Material Safety Data Sheet



Revision Number: 004.3 Issue date: 06/29/2012

1. PRODUCT AND COMPANY IDENTIFICATION

Product name:TURCO DEOXIDIZER 16 REPLIDH number:594403Product type:Auxiliary productItem number:594403Region:United States

Company address:Contact information:Henkel CorporationTelephone: 248.583.9300

32100 Stephenson Highway MEDICAL EMERGENCY Phone: Poison Control Center Madison Heights, MI 48071 1-877-671-4608 (toll free) or 1-303-592-1711

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

 HMIS:

 Physical state:
 Liquid
 HEALTH:
 *3

 Color:
 red
 FLAMMABILITY:
 0

 Odor:
 Sharp
 PHYSICAL HAZARD:
 0

Personal Protection: See MSDS Section 8

DANGER-CORROSIVE!: CAUSES EYE, SKIN AND RESPIRATORY TRACT BURNS.

HARMFUL IF SWALLOWED, ABSORBED THROUGH SKIN OR INHALED.

MAY CAUSE BLINDNESS.
POSSIBLE CANCER HAZARD.

Relevant routes of exposure: Skin, Inhalation, Eyes

Potential Health Effects

Inhalation: Mists, vapors or liquid may cause severe irritation or burns.

Skin contact: Contact with broken skin may lead to formation of firmly marginated "chrome sores". Product

contains chromium, which may cause an allergic skin sensitization reaction. Massive overexposures may lead to kidney failure and death. Following skin exposure to this product, the sensation of irritation or pain may be delayed. A component in this product may be harmful

or fatal if absorbed through the skin, especially if skin is damaged.

Eye contact: This product is severely irritating to the eyes and may cause irreversible damage including

burns and blindness.

Ingestion: This product may produce corrosive damage to the gastrointestinal tract if it is swallowed.

Ingestion of small amounts of this product may result in potentially fatal hypocalcemia and

systemic toxicity.

Existing conditions aggravated by

exposure:

Eye, skin and respiratory disorders.

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR

1910.1200).

See Section 11 for additional toxicological information.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous components	CAS NUMBER	%
Chromic acid	7738-94-5	10 - 30
Hydrogen fluoride	7664-39-3	5 - 10

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: 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.

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. Give one to two

glasses of water or milk. Never give anything by mouth to a victim who is

unconscious or is having convulsions.

Notes to physician: 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

Flash point: Not applicable

Autoignition temperature: Not applicable

Flammable/Explosive limits - lower: Not applicable

Flammable/Explosive limits - upper: Not applicable

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: If evaporated to dryness, solid residue is an oxidizing agent and may cause

spontaneous ignition of combustible materials.

Hazardous combustion products: Flammable and explosive hydrogen gas may be formed when hydrofluoric

acid reacts with certain metals. Hydrogen fluoride gas may evolve when

chemical is subjected to prolonged high temperature.

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 suitable protective

clothing, gloves and eye/face protection.

Clean-up methods: Absorb spill with inert material. Shovel material into appropriate container for

disposal. Dispose of according to Federal, State and local governmental

regulations. Do not allow product to enter sewer or waterways.

7. HANDLING AND STORAGE

Handling: Avoid contact with eyes, skin and clothing. Avoid breathing vapors or mists of

this product. Wash thoroughly after handling. For industrial use only.

Storage: Keep container tightly closed and in a cool, well-ventilated place away from

incompatible materials. Manufacturer recommends storing above 4.4 °C (40

°F). 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 components	ACGIH TLV	OSHA PEL	AIHA WEEL	OTHER
Chromic acid	0.05 mg/m3 TWA (as Cr)	0.1 mg/m3 Ceiling 0.005 mg/m3 TWA (SKIN) 0.0025 mg/m3 OSHA ACT 29 CFR 1910.1026	None	None
Hydrogen fluoride	(SKIN) (as F) 0.5 ppm TWA (as F) 2 ppm Ceiling (as F)	3 ppm TWA	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: red Odor: Sharp

Odor threshold: Not available.

pH: <

Vapor pressure:

Not determined

Boiling point/range:

Melting point/ range:

Specific gravity:

Vapor pressure:

Not determined

> 100 °C (> 212°F)

Not available.

