



TECHNIC, INC.

MATERIAL SAFETY DATA SHEET

SECTION I PRODUCT IDENTIFICATION

TRADE NAME (as labeled): **NICKEL SULFAMATE RTU (NICKEL S) AIR AGITATION**

CHEMICAL NAMES, COMMON NAMES: **Nickel Sulfamate, Nickel Bromide**

MANUFACTURER'S NAME & ADDRESS: **Product Code No. 030178**

TECHNIC, INC.
1 SPECTACLE STREET
CRANSTON, RI 02910

EMERGENCY PHONE: (401)781-6100

24 hour Emergency: Chem Trec 1-800-424-9300

NAME OF PREPARER: **WILLIAM A. WILSON**

DATE PREPARED: **March 25, 1998**

SECTION II HAZARDOUS INGREDIENTS

<u>CHEMICAL NAMES</u>	<u>CAS NUMBER</u>	<u>PERCENT</u>	<u>EXPOSURE LIMITS</u>
Nickel Sulfamate $\text{Ni}(\text{NH}_2)_2 \cdot \text{SO}_3)_2$	13770-89-3	25.60%	TWA = 0.10 mg Ni ⁺² /M ³ ACGIH
Nickel Bromide NiBr_2	13642-88-9	0.90%	TWA = 0.10 mg Ni ⁺² /M ³ ACGIH

This material is regulated as a toxic chemical under Section 313 of Title III/SARA, and 40 CFR, Part 372.
 This material contains ingredients known to the State of California to cause cancer.
 For purposes of the New Jersey Right To Know Law, the contents are partially unknown.
 The materials in this solution are listed on the TSCA Inventory.

SECTION III PHYSICAL PROPERTIES

VAPOR DENSITY (AIR=1)	N.A.	SPECIFIC GRAVITY:	1.26
VAPOR PRESSURE (mm Hg)	N.A.	MELTING POINT (degrees F)	N.A.
EVAPORATION RATE (BUTYL ACETATE=1)	N.A.	BOILING POINT (degrees F)	N.D.
SOLUBILITY IN WATER:	Complete.	pH	3.80-4.50
APPEARANCE AND ODOR:	Dark green solution; slight saline odor.		

SECTION IV. FIRE AND EXPLOSION

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 SPRAY CARBON DIOXIDE OTHER:

FOAM DRY CHEMICAL

SPECIAL FIREFIGHTING PROCEDURES: Wear a NIOSH/MSHA approved, self-contained breathing apparatus and protective gear if fully involved in a fire.

UNUSUAL FIRE AND EXPLOSION HAZARDS: None.

SECTION V HEALTH HAZARD INFORMATION

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

INHALATION: Upper respiratory tract irritation. Hypersensitive individuals may develop asthma bronchitis.

CONTACT WITH SKIN OR EYES: Irritation, allergic sensitization in some individuals in the presence of heat and humidity. ("Nickel Itch")

ABSORBED THROUGH SKIN: No.

SWALLOWED: Nausea, gastrointestinal problems, unconsciousness.

HEALTH EFFECTS OR RISKS FROM EXPOSURE. EXPLAIN IN LAY TERMS. ATTACH EXTRA PAGE IF MORE SPACE IS NEEDED.

ACUTE:

Local: Irritant, Allergen, Ingestion, Inhalation - Slight. Causes readily reversible changes which disappear after end of exposure.

Systemic: Ingestion, Inhalation - Slight. Causes readily reversible changes which disappear after end of exposure.

CHRONIC:

Local: Irritant, Allergen - Slight to Moderate. May involve both irreversible and reversible changes; not severe enough to cause death or permanent injury.

Systemic: Inhalation - Moderate. May involve both irreversible and reversible changes; not severe enough to cause death or permanent injury.

FIRST AID: EMERGENCY PROCEDURES

EYE CONTACT: Flush with water (15 minutes or longer). Call physician.

SKIN CONTACT: Wash thoroughly with soap and water. Call physician.

INHALED: Remove to fresh air. If breathing difficulties develop, call physician.

SWALLOWED: Induce vomiting if conscious, maintain respiration, call physician.

SUSPECTED CANCER AGENT? NO X YES ACGIH, IARC

SECTION VI REACTIVITY DATA

STABILITY: X STABLE UNSTABLE

CONDITIONS TO AVOID: Do not mix with cyanides.

INCOMPATIBILITY (MATERIALS TO AVOID): Cyanides.

HAZARDOUS DECOMPOSITION PRODUCTS (INCLUDING COMBUSTION PRODUCTS): Nickel residues, sulfur oxides, nitrogen oxides.

HAZARDOUS POLYMERIZATION: MAY OCCUR X WILL NOT OCCUR

CONDITIONS TO AVOID: None.

SECTION VII SPILL, LEAK AND DISPOSAL PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

Contain spill by dam or absorption on clay or sawdust.
Collect and dispose of at a proper waste disposal facility or reclaim the nickel.

See Section VIII for employee protection.

WASTE DISPOSAL: SHOULD BE IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL ENVIRONMENTAL CONTROL REGULATIONS.

SECTION VIII SPECIAL HANDLING INFORMATION

- VENTILATION: General exhaust.
- RESPIRATORY PROTECTION: NIOSH/MSHA approved respirator in a spill.
- EYE PROTECTION: Chemical goggles or face shield.
- GLOVES: Rubber gloves.
- OTHER CLOTHING AND EQUIPMENT: Rubber apron.
- WORK PRACTICES, HYGIENIC PRACTICES: Wash thoroughly after handling.
- OTHER HANDLING AND STORAGE REQUIREMENTS: Keep container closed and away from cyanides.
Store in a cool, dry place.
Temperature = 55-85 ° F

HMSD

H HEALTH	4
F FLAMMABILITY	0
R REACTIVITY	1
P PERSONAL	0