

Safety Data Sheet
Electroless Cobalt Plating Solution Part A

SECTION 1: Identification

1.1 Product identifier

Product name	Electroless Cobalt Plating Solution Part A
Product number	COA
Brand	Caswell

1.4 Supplier's details

Name	Caswell Inc
Address	7696 Route 31 Lyons, NY 14489 USA
Telephone	315 946 1213
Fax	315 946 4456
email	sales@caswellplating.com

1.5 Emergency phone number(s)

Office Hours (9-4ET): 315 946 1213
24 Hour: CHEMTEL US# 1-800-255-3924 Int# +01-813-248-0585

SECTION 2: Hazard identification

2.1 Classification of the substance or mixture

- Carcinogenicity (chapter 3.6), Cat. 2
- Acute toxicity, oral (chapter 3.1), Cat. 4
- Sensitization, respiratory (chapter 3.4), Cat. 1
- Sensitization, skin (chapter 3.4), Cat. 1

2.2 GHS label elements, including precautionary statements

Pictogram



Signal word

Warning

Hazard statement(s)

H351	Suspected of causing cancer
H302	Harmful if swallowed

Safety Data Sheet

Electroless Cobalt Plating Solution Part A

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled
H317 May cause an allergic skin reaction

Precautionary statement(s)

P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P308+P313 IF exposed or concerned: Get medical advice/attention.
P405 Store locked up.
P501 Dispose of contents/container to ...
P264 Wash ... thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor/.../if you feel unwell,
P330 Rinse mouth.
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P284 [In case of inadequate ventilation] wear respiratory protection.
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P342+P311 If experiencing respiratory symptoms: Call a POISON CENTER/doctor/...
P272 Contaminated work clothing should not be allowed out of the workplace.
P302+P352 IF ON SKIN: Wash with plenty of water/...
P333+P313 If skin irritation or a rash occurs: Get medical advice/attention.
P321 Specific treatment (see ... on this label).
P362+P364 Take off contaminated clothing and wash it before reuse.
P273 Avoid release to the environment.
P391 Collect spillage.

SECTION 3: Composition/information on ingredients

3.1 Substances

Hazardous components

1. NICKEL (II) SULFATE

Concentration 45 %
EC no. 232-104-9
CAS no. 7786-81-4
Index no. 028-009-00-5

2. COBALT SULFATE HEPTAHYDRATE

Concentration 10 %
CAS no. 10026-24-1

3. WATER OR OTHER NON-REPORTABLE INGREDIENTS

Concentration 45 %
CAS no. 7732-18-5

SECTION 4: First-aid measures

4.1 Description of necessary first-aid measures

General advice Consult a physician. Show this safety data sheet to the doctor in attendance.

Safety Data Sheet

Electroless Cobalt Plating Solution Part A

If inhaled	If breathed in, move person into fresh air. If not breathing, give artificial respiration.
In case of skin contact	Rinse with plenty of water. Get medical attention if irritation develops and persists.
In case of eye contact	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
If swallowed	Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.
Personal protective equipment for first-aid responders	Refer to section 8

- 4.2 Most important symptoms/effects, acute and delayed**
Compounds containing nickel can cause dermatitis and skin rash.

SECTION 5: Fire-fighting measures

- 5.1 Suitable extinguishing media**
Use extinguishing media appropriate for surrounding fire.
- 5.2 Specific hazards arising from the chemical**
Thermal decomposition will form oxides of nickel and sulfur.
- 5.3 Special protective actions for fire-fighters**
Wear self-contained breathing apparatus for firefighting if necessary.

SECTION 6: Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures**
Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
- 6.2 Environmental precautions**
Nickel compounds are damaging to aquatic life
- 6.3 Methods and materials for containment and cleaning up**
SMALL SPILLS: Contain and absorb with absorbent material and place into containers for later disposal. Wash site of spillage thoroughly with water. LARGE SPILLS: Dike far ahead of spill to prevent further movement. Recover by pumping or by using a suitable absorbent material and place into containers for later disposal. Dispose in suitable waste container.