1.1 - 1.2

Vapor density: Not determined Flash point: Not applicable Flammable/Explosive limits - lower: Not applicable Flammable/Explosive limits - upper: Not applicable Autoignition temperature: Not applicable **Evaporation rate:** Not determined Solubility in water: Complete Partition coefficient (n-octanol/water): Not available. **VOC** content: Not applicable

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10. STABILITY AND REACTIVITY

Stability: Stable at normal conditions.

Hazardous reactions: Will not occur.

Hazardous decomposition products: May liberate hydrogen fluoride. Decomposes with heat to produce oxides of

nitrogen.

Incompatible materials: Reacts with cyanides and sulfides to cause the release of poisonous gases.

This material will react with glass, concrete, certain metals, silica containing materials, rubber, leather, and many organics. Avoid contact with organic materials, oils, greases, and any oxidizable materials. This product may react

with strong alkalies.

Conditions to avoid: Store away from incompatible materials.

11. TOXICOLOGICAL INFORMATION

Hazardous components	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
Chromic acid	Known To Be Human Carcinogen.	Group 1	Yes
Hydrogen fluoride	No	No	No

Hazardous components	Health Effects/Target Organs
Chromic acid	Allergen, Blood, Carcinogen, Central nervous system, Corrosive, Developmental, Eyes, Gastrointestinal, Irritant, Kidney, Liver, Mutagen, Reproductive, Respiratory
Hydrogen fluoride	Allergen, Blood, Bone Marrow, Cardiac, Central nervous system, Corrosive, Irritant, Kidney, Liver, Lung, Muscle, Nervous System, Respiratory, Teeth

12. ECOLOGICAL INFORMATION

Ecological information: Not available.

13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

Recommended method of disposal: Dispose of according to Federal, State and local governmental regulations.

Hazardous waste number: This product, if discarded directly, would be a characteristic RCRA corrosive

waste (D002). This product contains chromium which is a hazardous waste (D007). This product contains a component or components identified as $\frac{1}{2}$

hazardous under 40 CFR 261.24. U134: Hydrogen fluoride

14. TRANSPORT INFORMATION

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

Proper shipping name: Corrosive liquids, toxic, n.o.s. (Hydrofluoric acid, Chromic acid)

Hazard class or division: 8 (6.1)
Identification number: UN 2922
Packing group: II

DOT Reportable quantity: Chromic acid, Hydrofluoric acid

International Air Transportation (ICAO/IATA)

Proper shipping name: Corrosive liquid, toxic, n.o.s. (Hydrofluoric acid, Chromic acid)

Hazard class or division: 8 (6.1)
Identification number: UN 2922
Packing group: II

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Water Transportation (IMO/IMDG)

Proper shipping name: CORROSIVE LIQUID, TOXIC, N.O.S. (Hydrofluoric acid, Chromic acid)

Hazard class or division: 8 (6.1)
Identification number: UN 2922
Packing group: II

Additional information: IMDG-Code: Segregation group 1- Acids

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: Chromic acid (CAS# 7738-94-5).

CERCLA/SARA Section 302 EHS: Hydrogen fluoride (CAS# 7664-39-3).
CERCLA/SARA Section 311/312: Immediate Health, Delayed Health

CERCLA/SARA 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). Chromic acid (CAS# 7738-94-5). Hydrogen fluoride (CAS# 7664-39-3).

CERCLA Reportable quantity: Chromic acid (CAS# 7738-94-5) 10 lbs. (4.54 kg)

Hydrogen fluoride (CAS# 7664-39-3) 100 lbs. (45.4 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/NDSL Status: All components are listed on or are exempt from listing on the Canadian Domestic

Substances List.

WHMIS hazard class: D.1.A, D.2.A, D.2.B, E

16. OTHER INFORMATION

This material safety data sheet contains changes from the previous version in sections: Reviewed MSDS. Reissued with new date

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