## SECTION 1: COMPANY AND MIXTURE IDENTIFICATION

1.1 **Product Name:**

   COLCAD 100

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)

- Skin Sens. 1, H317
- Resp. Sens. 1, H334
- Muta. 1A, H341
- Carc. 1A, H350
- Rep. 1B, H360
- STOT RE 1, H372
- Aquatic Chronic 3, H412

### 2.2 GHS Pictograms and H/P Statements

**Signal Word:** **DANGER**

- H317: May cause an allergic skin reaction
- H341: Suspected of causing genetic defects
- H350 1A: May cause cancer.
- H360 1B: May damage fertility or the unborn child.
- H372: Causes damage to organs through prolonged or repeated exposure.

**Hazard and Precautionary Statements:**

- P201: Obtain special instructions before use.
- P201: Avoid breathing dust/fume/gas/mist/vapours/spray.
- P270: Do not eat, drink or smoke when using this product.
- P273: Avoid release to the environment.
- P285: In case of inadequate ventilation wear respiratory protection.
- P304+P341: IF INHALED: If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing.
- 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.

- 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.
- P281: Use personal protective equipment as required.
- P302+P352: IF ON SKIN: Wash with plenty of soap and water.
- P308+P313: IF exposed or concerned: Get medical advice/attention.
- P342+P311: If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.
SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Name</th>
<th>Product Identifier</th>
<th>Classification according to Regulation (EC) No. 1272/2008 [CLP]</th>
</tr>
</thead>
<tbody>
<tr>
<td>NICKEL SULPHATE</td>
<td>CAS no. 7786-814 EC no. 232-104-9 Reach no. Not available. JCSL no. 1-813</td>
<td>&lt; 2% Acute Tox 4, H302 Skin Irrit. 2, H315 Skin Sens 1, H317 Acute Tox 4, H332 Resp. Sens. 1, H334 Mut. 2, H341 Carc. 1A, H350 Repr. 1B, H360D STOT RE 1, H372 Aquatic Acute 1, H400 Aquatic Chronic 1, H410</td>
</tr>
</tbody>
</table>

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures
- **Eye Contact:** Rinse under running water for several minutes.
- **Skin Contact:** Flush exposed area with running water for a few minutes.
- **Inhalation:** Move exposed individual to fresh air.
- **Ingestion:** Provide two glasses of water if victim is conscious and get medical attention. Never give anything by mouth to an unconscious person.

4.2 Important symptons and effect
- **acute and delayed**
  - **Symptoms/Injuries:** May cause an allergic skin reaction, symptoms include redness and irritation. In case of inhalation remove to fresh air. If symptoms persist get medical attention.
  - **Symptoms/injuries after skin contact:** May cause skin irritation, symptoms include redness or irritation.
  - **Symptoms/injuries after eye contact:** May cause serious eye irritation, symptoms include redness and irritation.
  - **Symptoms after ingestion:** May be harmful if swallowed. Symptoms include nausea and possible irritation to mouth, throat and esophagus.

4.3 Indication of any immediate medical attention and special treatment needed
No immediate medical attention or special treatment should be required while using this product as specified.

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
Use personal protective equipment as described in section (8) of the MSDS. Use self-contained breathing apparatus and chemically protective clothing. For further information refer to section 8, Exposure-controls/personal protection.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures
- **Ensure adequate ventilation. Use personal protective equipment.**

6.1.1 For non-emergency personnel
- **Methods for cleaning up:** Contain spills, cover with absorbent, carefully sweep up material and transfer to a suitable container for disposal.

6.1.2 For emergency responders
- **Other information:** Comply with local regulations for disposal.

6.2 Environmental precautions
- **Avoid discharge into soil, water or air.**

6.3 Containment and clean up
- **Avoid discharge into soil, water or air.**

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 Conditions for safe storage, including any incompatibilities
- **Storage Condition(s):** Shelf life is one (1) year from date of manufacture. Store tightly closed in a dry, cool and well-ventilated place.
- **Incompatible materials:** No specific materials to avoid when used under normal conditions.
- **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

NICKEL SULPHATE  (7786-81-4)
USA  ACGIH - TEL  0.1 mg/m3 as Ni

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 similar to 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: Launder contaminated clothing before reuse.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance: Dark blue liquid
Odour: Slight odor
Odour Threshold: No data available
pH: 6.0 - 9.0
Melting Point: No data available
Solidification Point: No data available
Boiling Point: No data available
Flash point: No data available
Relat evapor rate comp to butylacetate: No data available
Flammability (solid,gas): No data available
Explosive Limits: No data available
Vapor Pressure: No data available
Vapour Density: No data available
Relative Density: 0.96 - 1.050
Solubility: Complete in water
Self Ignition Temperature: No data available
 Decomposition Temperature: No data available
Viscosity: No data available

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity
Product is stable at normal conditions.
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
Product contains materials which may decompose into oxides of sulfur and carbon.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Toxicological effects

Acute toxicity: No known acute toxicity effects when used as directed.
Skin corrosion/irritation: Product should not be irritating to skin when used as directed.
Respiratory or skin sensitization: May cause an allergic skin reaction or breathing difficulties if inhaled.
Embryotoxic, Teratogenic, or Mutagenic: Nickel compounds are suspected of causing genetic defects and may damage fertility or the unborn child.
Carcinogenicity: Product contains nickel compounds which may cause cancer.
Reproductive Toxicity: Nickel compounds may damage fertility or the unborn child.
Specific Target Organ Toxicity (STOT): Product contains nickel compounds which cause damage to organs through prolonged or repeated exposure.

CARCINOGENS :

<table>
<thead>
<tr>
<th>IARC</th>
<th>OSHA</th>
<th>NTP</th>
<th>EU</th>
</tr>
</thead>
<tbody>
<tr>
<td>YES</td>
<td>NONE</td>
<td>YES</td>
<td>YES</td>
</tr>
</tbody>
</table>

SECTION 12: ECOLOGICAL INFORMATION
12.1 Toxicity
Material should not harm aquatic life, but avoid all releases to the aquatic environment.

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
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 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) Not regulated by DOT


I.M.D.G (SEA) Not regulated by IMDG

ERG Info: Not required.
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
Xn; R20/22

DPD Pictograms

Risk and Safety Phrases:
R20/22, R49, R61, R68, S45, S53, S60, S61

INGREDIENT CAS NUMBER CERCLA SARA 313 SARA 302 REACH SVHC List ROHS 2
NICKEL SULFATE 7786-81-4 X X

NATIONAL INVENTORIES:

AICS (Australia): Components listed
DSL (Canada): Components listed
ECL (Korea): Components listed
ENEC (Europe): Components listed
IECSC (China): Components listed
WHMIS: Components listed as CANADA WHMIS Class D1B - Toxic material causing immediate and serious toxic effects.
Components listed as CANADA WHMIS Class D2A - Materials Causing Other Toxic Effects.

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

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
11/11/15: Rev. item no.
5/13/15: Rev. GHS format.
10/25/14: Rev S14 format.
1/14/14: SDS release.