



## CHEMEON TCP-HF™ SP

### SECTION 1: Identification

**Product identifier:** CHEMEON TCP-HF™ SP  
**Other names:** Metalast TCP-HF SP (prior to June, 2015)  
**Product Code Number:** Not applicable.  
**Recommended use:** Conversion Coating and Anodizing Sealant.  
**Recommended restrictions:** Uses other than as recommended above.

**Manufacturer/Importer/Supplier/Distributor information:**

**Company Name:** CHEMEON Surface Technology, LLC.  
**Company Address:** 2241 Park Place, Bldg. B  
Minden, NV 89423.  
**Company Telephone:** (775) 782-8324  
**Company Contact Name:** Customer Service  
8:00 AM – 5:00 PM PST, Mon-Fri.  
**Emergency phone number:** Chemtrec 24 hr. Emergency Telephone  
800-424-9300 within U.S.  
703-527-3887 outside U.S.

### SECTION 2: Hazard(s) identification

**Classification of the chemical in accordance with paragraph (d) of §1910.1200:**

**Physical hazards**

No physical hazards under GHS classification.

**Health hazards**

Acute toxicity, Oral (Category 4), H302  
Acute toxicity, Inhalation (Category 4), H332  
Acute toxicity, Dermal (Category 4), H312  
Skin corrosion (Category 1A), H314  
Serious eye damage (Category 1), H318  
Specific target organ toxicity - single exposure, Respiratory tract irritation (Category 3), H335

**Environmental hazards**

No environmental hazards under GHS classification.

**GHS Signal word:** DANGER.

**GHS Hazard statement(s):** H302+H312+H332 – Harmful if swallowed, in contact with skin or if inhaled.  
H314 – Causes severe skin burns and eye damage.  
H335 – May cause respiratory irritation.

**GHS Hazard symbol(s):****GHS Precautionary statement(s):****Prevention:**

- P261 – Avoid breathing dust/fume/gas/mist/vapor/spray.
- P264 - Wash skin thoroughly after handling.
- P270 – Do not eat, drink or smoke when using this product.
- P271 - Use only outdoors or in a well-ventilated area.
- P280 - Wear protective gloves/ eye protection/ face protection.

**Response:**

- P301+P330 – If SWALLOWED: Rinse mouth.
- P302+P352 - If ON SKIN: Wash with plenty of water.
- P304+P340 – If INHALED: Remove person to fresh air and keep comfortable for breathing.
- P305+P351+P338+P310 – If IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center or doctor.
- P312 – Call a POISON CENTER or doctor if you feel unwell.
- P362+P364 - Take off contaminated clothing and wash it before reuse.

**Storage:**

- P403+P233 – Store in a well-ventilated place. Keep container tightly closed.
- P405 – Store locked up.

**Disposal:**

- P501 - Dispose of contents/container in accordance with local/regional/national/international regulations.

**Hazard(s) not otherwise**

**Classified (HNOC):** None known.

<b>SECTION 3: Composition/information on ingredients</b>
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**Mixture:**

Chemical name	CAS#	Concentration (weight %)
Chromium Sulfate, Basic Solution	12336-95-7	< 10%
Hexafluorozirconic Acid Solution (50%)	12021-95-3	< 10%

Note: The balance of the ingredients are not classified as hazardous or are below the concentration limit to be classified as hazardous, under the criteria of the Federal OSHA Hazard Communication Standard 29CFR 1910.1200.

#### **SECTION 4: First-aid Measures**

**Inhalation:** Immediately move person to fresh air if vapor or mist of product is inhaled. Seek immediate medical attention if symptoms develop.

**Skin contact:** Immediately remove all contaminated clothing. Wash affected area with water and soap. If irritation occurs seek medical attention.

**Eye contact:** In case of contact, immediately flush eyes with copious amounts of water for at least 15 minutes. Ensure adequate flushing of eyes by separating eyelids with fingers. Seek medical attention.

**Ingestion:** Wash out mouth with large amounts of water and do not induce vomiting. Seek medical attention.

**Most important symptoms/effects, acute and delayed:** Prolonged and/or repeated contact may cause fluoride type irritation and/or dermatitis. May cause irritation to the eye. May cause GI irritation, including nausea, vomiting, and diarrhea. May be harmful if swallowed in large quantities. May exacerbate pre-existing eye, skin, and lung disorders.

