

SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Identification

Product Name: Chrome Polishing Solution (Nobilium)
Product Number: 5016
Chemical Name: Ethylene Glycol & Sulfuric Acid
CAS Number: Blend

Company Identification

Nobilium, Div. of CMP Industries LLC
413 North Pearl St
Albany, NY 12207-1311 USA
(518)-434-3147 (For product information)
(800)-424-9300 (For emergencies)
1-800-424-9300 or 1-202-483-7616 (CHEMTREC)

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:

WARNING: Corrosive. May cause severe irritation or burns to all tissues. Inhalation of vapors or mist may cause severe mucous membrane irritation or burns and severe respiratory irritation and lung damage. May be fatal if swallowed or inhaled.

GHS Classification:

Metal Corrosion Category 1
Acute Toxicity, Oral - Category 1
Skin Corrosion/Irritation - Category 1A
Serious Eye Damage/Eye Irritation - Category 1
Carcinogenicity Category 1A
Specific target organ toxicity-repeated exposure Category 2
Acute Aquatic Hazard Category 3

GHS Hazard Symbols:

Corrosive, Irritant, Health Hazard



GHS Hazard Statements:

H290 - May be corrosive to metals.
H302 - Harmful if swallowed.



H314 - Causes severe skin burns and eye damage.
H350-May cause cancer.
H373-May cause damage to organs through prolonged or repeated exposure.
H402 - Harmful to aquatic life

GHS Precautionary Statements:

P201 - Obtain special instructions before use.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P281 - Use personal protective equipment as required.
P301/330/331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P303/361/353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P305/351/338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313 If exposed or concerned: Get medical advice/attention.

EYE:

Liquid or vapors may cause severe irritation or burns with redness, tearing, blurred vision. Tissue destruction may occur with corneal damage or blindness.

SKIN:

Mist may cause irritation with redness and burning of the skin. Contact with liquid may cause redness, pain and ulceration of the skin. Widespread exposure may cause circulatory collapse.

INHALATION:

Inhalation of vapors and mists may cause damaging effects in the mucous membranes and upper respiratory tract. Symptoms include coughing, sore throat, shortness of breath and lung edema.

INGESTION:

Results in severe damage to mucous membranes and deep tissues. Can cause gastrointestinal irritation, nausea, vomiting and diarrhea. May be fatal.

CHRONIC EFFECTS:

Prolong exposure to dilute solutions may cause dermatitis. Prolonged exposure to mist may cause damage to the teeth. Ethylene glycol has been shown to cause birth defects in studies with laboratory animals.

CARCINOGENICITY INFORMATION:

Sulfuric acid is listed by IARC (Group 1).

MEDICAL CONDITIONS AGRAVATED BY EXPOSURE:

Individuals with pre-existing eye, skin or respiratory disease may be at increased risk from exposure.

3. COMPOSITION/INFORMATION ON INGREDIENTS

COMPONENT LISTING:

Chemical Name	Amount	CAS Number
ETHYLENE GLYCOL	85.0 %	107-21-1
SULFURIC ACID (UN1760)	10.0 %	7664-93-9
HYDROCHLORIC ACID	5.0 %	7647-01-0

This product contains hazardous materials as defined by the OSHA Hazard Communication Standard 29 CFR 1910.1200.



As defined under Sara 311 and 312, this product contains materials that are acute, chronic hazards.

4. FIRST AID MEASURES

EYE CONTACT FIRST AID:

Flush eye with water for 15 minutes lifting upper and lower lids occasionally. Get medical attention.

SKIN CONTACT FIRST AID:

Wash skin with soap and water. Remove contaminated clothing. Wash clothing separately before reuse. Get medical attention.

INHALATION FIRST AID:

If inhaled, remove to fresh air. If breathing is difficult have qualified personnel give oxygen. If not breathing, give artificial respiration. Keep victim warm. Get medical attention.

INGESTION FIRST AID:

If swallowed, immediately give 2 glasses of water. Do not induce vomiting. Keep victim warm and quiet. Get medical attention. Never give anything by mouth to an unconscious person.

5. FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES

COC Flash Point: 115.6 C (240.1 F)

Autoignition Temperature: N/A

FLAMMABLE LIMITS IN AIR

LEL: N/A

UEL: N/A

EXTINGUISHING MEDIA:

Use dry chemical, foam and carbon dioxide. Cool fire exposed containers and structures with water. Use water spray to dissipate corrosive vapors. Do not direct a solid stream of water or foam into hot, burning pools of liquid. This may cause frothing and increase fire intensity.

FIRE & EXPLOSION HAZARDS:

Acids react with most metals to release hydrogen gas which can form explosive mixtures with it. Never use welding or cutting torch on or near (even empty) because products (even residue) can ignite explosively.

COMBUSTION PRODUCTS:

Carbon monoxide, carbon dioxide, hydrogen chloride gases and chlorine.

MISCELLANEOUS:

Wear self-contained breathing apparatus with a full face piece operated in the positive pressure demand mode and full body protection.

6. ACCIDENTAL RELEASE MEASURES

LARGE SPILLS PROCEDURE:

Eliminate all ignition sources. Stop spill at source. Dike area of spill to prevent spreading. Pump liquid to



salvage tank. Remaining liquid can be taken up with sand, clay, earth, floor absorbent or other absorbent material and shoveled into containers.

Do not use combustible material such as sawdust.

SMALL SPILLS PROCEDURE:

Cover contaminated surface with sodium bicarbonate or a soda ash/slaked lime mixture (50 - 50). Mix and add water if necessary to form a slurry. Scoop up slurry and wash site with soda ash solution.

MISCELLANEOUS:

Prevent spill from entering sewers and water courses. Report releases as required by local, state and federal authorities.

7. HANDLING AND STORAGE

HANDLING (PERSONNEL):

Prevent contact with eyes, skin and clothing. Do not breathe vapors or mists. Wear appropriate protective clothing as described in Section 8. Use only with adequate ventilation. Wash thoroughly with soap and water after handling. Keep containers closed when not in use.

Do not reuse containers. Empty containers retain product residues and can be hazardous. Follow all SDS precautions when handling empty containers.

HANDLING (PHYSICAL ASPECTS):

Addition to water releases heat which can result in violent boiling and splattering. Always add slowly and in small amounts. Never use hot water. Never add water to acids. Always add acids to water.

STORAGE PRECAUTIONS:

Store in a cool, dry, well ventilated area away from heat and incompatible materials. Protect from physical damage.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS:

Use with adequate general or local exhaust ventilation to maintain exposures below the occupational exposure limits.

EYE / FACE PROTECTION REQUIREMENTS:

Use chemical splash goggles and face shield (ANSI Z87-1 or approved equivalent). Chemical goggles are recommended to avoid contact with eyes.

SKIN PROTECTION REQUIREMENTS:

Protective gloves are highly recommended (nitrile rubber, polyvinyl chloride or neoprene). Also wear impervious clothing and boots.

RESPIRATORY PROTECTION REQUIREMENTS:

A NIOSH/OSHA approved air supplied respirator is advised in the absence of proper environmental control.

EXPOSURE GUIDELINES:

ETHYLENE GLYCOL

OSHA TWA: 50 ppm, 127 mg/m³



HYDROCHLORIC ACID

OSHA PEL: 5 ppm, 7 mg/m³
OSHA TWA: 5 ppm, 7 mg/m³
OSHA Ceiling Limit: 5 ppm, 7 mg/m³
Skin Designation: Yes

9. PHYSICAL AND CHEMICAL PROPERTIES

FORM:	Viscous Liquid
COLOR:	Colorless
ODOR:	Acidic
VAPOR PRESSURE:	6 mm Hg @ 317 F
VAPOR DENSITY:	3.4 (Air = 1)
SOLUBILITY IN WATER:	Very Soluable (50 gr / 100 ml water)
SPECIFIC GRAVITY:	1.864 (Water = 1)

10. STABILITY AND REACTIVITY

STABILITY:

Stable.

