

Safety Data Sheet

Nickel Electroforming Solution Part A

SECTION 1: Identification

1.1 Product identifier

Product name	Nickel Electroforming Solution Part A
Product number	NEA
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 Intl# +01-813-248-0585

SECTION 2: Hazard identification

2.1 Classification of the substance or mixture

- Acute toxicity, oral (chapter 3.1), Cat. 4
- Sensitization, respiratory (chapter 3.4), Cat. 1
- Sensitization, skin (chapter 3.4), Cat. 1
- Germ cell mutagenicity (chapter 3.5), Cat. 2
- Carcinogenicity (chapter 3.6), Cat. 1A
- Toxic to reproduction (chapter 3.7), Cat. 2
- Specific target organ toxicity, repeated exposure (chapter 3.9), Cat. 1
- Hazardous to the aquatic environment - acute hazard (chapter 4.1), Cat. 1
- Hazardous to the aquatic environment - long-term hazard (chapter 4.1), Cat. 1

2.2 GHS label elements, including precautionary statements

Pictogram

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Signal word

Warning

Hazard statement(s)

H302	Harmful if swallowed
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled
H317	May cause an allergic skin reaction
H341	Suspected of causing genetic defects
H350	May cause cancer
H361	Suspected of damaging fertility or the unborn child
H372	Causes damage to organs through prolonged or repeated exposure
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects

Precautionary statement(s)

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.
P501	Dispose of contents/container to ...
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.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
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.
P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P308+P313	IF exposed or concerned: Get medical advice/attention.
P405	Store locked up.
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P314	Get medical advice/attention if you feel unwell.
P273	Avoid release to the environment.
P391	Collect spillage.

SECTION 3: Composition/information on ingredients

3.1 Substances

Hazardous components

1. Sulfamic acid, nickel(2+) salt (2:1)

Concentration < 51 %

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CAS no. 13770-89-3

2. WATER OR OTHER NON-REPORTABLE INGREDIENTS

Concentration 49 %

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.

If inhaled Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

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. Get medical attention if symptoms occur.

If swallowed Drink 1 or 2 glasses of water. Do NOT induce vomiting. Get medical attention immediately if symptoms occur.

Personal protective equipment for first-aid responders
Refer to Section 8

4.2 Most important symptoms/effects, acute and delayed

Nickel Compounds may cause allergic rash (dermatitis)

SECTION 5: Fire-fighting measures

5.1 Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

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

Refer to Section 8 for PPE.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

6.3 Methods and materials for containment and cleaning up

Soak up with inert absorbent material (e.g. sand, silica gel). Keep in suitable, closed containers for disposal.

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SECTION 7: Handling and storage

7.1 Precautions for safe handling

Keep container tightly closed in a dry and well-ventilated place.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

1. Sulfamic acid, nickel(2+) salt (2:1) (CAS: 13770-89-3)

TWA: 0.1 mg/m³

8.2 Appropriate engineering controls

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

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

Pictograms



Eye/face protection

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

Wear chemical resistant gloves and clothing.

Respiratory protection

NIOSH/MSHA approved air purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance/form	Green Liquid
Odor	No Data Available
Odor threshold	No Data Available
pH	3.5-5
Melting point/freezing point	No Data Available
Initial boiling point and boiling range	220 deg F
Flash point	No Data Available
Evaporation rate	No Data Available
Flammability (solid, gas)	No Data Available

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Upper/lower flammability limits	No Data Available
Vapor pressure	No Data Available
Vapor density	No Data Available
Relative density	1.25-1.6 g/cm ³
Solubility(ies)	Complete In Water
Partition coefficient: n-octanol/water	No Data Available
Auto-ignition temperature	No Data Available
Decomposition temperature	No Data Available
Viscosity	No Data Available
Explosive properties	No Data Available
Oxidizing properties	No Data Available

SECTION 10: Stability and reactivity

10.1 Reactivity

Not reactive

10.2 Chemical stability

State

10.3 Possibility of hazardous reactions

No Data Available

10.4 Conditions to avoid

No Data Available

10.5 Incompatible materials

No Data Available

10.6 Hazardous decomposition products

Sulphur Oxides, Nickel, nickel oxides

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity

No Data Available

Skin corrosion/irritation

No Data Available

Serious eye damage/irritation

No Data Available

Respiratory or skin sensitization

No Data Available

Germ cell mutagenicity

No Data Available

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Carcinogenicity

IARC: Group 1 Carcinogenic To Humans

Reproductive toxicity

No Data Available

STOT-single exposure

No Data Available

STOT-repeated exposure

No Data Available

Aspiration hazard

No Data Available

Additional information

Ingestion may cause gastrointestinal irritation, nausea, vomiting, diarrhoea. Prolonged or repeated skin exposure can cause "nickel itch" dermatitis.

SECTION 12: Ecological information

Toxicity

No Data Available

Persistence and degradability

No Data Available

Bioaccumulative potential

No Data Available

Mobility in soil

No Data Available

Results of PBT and vPvB assessment

No Data Available

Other adverse effects

Very toxic to aquatic life with long lasting effects.

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.

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SECTION 14: Transport information

DOT (US)

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

SECTION 15: Regulatory information

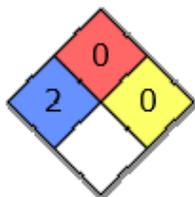
15.1 Safety, health and environmental regulations specific for the product in question

California Prop. 65 Components

Nickel Sulfmate

HMIS Rating

Nickel Electroforming Solution Part A	
HEALTH	2
FLAMMABILITY	0
PHYSICAL HAZARD	0
PERSONAL PROTECTION	H

NFPA Rating

SECTION 16: Other information

16.1 Further information/disclaimer

DISCLAIMER: The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigation to determine the suitability of information for their particular purposes. In no event shall Caswell Inc be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, whatsoever arising, even if Caswell Inc has been advised of the possibility of such damages.