

# MATERIAL SAFETY DATA SHEET



Date Issued: 03/09/2007  
 MSDS No: ENA  
 Date Revised: 03/09/2007  
 Revision No: 2

## 1. PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT DESCRIPTION:** Electroless Nickel Part A

### MANUFACTURER

CASWELL INC.  
 7696 ROUTE 31  
 LYONS NY 14489

**Emergency Contact:** 8004249300  
**Product Stewardship:** 3159461213  
**Transportation:** 8004249300  
**Service Number:** 3159461213

CASWELL INC.  
 7696 ROUTE 31  
 LYONS NY 14489  
 USA

**Emergency Contact:** CHEMTREC  
**Emergency Phone:** +1 703 527 3887  
**Service Number:** +1 315 946 1213  
**Transportation Number:** +1 703 527 3887

### 24 HR. EMERGENCY TELEPHONE NUMBERS

**CHEMTREC: 1 800 424 9300**  
**CHEMTREC INTERNATIONAL: 703 527 3887**

## 2. HAZARDS IDENTIFICATION

### POTENTIAL HEALTH EFFECTS

**EYES:** Contact may cause eye irritation.

**SKIN:** Long term exposure to skin may cause skin irritation and may cause sensitization or allergic reactions resulting in chronic eczema or "nickel itch".

**INGESTION:** Irritating to mouth, throat and stomach.

**INHALATION:** Irritating to the nose, throat and respiratory tract.

### SIGNS AND SYMPTOMS OF OVEREXPOSURE

**SKIN:** Substance causes moderate skin irritation.

**CHRONIC EFFECTS:** Frequent or prolonged contact may irritate the skin and cause a skin rash (dermatitis).

**CARCINOGENICITY:** Possible cancer hazard - (contains material which) may cause cancer based on animal data.

**ROUTES OF ENTRY:** Ingestion. Skin or Eye Contact

**CANCER STATEMENT:** Group 1 Cancer Hazard

**IRRITANCY:** Harmful by inhalation, contact with skin/eyes, and if swallowed.

## 3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Wt.%	CAS	EINECS
Nickel Sulfate	45	007786-81-4	- -

#### 4. FIRST AID MEASURES

**EYES:** Flush eye with water for 15 minutes. Get medical attention.

**SKIN:** Immediately wash skin with soap and plenty of water. Remove contaminated clothing. Get medical attention if symptoms occur. Wash clothing before reuse.

**INGESTION:** Do not induce vomiting. Give milk or water. Get immediate medical attention. Careful evacuation of stomach by medical personnel imperative.

#### 5. FIRE FIGHTING MEASURES

**FLAMMABLE LIMITS:** 0 to 0

**FLAMMABLE CLASS:** NA = Not Applicable

**EXTINGUISHING MEDIA:** Any available.

**EXPLOSION HAZARDS:** None

**FIRE FIGHTING PROCEDURES:** As in any fire, wear self-contained breathing apparatus pressure-demand, (MSHA/NIOSH approved or equivalent) and full protective gear.

**FIRE FIGHTING EQUIPMENT:** Any Available.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Thermal decomposition will form oxides of nickel and sulfur.

#### 6. ACCIDENTAL RELEASE MEASURES

**SMALL SPILL:** Clean up spills immediately, observing precautions in Protective Equipment section.

**LARGE SPILL:** Dike area to contain spill. Take precautions as necessary to prevent contamination of ground and surface waters. Recover spilled material on adsorbent, such as sawdust or vermiculite, and sweep into closed containers for disposal. After all visible traces, including ignitable vapors, have been removed thoroughly wet vacuum the area. Do not flush to sewer. If area of spill is porous, remove as much contaminated earth and gravel, etc. as necessary and place in closed containers for disposal.

#### 7. HANDLING AND STORAGE

**GENERAL PROCEDURES:** Must be stored above 55F at all times.

**HANDLING:** Follow all MSDS/label precautions even after container is emptied because they may retain product residues.