**Indication of immediate medical attention and special treatment needed:** If any symptoms are observed, contact a physician and give them this SDS sheet. If exposed or concerned: Get medical advice/attention.

#### **SECTION 5: Fire-fighting measures**

**Suitable extinguishing media:** Product is an aqueous mixture and will not burn. Use measures suitable to surrounding fire. Use Water, CO<sub>2</sub> or dry chemical.

**Unsuitable extinguishing media:** Not applicable.

**Specific hazards arising from the chemical:** Hazardous combustion products - Fire conditions may produce small amounts of hexavalent chromium, SO<sub>2</sub>, SO<sub>3</sub> and HF if exposed to elevated temperatures.

**Special protective equipment and precautions for fire-fighters:**

Wear full protective clothing and a self-contained respirator to avoid inhalation of possibly irritating and toxic fumes. Fight fire from a protected location. In addition, wear other appropriate protective equipment as conditions warrant (see Section 8).

#### **SECTION 6: Accidental release measures**

**Personal precautions, protective equipment and emergency procedures:** Evacuate danger area. Stay upwind and away from spill/release. Avoid direct contact with liquid and vapors. For large

spillages, notify persons downwind of the spill/release, isolate immediate hazard area and keep unauthorized personnel out. Wear appropriate protective equipment, including respiratory protection, as conditions warrant (see Section 8). See Sections 2 and 7 for additional information on hazards and precautionary measures.

**Environmental Precautions:** Stop spill/release if it can be done safely. Prevent spilled material from entering sewers, storm drains, other unauthorized drainage systems, and natural waterways. Use water sparingly to minimize environmental contamination and reduce disposal requirements. If spill occurs on water notify appropriate authorities and advise shipping of any hazard.

**Methods and material for containment and cleaning up:** Absorb spill with inert material and shovel into appropriate waste disposal container. Dispose of collected material according to regulations.

### SECTION 7: Handling and Storage

**Precautions for safe handling:** Do not get this material in your eyes, on your skin, or on your clothing. Wash thoroughly after handling. For industrial use only. Do not take internally. Comply with all national, state, and local codes pertaining to the storage, handling, dispensing, and disposal of the product.

**Conditions for safe storage, including any incompatibles:** Keep container tightly closed in a cool, well-ventilated place. Keep away from heat and light. Store above 40°F, away from strong bases/alkalis and strong oxidizers.

### SECTION 8: Exposure controls/personal protection

**Control Parameters:**

**Occupational exposure limits:**

<b>US OSHA HAZARDOUS COMPONENTS (29 CFR 1910.1200): Permissible Exposure Limits</b>			
<b>Substance</b>	<b>PEL-TWA (8 hour)</b>	<b>PEL-STEL (15 min)</b>	<b>REMARKS</b>
Chromium Sulfate, Basic Solution (as Cr)	0.5 mg/m <sup>3</sup>	No data available	Not classifiable as human carcinogen
Hexafluorozirconic Acid Solution	5 mg/m <sup>3</sup>	No data available	Not classifiable as human carcinogen

<b>US ACGIH Threshold Limit Values</b>			
<b>Substance</b>	<b>TLV-TWA</b>	<b>TLV-STEL</b>	<b>REMARKS</b>
Chromium Sulfate, Basic Solution (as Cr)	No data available	No data available	Not classifiable as human carcinogen
Hexafluorozirconic Acid Solution	5 mg/m <sup>3</sup>	10 mg/m <sup>3</sup>	Not classifiable as human carcinogen

**Appropriate engineering controls:** Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

**Individual protection measures, such as personal protective equipment:**

**Eye/face protection:** Wear safety glasses and a face shield where a splash hazard exists. Wear a full-face respirator, if needed. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin and Hand protection:** Impervious gloves and protective clothing are recommended. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

**Respiratory protection:** If engineering controls do not maintain airborne concentrations below recommended exposure limits or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. In the United States of America, if respirators are used, a program should be instituted to assure compliance with OSHA Standard 63 FR 1152, January 8, 1998. Respirator type: Air-purifying respirator with an appropriate, government approved (where applicable), air-purifying filter, cartridge or canister. Contact health and safety professional or manufacturer for specific information.

