

SECTION 1: COMPANY AND MIXTURE IDENTIFICATION

1.1 Product Name: TRICOL CD PLUS 500

1.2 Product Type and Use: Metal Finishing Additive

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)

Corr. To Metal, H290
Skin Corr. 1A, H314

2.2 GHS Pictograms and H/P Statements



Signal Word: **DANGER**

Hazard and Precautionary Statements:

H290: May be corrosive to metals.

P234: Keep only in original container.

P264: Wash thoroughly after handling.

P281: Use personal protective equipment as required.

P303+P361+P353: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

P310: Immediately call a POISON CENTER or doctor/physician.

P363: Wash contaminated clothing before reuse.

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

H314A: Causes severe skin burns and eye damage.

P260: Do not breathe dust/fume/gas/mist/vapours/spray.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P301+P330+P331: IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337+P313: If eye irritation persists: Get medical advice/attention.

P390: Absorb spillage to prevent material damage.

2.3 Additional Information:

None

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

Name	Product Identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
DIIRON TRIS(SULPHATE)	CAS no. 10028-22-5 EC no. 233-072-9 Reach no. Low volume exemption JCSL no. 1-359	< 8%	Metal Corr. 1, H290 Acute Tox. 4, H302 Eye Dam. 1; H318 Skin Irrit. 2, H315

SECTION 4: FIRST AID MEASURES**4.1 Description of first aid measures**

Eye Contact:	Immediately flush eyes with flowing water for at least TEN (10) minutes. Call emergency medical services if irritation continues.
Skin Contact:	Rinse thoroughly with running water for at least TEN (10) minutes. Seek medical advice if irritation continues. Remove/Take off all contaminated clothing.
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:	Causes severe skin burns and eye damage, redness, pain, tissue damage.
Inhalation:	Inhalation of mist may cause irritation of the respiratory system.
Skin contact:	Causes severe skin burns and eye damage.
Eye contact:	Causes severe eye damage, redness, pain.
Ingestion:	May cause severe irritation of the digestive tract, nausea, vomiting, or diarrhea.

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: 3-0-0-D

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:	Contain spills, cover with absorbent, carefully sweep up material and transfer to a suitable container for disposal.
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):	Shelf life is two (2) years from date of manufacture. Store tightly closed in original plastic container, in a dry, cool and well-ventilated place.
Incompatible materials:	Product may react with metals, carbon steel, brass, strong acids and strong basic solutions.
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

DIIRON TRIS(SULPHATE) (10028-22-5)

USA

ACGIH - TEL

1.0 mg/m3 (as Fe)

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:	Respiratory protection should not be required under normal use with proper engineering controls. A respiratory program that meets OSHA 1910.134 and ANSI Z88.2 requirements must be followed if workplace conditions warrant use of a respirator.
Hand Protection:	Wear chemical resistant rubber gloves.
Eye Protection:	Wear chemical safety glasses and/or face shield.
Skin Protection:	Wear protective clothing as appropriate.
Other:	Laundry contaminated clothing before reuse.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance:	Yellow to Orange-Brown	Flammability (solid,gas):	No data available
Odour:	Slight	Explosive Limits:	No data available
Odour Threshold:	No data available	Vapor Pressure:	No data available
pH:	1.2 - 2.2	Vapour Density:	No data available
Melting Point:	No data available	Relative Density:	1.022 - 1.062
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 other acids, alkaline solutions or metals.
10.2 Chemical Stability	Product is stable under normal conditions, but may not be stable under heat, moisture, pressure 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	Carbon steel, brass, strong acids, and strong basic solutions.
10.6 Hazardous decomposition products	Oxides of sulfur.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Toxicological effects

Acute toxicity:	No known acute toxicity effects when used as directed.
Skin corrosion/irritation:	Causes severe skin burns and eye damage.
Respiratory or skin sensitization:	No known skin sensitization affects when used as directed.
Embryotoxic, Teratogenic, or Mutagenic:	No components identified at 0.1% or greater as causing Reproductive or Gonadotoxic effects.
Carcinogenicity:	No components listed as carcinogen or suspect carcinogen by IARC, NTP, EU or OSHA at 0.1% or greater.
Reproductive or Gonadotoxicity:	No components identified at 0.1% or greater as causing Reproductive or Gonadotoxic effects.
Specific target organ toxicity (single exposure):	No known Specific Target Organ Toxicity when used as directed.

CARCINOGENS :

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

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity	Material may be harmful to aquatic life, avoid environmental release.
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 assessment has NOT been completed for this product.
12.6 Other Adverse Effects	No other adverse effects 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., (FERRIC SULFATE)
Hazard Class:	8
UN / NA Number:	3264
Packing Group:	II
Labels Required:	CLASS 8 CORROSIVE
Marine Pollutant:	NONE

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., (FERRIC SULFATE)
Hazard Class:	8
UN / NA Number:	3264
Packing Group:	II
Labels Required:	CLASS 8 CORROSIVE
Marine Pollutant:	NONE

I.M.D.G. (Sea)**International Maritime Organization**

Proper Shipping Name:	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S., (FERRIC SULFATE)
Hazard Class:	8
UN / NA Number:	3264
Packing Group:	II
Labels Required:	CLASS 8 CORROSIVE
Marine Pollutant:	NONE

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

14.5 Environmental Hazards

This mixture is not considered environmentally hazardous according to the UN Model Regulations and is not 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; R34

DPD Pictograms**Risk and Safety Phrases:**

R34, S24

INGREDIENT	CAS NUMBER	CERCLA	SARA 313	SARA 302	REACH SVHC List	ROHS 2
FERRIC SULFATE 50%	10028-22-5	X				

NATIONAL INVENTORIES:

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

WHMIS: No components controlled under Canada 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

7/23/15: New release.