Number: 005.0

Issue date: 08/05/2014

**1. PRODUCT AND COMPANY IDENTIFICATION**

**Product name:** BONDERITE C-IC METAL GLO 6 AERO IDH number: 597172  
 known as TURCO METAL GLO #6  
**Product type:** Cleaner  
**Restriction of Use:** None identified  
**Region:** United States  
**Company address:** Henkel Corporation  
 One Henkel Way  
 Rocky Hill, Connecticut 06067  
**Contact information:**  
 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:** CAUSES SEVERE SKIN BURNS AND EYE DAMAGE.

HAZARD CLASS	HAZARD CATEGORY
SKIN CORROSION	1B
SERIOUS EYE DAMAGE	1

**PICTOGRAM(S)**



**Precautionary Statements**

**Prevention:** Do not breathe vapors, mist, or spray. Wash thoroughly after handling. Wear protective gloves, eye protection, and face protection.  
**Response:** 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. Wash contaminated clothing before reuse.  
**Storage:** Store locked up.  
**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*
Phosphoric acid	7664-38-2	1 - 5

IDH number: 597172

Product name: BONDERITE C-IC METAL GLO 6 AERO known as TURCO METAL GLO #6

Nitric acid	7697-37-2	1 - 5
Ethoxylated nonylphenol, branched	Proprietary	1 - 5
Tetrafluoroboric acid	16872-11-0	1 - 5
Xanthan gum	11138-66-2	1 - 5
2-Butoxyethanol	111-76-2	1 - 5
Ammonium bifluoride	1341-49-7	0.1 - 1

\* 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 inhaled, immediately remove the affected person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
<b>Skin contact:</b>	Remove contaminated clothing and footwear. Rinse with large amounts of running water. GET MEDICAL ATTENTION IMMEDIATELY! If iced 0.13% benzalkonium chloride (Zephiran) solution or 2.5% calcium gluconate gel are available, the rinsing may be limited to 5 minutes, with the soaks or gel applied as soon as the rinsing is stopped. If benzalkonium chloride or calcium gluconate gel is not available, rinsing must continue until medical treatment is provided.
<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.
<b>Notes to physician:</b>	Ocular exposure to corrosive fluoride compounds has been treated with isotonic sodium chloride or magnesium chloride. Dermal exposure to corrosive fluoride compounds has been treated with calcium gluconate or calcium carbonate gel applied topically to the affected areas to relieve pain at the site of exposure. Treatment of hypocalcemia associated with corrosive fluoride compounds exposure may be corrected by intravenous calcium gluconate or calcium chloride. Treatment of hypomagnesemia may be corrected by intravenous magnesium sulfate.

#### 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>	Flammable and explosive hydrogen gas may be formed when acids react with certain metals.

#### 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.
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**Clean-up methods:**

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

**Handling:**

Avoid contact with eyes, skin and clothing. Provide adequate ventilation. Avoid breathing vapors or mists of this product. Wash thoroughly after handling. Do not reuse the empty container. Do not take internally. For industrial use only.

**Storage:**

For safe storage, store between 40 °F (4.4 °C) and 100 °F (37.8 °C) Keep the container tightly closed and in a cool, well-ventilated place. Do not freeze. Thaw and mix thoroughly if frozen.

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
Phosphoric acid	3 mg/m <sup>3</sup> STEL 1 mg/m <sup>3</sup> TWA	1 mg/m <sup>3</sup> PEL	None	None
Nitric acid	2 ppm TWA 4 ppm STEL	2 ppm (5 mg/m <sup>3</sup> ) PEL	None	None
Ethoxylated nonylphenol, branched	None	None	None	None
Tetrafluoroboric acid	None	None	None	None
Xanthan gum	None	None	None	None
2-Butoxyethanol	20 ppm TWA	50 ppm (240 mg/m <sup>3</sup> ) PEL (SKIN)	None	None
Ammonium bifluoride	2.5 mg/m <sup>3</sup> TWA (as F)	2.5 mg/m <sup>3</sup> PEL (as F) 2.5 mg/m <sup>3</sup> TWA Dust.	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:**

Translucent

**Odor:**

Acidic

**Odor threshold:**

Not available.

**pH:**

< 2.5

**Vapor pressure:**

25 mm hg

**Boiling point/range:**

> 93.4 °C (> 200.1 °F)

**Melting point/ range:**

Not determined

**Specific gravity:**

1.04 - 1.06 at 75 °F (23.89 °C)

**Vapor density:**

> 1

**Flash point:**

Not applicable

**Flammable/Explosive limits - lower:**

Not applicable

Flammable/Explosive limits - upper:	Not applicable
Autoignition temperature:	Not applicable
Evaporation rate:	< 1 (Butyl acetate = 1)
Solubility in water:	Complete
Partition coefficient (n-octanol/water):	Not determined
VOC content:	< 3 % (calculated)
Viscosity:	Not available.
Decomposition temperature:	Not available.