**Other:** Eye wash, safety shower and washing facilities should be available in the work area.

**Thermal hazards:** No data available.

## **SECTION 9: Physical and chemical properties**

### **Appearance**

<b>Physical state:</b>	Liquid
<b>Color:</b>	Translucent dark-green
<b>Odor:</b>	Mild to no odor.
<b>Odor threshold:</b>	No data available
<b>pH:</b>	2.0 – 3.5
<b>Melting point/freezing point:</b>	freezing point 0 °C

<b>Initial Boiling Point and boiling range:</b>	> 100 °C (> 212 °F) @ 760 mmHg
<b>Flash point:</b>	Not applicable
<b>Evaporation rate:</b>	Not determined
<b>Flammability (solid, gas):</b>	Not applicable
<b>Upper/lower flammability or explosive limits</b>	
<b>Flammability limit – lower (%):</b>	Not applicable
<b>Flammability limit – upper (%):</b>	Not applicable
<b>Explosive limit – lower (%):</b>	Not applicable
<b>Explosive limit – upper (%):</b>	Not applicable
<b>Vapor pressure:</b>	Not determined
<b>Vapor density (air=1):</b>	Not determined
<b>Relative density (water = 1):</b>	Not determined
<b>Solubility(ies):</b>	100%
<b>Partition coefficient</b>	
<b>(n-octanol/water):</b>	Not available
<b>Auto-ignition temperature:</b>	Not applicable
<b>Decomposition temperature:</b>	Not available
<b>Viscosity @ 20°C:</b>	Not available
<b>Weight per gallon:</b>	8.755 lbs.
<b>% Volatiles by wt:</b>	0

#### SECTION 10: Stability and Reactivity

<b>Reactivity:</b>	Not chemically reactive.
<b>Chemical stability:</b>	Stable under normal ambient and anticipated conditions of use.
<b>Possibility of hazardous reactions:</b>	Hazardous reactions not anticipated.
<b>Conditions to avoid:</b>	Avoid contact with incompatible materials, elevated temperatures, sparks, flames and ignition sources.
<b>Incompatible materials:</b>	This product is incompatible with strong bases/alkalis and strong oxidizers.
<b>Hazardous decomposition products:</b>	This product may emit harmful gases if exposed to elevated temperatures. Carbon monoxide and carbon dioxide.

#### SECTION 11: Toxicological information

##### Information on likely routes of exposure:

<b>Inhalation:</b>	None expected. May exacerbate lung disorders.
<b>Ingestion:</b>	None expected. May cause GI irritation, including nausea, vomiting, and diarrhea. Maybe harmful if swallowed in large quantities.
<b>Skin:</b>	Prolonged and/or repeated contact may cause fluoride-type irritation and/or dermatitis. Skin absorption not expected.
<b>Eyes:</b>	May cause irritation to the eye.

**Target Organ(s):** Eye, skin, lungs.

**Symptoms related to the physical, chemical, and toxicological characteristics:**

May exacerbate pre-existing eye, skin, and lung disorders.

**Delayed and immediate effects and chronic effects from short or long-term exposure:**

Prolonged and/or repeated contact may cause fluoride type irritation and/or dermatitis.

**Acute toxicity estimates:**

Acute Oral Toxicity – no data available  
Acute Dermal Toxicity - no data available  
Acute Inhalation Toxicity - no data available

**Skin corrosion/irritation:**

Prolonged and/or repeated contact may cause fluoride-type irritation and/or dermatitis.

**Serious eye damage/eye irritation:**

This material can cause eye irritation. Symptoms may include irritation, redness, and tearing.

**Respiratory sensitization:**

No information available on the mixture, however none of the components have been classified for respiratory sensitization (or are below the concentration threshold for classification).

**Skin sensitization:**

No information available on the mixture, however none of the components have been classified for skin sensitization (or are below the concentration threshold for classification).

