



# PRODUCT INFORMATION

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EMERGENCY - MARTRON 704-289-1934  
CHEMTREC 800-424-9300

REF # RES-004530

## MARTRON NICKEL SULFATE LIQUID, EN/EG GRADE

### SECTION 1. INTRODUCTION

*Martron Nickel Sulfate Liquid, EN/EG Grade* was specifically developed to meet the needs of the electrolytic and Electroless nickel plating industry where very low impurity levels are required. It is produced from high purity, virgin nickel powder that assures a highly consistent, high purity product.

### SECTION 2. SPECIFICATIONS

	SPECIFICATION	TYPICAL		SPECIFICATION	TYPICAL
Ni (%)	10.0% Min.	10.1%	Zinc (Zn)	1 ppm Max.	0.1 ppm
Nickel	131 g/l Min.	133.2 g/l	Cadmium (Cd)	1 ppm Max.	0.1 ppm
NiSO <sub>4</sub> •6 H <sub>2</sub> O	587.4 g/l Min. 4.90 lbs/gal Min.	597.3 g/l 4.98 lbs/gal	Selenium (Se)	1 ppm Max.	0.5 ppm
Iron (Fe)	10 ppm Max.	2 ppm	Arsenic (As)	1 ppm Max.	< 1 ppm
Copper (Cu)	2 ppm Max.	0.1 ppm	Bismuth (Bi)	1 ppm Max.	< 1 ppm
Lead (Pb)	3 ppm Max.	0.1 ppm	Calcium (Ca)	10 ppm Max.	2 ppm
Chromium (Cr)	2 ppm Max.	1 ppm	Magnesium (Mg)	5 ppm Max.	1 ppm

### SECTION 3. PROPERTIES

Appearance -	Clear, green liquid
pH -	3.0 - 4.0
Specific Gravity -	1.31 - 1.35

### SECTION 4. PACKAGING

*Martron Nickel Sulfate Liquid, EN/EG Grade*, is packaged in 5-gallon pails, 32 per pallet, 20-liter pails, 32 per pallet, 200-liter drums, 4 pallets and 55-gallon fiber drums, 4 per pallet.

### SECTION 5. WASTE DISPOSAL

This material must be disposed of in accordance with all applicable federal, state, and local regulations and permits. Consult the SDS for additional regulatory information. The information contained herein is general in nature and may not apply to each application.

**SECTION 6. GENERAL SAFETY PRECAUTIONS**

When working with this product(s), ensure that all health, environmental, and safety regulations and standards are met. Avoid direct contact with this material. Do not inhale associated mist, vapors, and/or dust. Maintain and limit exposure as recommended by OSHA, ACGIH, and other state and local regulations. Wash contaminated clothing before reuse. Always comply with the Hazard Communication Standard, 29 CFR 1910.1200. Emergency showers and eyewashes must be readily available.

It is recommended that the plating chemistry product(s) referred to in this Technical Information Sheet be used: (a) in accordance with the information provided in product specific SDS; and (b) in compliance with all applicable requirements and guidelines established by OSHA, NIOSH, ACGIH, NFPA, and others.

**NOTE:** A Safety Data Sheet (SDS) for this product(s) is available upon request from **Martron Inc.**

REVIEW SDS BEFORE USING THIS PLATING CHEMISTRY AND FOR SPECIFIC INFORMATION. A precautionary approach should be used when there is potential for chemical exposure -- this includes minimizing exposure potential, rapid decontamination, and medical follow-up.