## 10. STABILITY AND REACTIVITY

Stability:	Stable at normal conditions.
Hazardous reactions:	Will not occur.
Hazardous decomposition products:	May liberate hydrogen fluoride. Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.
Incompatible materials:	This product may react with strong alkalis. Explosive HYDROGEN GAS may be released if aqueous solutions of this material come into contact with reactive metals (IRON, ZINC, ALUMINUM).
Reactivity:	Not available.
Conditions to avoid:	Keep away from alkalis.

## 11. TOXICOLOGICAL INFORMATION

Relevant routes of exposure:	Skin, Inhalation, Eyes
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**Potential Health Effects/Symptoms**

**Inhalation:** Inhalation of mists/vapors of this product may cause dizziness, nausea, and respiratory tract congestion. Harmful by inhalation. Mists, vapors or liquid may cause severe irritation or burns. Contains fluorides. Exposure to fluorides over years may cause fluorosis.

**Skin contact:** Liquid or vapor can cause fluoride-type irritation or burns which may not be immediately painful or visible. A component in this product may be harmful or fatal if absorbed through the skin, especially if skin is damaged.

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

**Ingestion:** Not a likely route of entry.

Hazardous Component(s)	LD50s and LC50s	Immediate and Delayed Health Effects
Phosphoric acid	Oral LD50 (RAT) = 1,530 mg/kg Dermal LD50 (RABBIT) = 2,740 mg/kg	Irritant, Corrosive
Nitric acid	Inhalation LC50 (RAT, 30 min) = 334 mg/l Inhalation LC50 (RAT, 30 min) = 244 mg/l Inhalation LC50 (RAT, 30 min) = 138 mg/l Inhalation LC50 (RAT, 4 h) = 65 mg/l	Irritant, Corrosive, Lung, Teeth
Ethoxylated nonylphenol, branched	None	No Target Organs
Tetrafluoroboric acid	Oral LD50 (RAT) = 100 mg/kg Oral LD50 (RAT) = 464 mg/kg	Blood, Central nervous system, Corrosive, Eyes, Irritant, Kidney, Muscle, Skin, Teeth, Less weight gain and food intake.
Xanthan gum	None	Irritant
2-Butoxyethanol	Oral LD50 (RAT) = 560 mg/kg Oral LD50 (RABBIT) = 0.32 g/kg Oral LD50 (RAT) = 1.48 g/kg Dermal LD50 (RABBIT) = 400 mg/kg Inhalation LC50 (RAT, 4 h) = 486 ppm Inhalation LC50 (RAT, 4 h) = 450 ppm	Blood, Central nervous system, Irritant, Kidney, Liver
Ammonium bifluoride	Oral LD50 (RAT) +/- 130 mg/kg	Cardiac, Corrosive, Gastrointestinal tract, Irritant, Kidney, Lung, Metabolic, Nervous System, Respiratory, Teeth

Hazardous Component(s)	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
Phosphoric acid	No	No	No
Nitric acid	No	No	No
Ethoxylated nonylphenol, branched	No	No	No
Tetrafluoroboric acid	No	No	No
Xanthan gum	No	No	No
2-Butoxyethanol	No	No	No
Ammonium bifluoride	No	No	No

**12. ECOLOGICAL INFORMATION**

**Ecological information:** Not 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:** Corrosive liquid, acidic, inorganic, n.o.s. (Phosphoric acid, Nitric acid)  
**Hazard class or division:** 8  
**Identification number:** UN 3264  
**Packing group:** II  
**DOT Hazardous Substance(s):** Ammonium bifluoride, Nitric acid

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

**Proper shipping name:** Corrosive liquid, acidic, inorganic, n.o.s. (Phosphoric acid, Nitric acid)  
**Hazard class or division:** 8  
**Identification number:** UN 3264  
**Packing group:** II

#### Water Transportation (IMO/MDG)

**Proper shipping name:** CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Phosphoric acid, Nitric acid)  
**Hazard class or division:** 8  
**Identification number:** UN 3264  
**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:** Nitric acid (CAS# 7697-37-2).  
**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). Nitric acid (CAS# 7697-37-2). 2-Butoxyethanol (CAS# 111-76-2).  
**CERCLA Reportable quantity:** Ammonium bifluoride (CAS# 1341-49-7) 100 lbs. (45.4 kg)  
Nitric acid (CAS# 7697-37-2) 1,000 lbs. (454 kg)

**California Proposition 65:** This product contains a chemical known in the State of California to cause cancer. This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

#### 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: Updated Contact Information in Section 1.

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**Issue date:** 03/05/2014

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