Date prepared: August 28, 2002

**REVISION: 6** 

### MATERIAL SAFETY DATA SHEET

HF scientific, inc. 3170 Metro Parkway Fort Myers, FL 33916-7597 (239) 337-2116

24 Hour Emergency Telephone Number CHEMTREC 1-800-424-9300

Mon-Fri 8:00 am - 4:30 pm

### SECTION 1 PRODUCT IDENTIFICATION

PRODUCT NAME: 4000 NTU STOCK SOLUTION - FORMAZIN KIT

PART NUMBER: 50040, 70914

CHEMICAL FAMILY: NA

SYNONYMS: NA

FORMULA:

Hydrazine Sulfate

Hexamethylenetetramine Formazin Polymer

<10% <1%

Water

>88%

<0.1%

# SECTION 2 HAZARDOUS INGREDIENTS

Other Limits

Hazardous Ingredient(s)

OSHA PEL

**ACGIH TLV** 

Recommended

Hydrazine Sulfate

Not listed

Not Listed LD<sub>50</sub> 601

mg/kg CAS# 10034-93-2

(oral rat)

Hexamethylenetetramine Not Listed

Not Listed

LD<sub>50</sub> 9200 mg/kg

CAS# 100-97-0

(intravenous

rat)

Formazin Polymer

Not Listed

Not Listed

Not Listed

CAS# Not Applicable

#### **SECTION 3 PHYSICAL DATA**

Boiling Point(F): Approximately 212 ° F (100 °C)

Specific Gravity (H2O = 1): Not found Vapor Pressure (mm Hg): Not applicable

Melting Point: Not found

Vapor Density (Air = 1): Not found

Evaporation Rate (Butyl Acetate = 1): Not found Solubility in Water: Fluid layer is miscible

Appearance and Odor: White suspension - little odor

Percent Volatile By Volume: Not found

#### SECTION 4 FIRE AND EXPLOSION HAZARD DATA

Flash Point: Not flammable

Flammable Limits:

LEL: Not Applicable

**UEL**: Not Applicable

Extinguishing Media: Suitable to cause of fire Special Fire Fighting Procedures: NIOSHA approved respirator and

protective clothing.

Unusual Fire and Explosion Hazards: None found

### SECTION 5 HEALTH EFFECTS AND FIRST AID

Route(s) of Entry: Inhalation? No Skin? Yes Ingestion? Yes Health Hazards (Acute and Chronic): Acute and chronic for residual hydrazine sulfate Carcinogenicity:

NTP? Yes, for hydrazine sulfate

IARC Monographs? Yes, for hydrazine sulfate

OSHA Regulated? Yes, for Hydrazine CAS # 302-01-02, 1.3 mg/m<sup>3</sup>

Hydrazine sulfate, which may exist in residual amounts in formazin is a

possible cancer hazard based on tests with laboratory animals.

Signs and Symptoms of Exposure: Irritation of the eyes, skin, and mucous membranes. Gastrointestinal pain if swallowed.

Medical Conditions Generally Aggravated by Exposure: Allergies

or sensitivity to hexamethylenetetramine.

**EMERGENCY AND FIRST AID PROCEDURES:** 

Eyes: Flush eyes for at least 15 minutes. See a physician.

Ingestion: Get medical help immediately.

Skin: Wash well with soap and water. If irritation develops, see a

physician.

Inhalation: Remove to fresh air.

## SECTION 6 REACTIVITY DATA

Stability: Stable under normal conditions of use and storage

Conditions to Avoid: None found

Incompatibility (Materials to Avoid): Not found Hazardous Decomposition of Product: None

Hazardous Polymerization: Will not occur under normal conditions

of use and storage

Conditions to Avoid: None found

## SECTION 7 SAFE HANDLING AND USE

Steps to be Taken in Case Material is Released or Spilled: Absorb with earth, sand, or similar material. Flush area with water.

Waste Disposal Method: DISPOSE OF IN ACCORDANCE THE APPLICABLE FEDERAL, STATE AND LOCAL ENVIRONMENTAL

REGULATIONS.

Precautions to be Taken in Handling And Storage: Normal

precautions satisfactory. Avoid skin and eye contact.

Other Precautions: Do not pipette by mouth

### **SECTION 8 CONTROL MEASURES**

Respiratory Protection: None required in normal use Ventilation: General ventilation is satisfactory for normal use

Skin Protection: Rubber gloves Eve Protection: Splash goggles

Other Protective Clothing or Equipment: Lab coat suggested.

Safety shower and eve wash.

Work/Hygienic Practices: Wash well after handling.

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