

SECTION 1: COMPANY AND MIXTURE IDENTIFICATION

1.1 Product Name: COLDIP TRI-V 121

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
 Zi Ecoparc II
 27400 Heudebouville
 France
 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.
 P302+P350: IF ON SKIN: Gently wash with plenty of soap and water.
 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]
CHROME III COMPLEX	CAS no. T.S. EC no. 236-921-1 Reach no. 01-2119987047-27-0009 JCSL no. 1-281	<40%	Ox. Liq 3, H272 Skin Irrit. 2, H315 Skin Sens. 1, H317 Eye Irrit. 2, H319 Aquatic Chronic 2, H411
COBALT SALT	CAS no. T.S. EC no. 233-334-2 Reach no. 01-2119517426-41 JCSL no. 1 - 270	< 5%	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
SODIUM HYDROXIDE	CAS no. 1310-73-2 EC no. 215-185-5 Reach no. Low Volume Exempt JCSL no. 2-1972, 1-410	< 3 %	Skin Corr. 1A, H314
2, 3-DIHYDROXYBUTANEDIOIC ACID	CAS no. 87-69-4 EC no. 201-766-0 Reach no. Low volume exemption JCSL no. 2-1456	< 2%	Acute Tox. 4, H302 Skin Irrit. 2, H315 Skin Sens. 1, H317 Eye Irrit. 2, H319 STOT SE 3, H335
AMMONIUM BIFLOURIDE	CAS no. 1341-49-7 EC no. 215-676-4 Reach no. 05-2118253908-30 JCSL no. 1 - 311	< 2%	Acute Tox. 3, H301 Skin Corr. 1B, H314

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

Eye Contact:	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
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 severe burns. Symptoms might include pain, redness, and tissue damage.
Inhalation:	Inhalation of mist may cause irritation of the respiratory system.
Skin contact:	May cause severe burns. Symptoms might include pain, redness, and tissue damage.
Eye contact:	Causes serious eye damage.
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: 3-0-1-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:	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 a dry, cool and well-ventilated place.
Incompatible materials:	Product may react with strong acidic 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**

2, 3-DIHYDROXYBUTANEDIOIC ACID (87-69-4)		
USA	ACGIH - TEL	10 mg/m3
AMMONIUM BIFLOURIDE (1341-49-7)		
USA	ACGIH - TEL	2.5 mg/m3 as F
CHROME III COMPLEX (T.S.)		
USA	ACGIH - TEL	0.5 mg/m3 Cr (III)
COBALT SALT (T.S.)		
USA	ACGIH - TEL	0.02 mg/m3 as Co
SODIUM HYDROXIDE (1310-73-2)		
USA	ACGIH - TEL	2.0 mg/m3

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 gloves when handling any chemical product.
Eye Protection:	Wear chemical safety glasses and/or face shield when handling chemical products.
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:	Dark blue green liquid	Flammability (solid,gas):	No data available
Odour:	Sharp acidic odor	Explosive Limits:	No data available
Odour Threshold:	No data available	Vapor Pressure:	No data available
pH:	1.8 - 2.6 (5% Solution)	Vapour Density:	No data available
Melting Point:	No data available	Relative Density:	1.260 - 1.300
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 may not be stable under heat, moisture, pressure, or exposure to incompatible 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	Product may react with strong acidic and strong basic solutions.
10.6 Hazardous decomposition products	Oxides of nitrogen, chromium and sulfur.

SECTION 11: TOXICOLOGICAL INFORMATION**11.1 Toxicological effects**

Acute toxicity:	No known acute toxicity effects when used as directed.
Skin corrosion/irritation:	Causes serious eye damage and skin irritation.
Respiratory or skin sensitization:	No known skin sensitization affects when used as directed.
Embryotoxic, Teratogenic, or Mutagenic:	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:	Product has components that may damage fertility or the unborn child.
Specific target organ toxicity (single exposure):	No known Specific Target Organ Toxicity when used as directed.

CARCINOGENS :

IARC :	YES	OSHA :	YES
NTP :	YES	EU :	YES

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity	Material is harmful to aquatic life with long lasting effects.
12.2 Persistence & Degradability	No persistence and biodegradability data available.
12.3 Bioaccumulative Potential	No known bioaccumulative potential.
12.4 Mobility in Soil	Spillage of material can lead to penetration into soil and groundwaters.
12.5 PBT and vPvB Assessment	This product does NOT contain substances which are persistent, bioaccumulative and toxic, or substances that are very persistent or very bioaccumulative per REACH Annex XIII.
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. (AMMONIUM BIFLUORIDE AND 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. (AMMONIUM BIFLUORIDE AND 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. (AMMONIUM BIFLUORIDE AND 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 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.

INGREDIENT	CAS NUMBER	CERCLA	SARA 313	SARA 302	REACH SVHC List	ROHS 2
AMMONIUM BIFLUORIDE	1341-49-7	X	X			
SODIUM HYDROXIDE	1310-73-2	X				
CHROME III COMPLEX	T.S.	X	X			
COBALT SALT	T.S.		X		X	

NATIONAL INVENTORIES:

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

WHMIS: Components listed as CANADA WHMIS Class D1B - Toxic material causing immediate and serious toxic effects.

Components listed as CANADA WHMIS Class E - Corrosive Materials.

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

8/2/17: removed DPD information
 5/5/15: Rev. S2 and 15.
 5/1/15: Rev. new GHS format.
 4/8/15: Rev. S2, 3 and 16.
 1/31/13: New release