**STORAGE:** Store above 55degF.

**STORAGE TEMPERATURE:** (55°F)

**SHELF LIFE:** 1 Year

#### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**EXPOSURE GUIDELINES**

OSHA HAZARDOUS COMPONENTS (29 CFR1910.1200)						
			EXPOSURE LIMITS			
			OSHA PEL		ACGIH TLV	
Chemical Name			ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>
Nickel Sulfate		<b>TWA</b>		1		0.1

**ENGINEERING CONTROLS:** Use only in a well ventilated area.

**PERSONAL PROTECTIVE EQUIPMENT**

**EYES AND FACE:** Wear safety glasses with side shields (or goggles) and a face shield.

**SKIN:** Where splashing is possible, full chemically resistant protective clothing (e.g. acid suit) and boots are required.

**RESPIRATORY:** A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.

**PROTECTIVE CLOTHING:** Wear suitable protective clothing at all times.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

**PHYSICAL STATE:** Liquid

**ODOR:** None

**APPEARANCE:** Clear, green liquid.

**COLOR:** Translucent green.

**pH:** 3.5

**BOILING POINT:** (212°F) to (212°F)

**FREEZING POINT:** (55°F)

**SOLUBILITY IN WATER:** 100 at (70°F)

**SPECIFIC GRAVITY:** 1.340 (water=1)

**10. STABILITY AND REACTIVITY**

**STABLE:** Yes

**HAZARDOUS POLYMERIZATION:** No

**STABILITY:** Stable.

**CONDITIONS TO AVOID:** Excess heat

**INCOMPATIBLE MATERIALS:** Cyanides, strong alkalis.

**11. TOXICOLOGICAL INFORMATION****ACUTE**

**ORAL LD<sub>50</sub>:** 264 mg/kg (rat)

**CARCINOGENICITY**

**IARC:** Yes.

**NTP:** Anticipated as nickel compound.

**OSHA:** Yes.

## 12. ECOLOGICAL INFORMATION

## 13. DISPOSAL CONSIDERATIONS

**DISPOSAL METHOD:** Consult appropriate federal, local regulations for disposal. Empty containers are subject to same regulations.

**PRODUCT DISPOSAL:** Follow directions in product literature.

**EMPTY CONTAINER:** Consult appropriate federal, local regulations for disposal. Empty containers are subject to same regulations.

## 14. TRANSPORT INFORMATION

### DOT (DEPARTMENT OF TRANSPORTATION)

**PROPER SHIPPING NAME:** Nonhazardous

### AIR (ICAO/IATA)

**SHIPPING NAME:** Nonhazardous

### VESSEL (IMO/IMDG)

**SHIPPING NAME:** Nonhazardous

### CANADA TRANSPORT OF DANGEROUS GOODS

**SHIPPING NAME:** Nonhazardous

## 15. REGULATORY INFORMATION

### UNITED STATES

#### SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

**311/312 HAZARD CATEGORIES:** Toxic

**FIRE:** No **PRESSURE GENERATING:** No **REACTIVITY:** Yes **ACUTE:** No **CHRONIC:** Yes

**313 REPORTABLE INGREDIENTS:** All

#### CALIFORNIA PROPOSITION 65: WARNING:

THIS PRODUCT CONTAINS A CHEMICAL(S) KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER.

## 16. OTHER INFORMATION

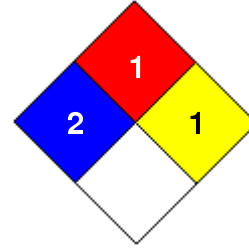
**APPROVED BY:** L CASWELL **TITLE:** PRESIDENT

**PREPARED BY:** L CASWELL

**REVISION SUMMARY:** Revision #: 2 This MSDS replaces the March 09, 2007 MSDS. Any changes in information are as follows: In Section 2 Potential Health Effects - Eyes Potential Health Effects - Skin

**HMIS RATING**

<b>HEALTH:</b>	□	<b>2</b>
<b>FLAMMABILITY:</b>		<b>1</b>
<b>PHYSICAL HAZARD:</b>		<b>1</b>
<b>PERSONAL PROTECTION:</b>		

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