SECTION 7: Handling and storage

- 7.1 Precautions for safe handling**
Must be stored above 55 deg F.
- 7.2 Conditions for safe storage, including any incompatibilities**
Keep container tightly closed and away from incompatible materials.

SECTION 8: Exposure controls/personal protection

Safety Data Sheet

Electroless Cobalt Plating Solution Part A

8.1 Control parameters

1. NICKEL (II) SULFATE (CAS: 7786-81-4 EC: 232-104-9)

PEL-TWA: 1 mg/m³ (OSHA)

8.2 Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

8.3 Individual protection measures, such as personal protective equipment (PPE)

Pictograms



Eye/face protection

Face shield and safety glasses. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Wear chemical resistant gloves and clothing.

Body protection

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance/form	Reddish Liquid
Odor	
Odor threshold	
pH	3.5
Melting point/freezing point	55 deg F
Initial boiling point and boiling range	212 de g F
Flash point	
Evaporation rate	
Flammability (solid, gas)	Not Flammable
Upper/lower flammability limits	
Vapor pressure	
Vapor density	
Relative density	1.34
Solubility(ies)	100% In Water
Partition coefficient: n-octanol/water	
Auto-ignition temperature	

Safety Data Sheet

Electroless Cobalt Plating Solution Part A

Decomposition temperature
Viscosity
Explosive properties
Oxidizing properties

SECTION 10: Stability and reactivity

10.1 Reactivity

Not reactive

10.2 Chemical stability

Stable

10.4 Conditions to avoid

Excess Heat

10.5 Incompatible materials

Cyanides, Strong Alkalis

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity

Oral LD50: 264 mg/kg

Skin corrosion/irritation

Continued Exposure to nickel can cause nickel itch/dermatitus/skin rash.

Serious eye damage/irritation

May cause eye irritation

Respiratory or skin sensitization

May cause respiratory and skin sensitisation.

Germ cell mutagenicity

Not known

Carcinogenicity

Nickel compounds are a known carcinogen.

Reproductive toxicity

Not known

STOT-single exposure

Not known

STOT-repeated exposure

Not known

Aspiration hazard

Not known

SECTION 12: Ecological information

Safety Data Sheet

Electroless Cobalt Plating Solution Part A

Toxicity

Not known

Persistence and degradability

Not known

Bioaccumulative potential

Not known

Mobility in soil

Not known

Results of PBT and vPvB assessment

Not known

Other adverse effects

Nickel compounds are damaging to the aquatic environment.

SECTION 13: Disposal considerations

Disposal of the product

Consult appropriate federal and local regulations for disposal. Empty containers are subject to the same regulations.

Disposal of contaminated packaging

Consult appropriate federal and local regulations for disposal. Empty containers are subject to the same regulations.

SECTION 14: Transport information

DOT (US)

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations specific for the product in question

Massachusetts Right To Know Components

Chemical name: Nickel sulfate

CAS number: 7786-81-4

New Jersey Right To Know Components

Common name: NICKEL SULFATE

CAS number: 7786-81-4

Pennsylvania Right To Know Components

Chemical name: Sulfuric acid, nickel(2+) salt (1:1)

CAS number: 7786-81-4

Safety Data Sheet

Electroless Cobalt Plating Solution Part A

California Prop. 65 components

Common name: NICKEL SULFATE

CAS number: 7786-81-4

California Prop. 65 components

Chemical name: COBALT SULFATE HEPTAHYDRATE

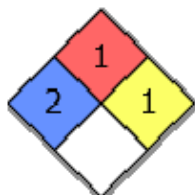
CAS number: 10026-24-1

06/02/2000 - cancer

HMIS Rating

Electroless Cobalt Plating Solution Part A	
HEALTH	2
FLAMMABILITY	1
PHYSICAL HAZARD	1
PERSONAL PROTECTION	C

NFPA Rating



SECTION 16: Other information

16.1 Further information/disclaimer

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