

SECTION 1: COMPANY AND MIXTURE IDENTIFICATION

1.1 Product Name: TRIVECTA SEALER 350

1.2 Product Type and Use: Metal Finishing Additives

1.3 Manufacturer:
Columbia Chemical Corp.
1000 Western Drive
Brunswick, OH, 44212
330-225-3200
eh&s@columbiachemical.com

Only Representative:
Intertek France
Campus Industrial Grand
Chalon Route de Demigny
Chalon Sur Saone
France, 71102
T: +33 (0) 385 99 1280

1.4 Emergency Telephone Numbers CHEMTEL
US & CANADA 800-255-3924
INTERNATIONAL 01-813-248-0585

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the mixture according to GHS (EC 1272 -2008)

Acute Tox. 4 (Oral), H302
Skin Corr. 1A, H314
Resp. Sens. 1, H334
Muta. 2, H341
Carc. 1B, H350
Repr. 1B, H360
Aquatic Chronic 2, H411

2.2 GHS Pictograms and H/P Statements



Signal Word: **DANGER**

Hazard and Precautionary Statements:

H302: Harmful if swallowed
H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled
H350 1B: May cause cancer.
H411: Toxic to aquatic life with long lasting effects.
P201: Obtain special instructions before use.
P260: Do not breathe dust/fume/gas/mist/vapours/spray.
P264: Wash thoroughly after handling.
P272: Contaminated work clothing should not be allowed out of the workplace.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P285: In case of inadequate ventilation wear respiratory protection.
P301+P330+P331: IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P304+P340: IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P333+P313: If skin irritation or rash occurs: Get medical advice/attention.
P501: Dispose of contents/container in accordance with all local/regional/national/international regulations.

H314A: Causes severe skin burns and eye damage.
H341: Suspected of causing genetic defects
H360 1B: May damage fertility or the unborn child.
P202: Do not handle until all safety precautions have been read and understood.
P261: Avoid breathing dust/fume/gas/mist/vapours/spray.
P270: Do no eat, drink or smoke when using this product.
P273: Avoid release to the environment.
P281: Use personal protective equipment as required.
P301+P312: IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P303+P361+P353: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P341: IF INHALED: If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing.
P308+P313: IF exposed or concerned: Get medical advice/attention.
P342+P311: If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.

2.3 Additional Information:
NONE

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

Name	Product Identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
CHROMIUM TRIS (DIHYDROGEN PHOSPHATE)	CAS no. 27096-04-4 EC no. 248-221-3 Reach no. Low volume exemption. JCSL no. 1-1060	< 30%	Acute Tox. 4, H302 Eye Irrit. 2, H319
CITRIC ACID	CAS no. 77-92-9 EC no. 201-069-1 Reach no. Low volume exemption JCSL no. 2-1318	< 10%	Eye Irrit. 2, H319
SODIUM HYDROXIDE	CAS no. 1310-73-2 EC no. 215-185-5 Reach no. Low volume exemption JCSL no. 2-1972, 1-410	< 8%	Skin Corr. 1A, H314
ZINC OXIDE	CAS no. 1314-13-2 EC no. 215-222-5 Reach no. Not available. JCSL no. 1-561	< 5%	Aquatic Acute 1, H400 Aquatic Chronic 1, H410
FERROUS SULFATE	CAS no. 7720-78-7 EC no. 231-753-5 Reach no. Not available. JCSL no. 1-359	< 3%	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319 Skin Irrit. 2, H315
COBALT SALT	CAS no. T.S. EC no. 233-334-2 Reach no. 01-2119517426-41 JCSL no. 1 - 270	< 3%	Acute Tox 4 (Oral), H302 Skin Sens 1, H317 Resp Sens 1, H334 Muta 2, H341 Carc 1B, H350 Repr 1B, H360 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

Eye Contact:	Immediately flush eyes with flowing water for at least TWENTY (20) minutes. Call emergency medical services.
Skin Contact:	Flush exposed area with running water for at least TWENTY (20) minutes. Remove and isolate contaminated clothing. Get medical attention.
Inhalation:	Move exposed individual to fresh air. Give oxygen if breathing is difficult. Provide artificial respiration using a mask equipped with a one-way valve if victim is not breathing. Call emergency medical services.
Ingestion:	Provide large quantities of water if victim is conscious and call emergency medical services immediately. Never give anything by mouth to an unconscious person.

4.2 Important symptoms and effect acute and delayed

Symptoms/Injuries:	May cause eye irritation, burns or blindness.
Inhalation:	Inhalation of mist may cause irritation of the respiratory system.
Skin contact:	May cause severe burns, redness and pain. Skin contact with some chromium compounds may cause allergic dermatitis. May be absorbed through broken skin.
Eye contact:	May cause serious eye irritation and redness.
Ingestion:	Sore throat. Abdominal pain, nausea. May cause burns or irritation of the linings of the mouth, throat and gastrointestinal tract.