POLYMERIZATION:

Hazardous polymerization will not occur.

INCOMPATIBILITY WITH OTHER MATERIALS:

Avoid contact with strong oxidizing agents, strong alkalies, alkali metals, combustible materials, powder metals and organic materials.

11. TOXICOLOGICAL INFORMATION

EYE EFFECTS:

Liquid or vapors may cause severe irritation or burns with redness, tearing, blurred vision. Tissue destruction may occur with corneal damage or blindness.

SKIN EFFECTS:

Mists may cause irritation with redness and burning of the skin. Contact with liquid may cause redness, pain and ulceration of the skin. Widespread exposure may cause circulatory collapse with clammy skin, weak or rapid pulse, shallow respiration and scanty urine.

ACUTE INHALATION EFFECTS:

Inhalation of vapors and mists may cause damaging effects in the mucous membranes and upper respiratory tract. Symptoms include coughing, sore throat, shortness of breath and lung edema.

CHRONIC EFFECTS /:

Prolonged exposure to dilute solutions may cause dermatitis. Prolonged exposure to mists may cause damage to the teeth. Ethylene glycol has been shown to cause birth defects in studies with laboratory animals.

SULFURIC ACID (UN1760)

Test Code: TCLO
Description: Inhalation



Species: Human
Results: 3 mg/m³ for 24 weeks, not yet reviewed.

HYDROCHLORIC ACID

Test Code: LD₅₀
Description: Inhalation
Species: Human
Results: 1300 ppm/30 min, not yet reviewed.

Test Code: Oral LD₅₀
Species: Rabbits
Results: 900 mg/kg, toxic effects not yet reviewed.

Test Code: TCLO
Description: Inhalation
Species: Rat
Results: 450 mg/m³/hr (1 day prior to pregnancy) produced fetotoxicity (except death) and specific developmental abnormalities.

Test Code: Eye
Species: Rabbit
Results: 100 mg rinse caused irritation.

SULFURIC ACID

Test Code: LD₅₀
Description: Unreported route of entry.
Species: Man
Results: 135 mg/kg, toxic effects not yet reviewed.

Test Code: Oral LD₅₀
Species: Rat
Results: 2140 mg/kg toxic effects not yet reviewed.

Test Code: Eye
Species: Rabbit
Results: 100 mg rinse produced severe irritation.

Test Code: TCLO
Description: Inhalation
Species: Human
Results: 10,000 mg/m³ caused watering eyes and cough.

Test Code: Lymphocyte Study
Species: Human
Results: 320 millimoles/L caused DNA inhibition

Test Code: Acute Dermal Exposure
Description: Skin
Species: Rabbit
Results: 555 mg (open patch tests) caused mild irritation.

Test Code: Oral LD₅₀
Species: Rat
Results: 4700 mg/kg, no toxic effects.

Test Code: Oral TDLO



Species: Rat
Results: 50 g/kg (6 to 15th day of pregnancy) caused specific developmental abnormalities of the skin, blood, lymph and musculoskeletal system.

12. ECOLOGICAL INFORMATION

ETHYLENE GLYCOL

Test Code: LC50/96-hour
Species: fish
Results: >100 mg/l

SULFURIC ACID (UN1760)

Test Code: LC50/48-hour
Species: Prawn
Results: 42.5 ppm

HYDROCHLORIC ACID

Test Code: 96 hr
Description: LC50
Species: Fathead minnow
Results: 21900 ug/l

13. DISPOSAL CONSIDERATIONS

WASTE DISPOSAL:

Small waste: Allow volatile portion to evaporate under the hood. Allow sufficient time for vapors to completely clear hood duct work. Treat or dispose of waste material in accordance with all local, state/provincial, and national requirements.

Large waste: Destroy by liquid incineration in accordance with state, local and federal regulations. Contaminated absorbent may be deposited in a landfill in accordance with local, state and federal regulations.

