



TECHNIC, INC.

MATERIAL SAFETY DATA SHEET

SECTION 1

PRODUCT IDENTIFICATION

TRADE NAME (AS LABELED): NICKEL SULFAMATE RTU (Soluble) (Mechanical)

CHEMICALS NAMES, COMMON NAMES:

PRODUCT CODE: 030175

MANUFACTURE'S NAME & ADDRESS:

PREPARED BY: ALLAN H. REED

TECHNIC INC.

DATE PREPARED: January 27, 2009

1 SPECTACLE STREET

CRANSTON, RI 02910

EMERGENCY PHONE: 401-781-6100

24 HOUR EMERGENCY: CHEM TREC 800-424-9300

OUTSIDE THE USA AND CANADA: 703-527-3887

SECTION 2

COMPOSITION / INFORMATION ON INGREDIENTS

<u>CHEMICAL NAMES</u>	<u>CAS NUMBER</u>	<u>PERCENT</u>	<u>EXPOSURE LIMITS</u>
Nickel sulfamate	13770-89-3	20-35%	0.1 mg/m ³ (Ni) ACGIH TWA 1 mg/m ³ (Ni) OSHA PEL
Nickel bromide	13462-88-9	0.5-1.5%	0.1 mg/m ³ (Ni) ACGIH TWA 1 mg/m ³ (Ni) OSHA PEL
Boric acid	10043-35-3	1-3%	10 mg/m ³ ACGIH TLV 5 mg/m ³ OSHA PEL

SECTION 3

HAZARD IDENTIFICATION

SYMPTOMS OF OVER-EXPOSURE FOR EACH POTENTIAL ROUTE OF EXPOSURE.

INHALATION: Vapor or mist may be slightly irritating to nasal and respiratory passages.

CONTACT WITH SKIN OR EYES: Will cause minor skin irritation (nickel itch); will cause irritation and burns to eyes.

ABSORBED THROUGH SKIN: Not readily absorbed through unbroken skin.

SWALLOWED: Will cause irritation to membranes of mouth, throat, esophagus and stomach.
May cause gastric upset including nausea, vomiting and diarrhea.

SUSPECTED CANCER AGENT? _____ NO _____ X YES (IARC,NTP)

HEALTH EFFECTS OR RISKS FROM EXPOSURE. EXPLAIN IN LAY TERMS.

ACUTE: Individuals sensitive to nickel may develop allergic dermatitis (nickel itch) and asthma, bronchitis or wheezing.

CHRONIC: Nickel compounds are reported carcinogens.

SECTION 4**FIRST AID MEASURES****FIRST AID: EMERGENCY PROCEDURES**

EYE CONTACT: Flush with water, including under lids, for fifteen minutes. Obtain immediate medical attention.

SKIN CONTACT: Remove contaminated clothing and wash affected area thoroughly with soap and water. Launder clothing before rewearing. Seek medical attention for prolonged skin irritation.

INHALED: Remove patient to fresh air. Support breathing if required. Obtain medical treatment for dizziness, unconsciousness or irritation or difficulty in breathing.

SWALLOWED: If patient is conscious, rinse mouth and drink at least two large glasses of water. **DO NOT** induce vomiting. Never give anything by mouth to an unconscious person. Obtain immediate medical attention.

SECTION 5**FIRE FIGHTING MEASURES**

FLASH POINT (°F) (METHOD USED): N.A. (Does not burn)

AUTOIGNITION TEMPERATURE, °F: N.A.

FLAMMABLE LIMITS IN AIR, VOLUME, %: LOWER LIMIT N.A. UPPER LIMIT N.A.

FIRE EXTINGUISHING MATERIALS: Use media appropriate for the surrounding fire.

WATER CARBON DIOXIDE OTHER

FOAM DRY CHEMICAL

SPECIAL FIREFIGHTING PROCEDURES: Wear approved self-contained breathing apparatus and full protective gear.

UNUSUAL FIRE AND EXPLOSION HAZARDS: May emit toxic fumes under fire conditions.

SECTION 6**ACCIDENTAL RELEASE MEASURES****STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:**

Wear protective gear. Contain spilled material and collect by absorption or other suitable method for disposal. Do not allow this material to enter storm or sanitary sewers or other waterways.

SECTION 7**HANDLING AND STORAGE****HANDLING AND STORAGE REQUIREMENTS:**

Store in a cool, dry place. Keep container tightly closed except when transferring material.

SECTION 8**EXPOSURE CONTROLS / PERSONAL PROTECTION****VENTILATION:**

Local exhaust.

RESPIRATORY PROTECTION:

Wear approved respirator when ventilation is inadequate to meet exposure limits.

EYES PROTECTION:

Chemical splash goggles.

GLOVES:

Rubber.

OTHER CLOTHING AND EQUIPMENT: Rubber apron and long sleeves.

WORK PRACTICES, HYGIENIC PRACTICES: Wash hands thoroughly after handling and before eating or smoking.

SECTION 9**PHYSICAL / CHEMICAL PROPERTIES**

VAPOR DENSITY (AIR =1): N.D.

SPECIFIC GRAVITY: 1.25-1.35

VAPOR PRESSURE (MM Hg): N.D.

MELTING POINT (°F): N.D.

EVAPORATION RATE (BUTYL ACETATE=1): N.D.

BOILING POINT (°F): >212° F

SOLUBILITY IN WATER: Complete

pH: 3.5-4.5

APPEARANCE AND ODOR: Clear, green liquid; odorless.

SECTION 10**STABILITY AND REACTIVITY****STABILITY:**

STABLE

UNSTABLE

CONDITIONS TO AVOID: None.

INCOMPATIBILITY (MATERIALS TO AVOID): Strong acids and oxidizing materials.

HAZARDOUS DECOMPOSITION PRODUCTS (INCLUDING COMBUSTION PRODUCTS):

Nickel residues and oxides of carbon, nitrogen and sulfur.

HAZARDOUS POLYMERIZATION:

MAY OCCUR

WILL NOT OCCUR

SECTION 11**TOXICOLOGICAL INFORMATION**

ACUTE EFFECTS: See section 3.

IRRITATION DATA: See section 3.

TOXICITY DATA: Oral LDLo: 250 mg/kg (mouse, nickel sulfamate)

TARGET ORGAN DATA: See section 3.

SECTION 12**ECOLOGICAL INFORMATION**

No specific data; however, this material should be considered as harmful to aquatic life.

SECTION 13**DISPOSAL CONSIDERATIONS**

Dispose of all chemical wastes at an appropriate waste disposal facility. Follow all local, state, and federal regulations for disposal of waste chemicals.

SECTION 14**TRANSPORT INFORMATION**

Not regulated by DOT, IMDG or IATA.

SECTION 15**REGULATORY INFORMATION**

This product is regulated as a toxic chemical under Section 313 of Title III/SARA, and 40 CFR, Part 372.
 This product is regulated by the California Proposition 65 list.
 All ingredients are listed in the TSCA inventory.
 For the purposes of the New Jersey Right to Know Law, the contents are partially known.

SECTION 16**OTHER INFORMATION**

H	
Health	3
F	
Flammability	0
R	
Reactivity	0
Personal Protection	C