4.3 Indication of any immediate medical attention and special treatment needed

Seek immediate medical attention if splashed in eyes or if there is a difficulty in breathing while using this product.

SECTION 5: FIRE FIGHTING MEASURES

5.1 Extinguishing media

Dry chemical powder. Water spray. Carbon dioxide (CO₂)

5.2 Special Hazards from the mixture

Mixture itself does not burn but may decompose upon heating to produce fumes. Cool plastic drum, pail or tote containers which may swell or rupture upon heating.

5.3 Advice for firefighters

Protection from firefighting:	Use self-contained breathing apparatus and chemically protective clothing. For further information refer to section 8, Exposure-controls/personal protection.
Other Information:	Avoid eye and skin contact.

HMIS: 3-0-1-J

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures**6.1.1 Non-emergency personnel**

Ensure adequate ventilation, Use personal protective equipment.

6.1.2 Emergency responders

Ensure adequate ventilation, Use personal protective equipment.

6.2 Environmental precautions

Avoid discharge into soil, water or air.

6.3 Containment and clean up

Methods for cleaning up:

May be hazardous to aquatic life if released to open waters. Carefully sweep up spilled material and transfer to a suitable container for disposal, Contain spilled material and ventilate area.

Other information:

Comply with local regulations for disposal.

6.4 Reference to other sections

Refer to section 8.

SECTION 7: HANDLING AND STORAGE**7.1 Precautions for safe handling**

Avoid contact with skin, eye and clothing. Avoid breathing dust, mist or spray. Refer to section 8 for exposure controls.

7.2 Storage and Incompatibles

Storage Condition(s):

Store tightly closed in a dry, cool and well-ventilated place.

Incompatible materials:

Combustible organic materials, organic acids, or readily oxidizable materials like paper, wood, sulfur and aluminium.

Storage area:

Floors should be impenetrable, resistant to liquids and easy to clean. Keep away from heat and direct sunlight. Do not store near oxidizing agents. Store in dry, cool, well-ventilated area.

7.3 Specific end use(s)

Metal Finishing

SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION**8.1 Control Parameters**

CHROMIUM TRIS (DIHYDROGEN PHOSPHATE) (27096-04-4) USA	ACGIH - TEL	0.5 mg/m ³ Cr (III)
CITRIC ACID (77-92-9) USA	ACGIH - TEL	N/A
COBALT SALT (T.S.) USA	ACGIH - TEL	0.02 mg/m ³ as Co
FERROUS SULFATE (7720-78-7) USA	ACGIH - TEL	1.0 mg/m ³ (as Fe)
SODIUM HYDROXIDE (1310-73-2) USA	ACGIH - TEL	2.0 mg/m ³
ZINC OXIDE (1314-13-2) USA	ACGIH - TEL	5.0 mg/m ³

8.2 Exposure Controls**Exposure Controls:**

Maintain employee exposures to levels below the applicable exposure limits.

Ventilation:

Use local or general exhaust to reduce airborne exposures.

Respiratory Protection:

To reduce exposure a NIOSH-approved respirator should be used.

Hand Protection:

Wear chemical resistant rubber gloves.

Eye Protection:

Wear chemical safety glasses

Skin Protection:

Wear protective clothing as appropriate.

Other:

Launder contaminated clothing before reuse.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**9.1 Information on basic physical and chemical properties**

Appearance:	Clear green solution, no precipitates	Flammability (solid,gas):	No data available
Odour:	Slight odor	Explosive Limits:	No data available
Odour Threshold:	No data available	Vapor Pressure:	No data available
pH:	3.6 - 4.2 (20% solution)	Vapour Density:	No data available
Melting Point:	No data available	Relative Density:	1.28 - 1.30
Solidification Point:	No data available	Solubility:	Complete in water
Boiling Point:	No data available	Self Ignition Temperature:	No data available
Flash point:	No data available	Decomposition Temperature:	No data available
Evap rate rel to butylacetate:	No data available	Viscosity:	No data available

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity	Product is an acidic solution and may react vigorously with alkaline solutions.
10.2 Chemical Stability	Product is stable under normal conditions only. Product may not be stable under heat, moisture, pressure ventilation or exposure to incompatible or reactive materials.
10.3 Possibility of hazardous reactions	Product will not undergo polymerization.
10.4 Conditions to avoid	Keep away from heat. Keep out of direct sunlight.
10.5 Incompatible materials	Strong basic solutions.
10.6 Hazardous decomposition products	Nitrogen oxides (NOx) and chromium compounds.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Toxicological effects	
Acute toxicity:	Harmful if swallowed.
Skin corrosion/irritation:	Causes severe skin burns and eye damage.
Respiratory or skin sensitization:	May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction.
Embryotoxic, Teratogenic, or Mutagenic:	Products that contain cobalt salts may damage fertility or the unborn child.
Carcinogenicity:	Products that contain cobalt salts may cause cancer based on testing data. Risk of cancer depends on level of exposure.
Reproductive or Gonadotoxicity:	Products that contain cobalt salts may damage fertility or the unborn child.
Specific target organ toxicity (single exposure):	None identified.