**Germ cell mutagenicity:**

No information available on the mixture, however none of the components have been classified for germ cell mutagenicity (or are below the concentration threshold for classification).

**Carcinogenicity:**

No information available on the mixture, however none of the components are listed in the National Toxicology Program (NTP) Report on Carcinogens (latest edition) or has been found to be a potential carcinogen in the International Agency for Research on Cancer (IARC) Monographs (latest edition), or by OSHA.

**Reproductive toxicity:**

No information available on the mixture, however none of the components have been classified for reproductive toxicity (or are below the concentration threshold for classification).

**Specific target organ toxicity-  
Single exposure:**

No information available on the mixture, however none of the components have been classified for Specific target organ toxicity- Single exposure (or are below the concentration threshold for classification).

**Specific target organ toxicity-****Repeat exposure:**

No information available on the mixture, however none of the components have been classified for Specific target organ toxicity- Single exposure (or are below the concentration threshold for classification).

**Aspiration hazard:**

No information available on the mixture, however none of the components have been classified for aspiration hazard (or are below the concentration threshold for classification).

**Further information:**

No data available

**SECTION 12: Ecological information****Ecotoxicity:**

**Persistence and Degradability:** No data available

**Bioaccumulative Potential:** No data available.

**Mobility in Soil:** No data available.

**Other adverse effects:** None anticipated.

**SECTION 13: Disposal considerations****Disposal instructions:**

**Product** - Discharge, treatment, or disposal may be subject to national, state, or local laws.

**Contaminated packaging** - Since emptied containers retain product residue, follow label warnings even after container is emptied. Residual vapors may explode on ignition; do not cut, drill, grind, or weld on or near this container.

**SECTION 14: Transport Information****Land transport DOT**

UN Number: 1760, Corrosive Liquid, n.o.s. (Chromic (III) Sulfate, Hexafluorozirconic Acid)

Class: 8 Packing Group: III.

**Maritime transport IMDG**

UN Number: 1760, Corrosive Liquid, n.o.s. (Chromic (III) Sulfate, Hexafluorozirconic Acid)

Class: 8 Packing Group: III.

**Air transport ICAO-TI and IATA-DGR**

UN Number: 1760, Corrosive Liquid, n.o.s. (Chromic (III) Sulfate, Hexafluorozirconic Acid)

Class: 8 Packing Group: III.



<b>SECTION 15: Regulatory Information</b>
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**USA:**

**United States Federal Regulations:** This SDS complies with the OSHA, 29 CFR 1910.1200. The product is hazardous under OSHA.

**Toxic Substances Control Act (TSCA)** – All substances in this product are listed, as required, or are exempt from the TSCA inventory.

**CERCLA Hazardous Substance List, 40 CFR 302.4:** None

**SARA Title III**

**Section 302 Extremely Hazardous Substance (40 CFR 355, Appendix A):** None

**Section 311/312 (40 CFR 370):**

**Acute Health Hazard:** Yes

**Chronic Health Hazard:** No

**Fire Hazard:** No

**Pressure Hazard:** No

**Reactivity Hazard:** No

**Section 313 Toxic Release Inventory (40 CFR 372):**

Component	CAS No.	Weight %
Chromium Sulfate, Basic Solution	12336-95-7	< 2%

**STATE REGULATIONS:**

This SDS contains specific health and safety data is applicable for state requirements. For details on your regulatory requirements you should contact the appropriate agency in your state.

**California Proposition 65 (California Safe Drinking Water and Toxic Enforcement Act of 1986):**

This product does not contain chemicals known to the State of California to cause reproductive effects.

**New Jersey Right to Know:**

Chromium Hydroxide Sulfate, 12336-95-7

Dihydrogen hexafluorozirconate(2-), 12021-95-3

**Pennsylvania Right to Know:**

Chromium Hydroxide Sulfate, 12336-95-7

Dihydrogen hexafluorozirconate(2-), 12021-95-3

**Canada WHMIS Hazard Class:** This product has been classified as Class D2B in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations.

#### **SECTION 16: Other Information**

**To the best of our knowledge, the information contained herein is accurate. However, CHEMEON Surface Technology, LLC does not assume any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist.**