14. TRANSPORT INFORMATION

PRODUCT LABEL:	Chrome Polishing Solution (Nobilium)
D.O.T. SHIPPING NAME:	Corrosive Liquid N.O.S.
TECHNICAL SHIPPING NAME:	Corrosive Liquid N.O.S. Sulfuric Acid
D.O.T. HAZARD CLASS:	8, PG III
UN NUMBER:	1760

15. REGULATORY INFORMATION

REGULATORY LISTS SEARCHED:

01 = SARA 313	02 = CA Proposition 65
03 = SARA 302/304	04 = CERCLA 302.4
05 = ACGIH TWA	06 = ACGIH STEL
07 = ACGIH CALC TLV	08 = OSHA PEL



10 = OSHA CEILING

EEC Symbols and Indications of Danger:

Toxic (T), Harmful (Xn), Corrosive (C)



R-Phrases:

- R35 - Causes severe burns.
- R36/37 - Irritating to eyes and respiratory system.
- R39 - Danger of very serious irreversible effects.
- R20/21/22 - Harmful by inhalation, in contact with skin, and if swallowed.
- R23 - Toxic by inhalation.
- R25 - Toxic if swallowed.
- R32 - Contact with acids liberates very toxic gas.
- R36/38 - Irritating to eyes and skin.
- R37 - Irritating to respiratory system.

S-Phrases:

- S15 - Keep away from heat.
- S23.2 - Do not breathe vapor.
- S24/25 - Avoid contact with skin and eyes.
- S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- S36/37/39 - Wear suitable protective clothing, gloves, and eye/face protection.
- S45 - In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
- S51 - Use only in well-ventilated areas.
- S60 - This material and its container must be disposed of as hazardous waste.

Canadian Disclosure List

- ETHYLENE GLYCOL (107-21-1)
- SULFURIC ACID (UN1760) (7664-93-9)
- HYDROCHLORIC ACID (7647-01-0)

SARA Title III - Section 313

- Chrome Polishing Solution (Nobilium) (BLEND) --
- ETHYLENE GLYCOL (107-21-1)
- SULFURIC ACID (UN1760) (7664-93-9)
- HYDROCHLORIC ACID (7647-01-0)

CERCLA Hazardous Substances

- SULFURIC ACID (UN1760) (7664-93-9) -- RQ 1000 lb
- HYDROCHLORIC ACID (7647-01-0) -- RQ 5000 lb

Clean Air Act - Section 112

- HYDROCHLORIC ACID (7647-01-0)

Title V

- ETHYLENE GLYCOL (107-21-1)
- SULFURIC ACID (UN1760) (7664-93-9)
- HYDROCHLORIC ACID (7647-01-0)



CA Proposition 65

SULFURIC ACID (UN1760) (7664-93-9)

SC Toxic Air Pollutants List

ETHYLENE GLYCOL (107-21-1)
SULFURIC ACID (UN1760) (7664-93-9)
HYDROCHLORIC ACID (7647-01-0)

16. OTHER INFORMATION

PREPARED BY: John Nicpon
APPROVED BY: John Nicpon
TITLE: Quality Manager
APPROVAL DATE: March 14, 2018
SUPERCEDES DATE: March 9, 2018
RTN NUMBER: 00000198 (Official Copy)

HMIS Rating:

Health - 3
Flammability - 0
Reactivity - 0

NFPA Rating:

Health -
Flammability -
Reactivity -
Special Hazard - N/A

ABBREVIATIONS USED IN THIS MSDS:

TLV - THRESHOLD LIMIT VALUE
STEL - SHORT TERM EXPOSURE LIMIT
RQ - REPORTABLE QUANTITY
C - CEILING LIMIT
NDA - NO DATA AVAILABLE
TWA - Time Weighted Average
TPQ - Threshold Planning Quantity
PEL - Permissible Exposure Limit
CAS - Chemical Abstract Service Number
N/A - Not Applicable or Not Available

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END OF SAFETY DATA SHEET