CARCINOGENS :

IARC :	YES	OSHA :	NONE
NTP :	NONE	EU :	YES

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity	Material may cause long lasting harmful effects to aquatic life.
12.2 Persistence & Degradability	No persistence and biodegradability data available.
12.3 Bioaccumulative Potential	No known bioaccumulative potential.
12.4 Mobility in Soil	No known mobility in soils.
12.5 PBT and vPvB Assessment	A PBT or vPvB assesment has NOT been completed for this product.
12.6 Other Adverse Effects	No other adverse affects known.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods	
Waste Disposal:	Dispose of this material and its container to hazardous or special waste collection point. Disposal must be done according to official regulations. Do not empty into drain or the aquatic environment.
Ecology - waste materials:	Dispose of all waste in accordance with federal, state, and local regulations.

SECTION 14: TRANSPORTATION INFORMATION

U.S. DOT (Land)	Department of Transportation
Proper Shipping Name:	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S., (TRIVALENT CHROMIUM COMPOUNDS)
Hazard Class:	8
UN / NA Number:	3264
Packing Group:	II
Labels Required:	CLASS 8 CORROSIVE
Marine Pollutant:	NO
I.A.T.A / I.C.A.O. (AIR)	International Air Transportation Authority / International Civil Air Organization
Proper Shipping Name:	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S., (TRIVALENT CHROMIUM COMPOUNDS)
Hazard Class:	8
UN / NA Number:	3264
Packing Group:	II
Labels Required:	CLASS 8 CORROSIVE
Marine Pollutant:	NO
I.M.D.G. (Sea)	International Maritime Organization
Proper Shipping Name:	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S., (TRIVALENT CHROMIUM COMPOUNDS)
Hazard Class:	8

UN / NA Number: 3264
 Packing Group: II
 Labels Required: CLASS 8 CORROSIVE
 Marine Pollutant: MARINE POLLUTANT

ERG Info: 154
 Reportable Quantity: NONE
 Placard: AS REQUIRED

14.5 Environmental Hazards This mixture may be considered environmentally hazardous according to the UN Model Regulations and is considered a marine pollutant according to the IMDG Code.

14.6 Special Precautions No other special precautions are required for transport of this mixture.

SECTION 15: REGULATORY INFORMATION

15.1 Safety, Health and Environmental Regulations.

Classification according to Directive 1999/548/EC
 C; R35; Carc. Cat. 2; R49 - N; R51-53

DPD Pictograms



Risk and Safety Phrases:

R22, R34, R36, R36/38, R42/43, R49, R50/53, R60, R68, S25, S26, S37/39, S45, S53, S60, S61

INGREDIENT	CAS NUMBER	CERCLA	SARA 313	SARA 302	REACH SVHC List	ROHS 2
SODIUM HYDROXIDE	1310-73-2	X				
CHROMIC DIHYDROGEN PHOSPHATE	27096-04-4		X			
FERROUS SULFATE HEPT-GRAN	7720-78-7	X				
COBALT SALT	T.S.		X		X	

NATIONAL INVENTORIES:

AICS (Australia):	Components listed	NZIoC (New Zealand):	Components listed
DSL (Canada):	Components listed	PICCS (Philippines):	Components listed
ECL (Korea):	Status not determined	TSCA (USA):	Status not determined
EINECS (Europe):	Components listed	SWISS (Switzerland):	Components listed
ENCS (Japan):	Components listed	ECN (Taiwan):	Components listed
IECSC (China):	Components listed	NDSL (Canada):	Not all components listed

WHMIS:

15.2 Chemical Safety Assessment A Chemical Safety Assessment has not been carried out for this mixture by the supplier.

SECTION 16 : OTHER INFORMATION

16.1 Method of Evaluation

Mixture hazard classification per UN GHS Purple Book, (EC) 1272/2008 Article 9(4), OSHA Haz-Com 2012.

16.3 Other Information

This information is provided in good faith from current, reliable sources and is believed to be correct. No warranty is expressed, implied, or given. The seller of this material assumes no responsibility for any damages resulting from contact with this material

16.4 Revision History

5/4/15: Rev. S2, 3, 11, 14, 15.
 10/23/14: Rev. S2, S3, and S16.
 5/20/2013 - New release.