

MATERIAL SAFETY DATA SHEET**Section 1 – PRODUCT AND SAFETY SUPPLIER INFORMATION**

Product Name: Ninhydrin Fixative
Common Name: Ninhydrin Fixative
Supplier: Armor Holdings Forensics, Inc.
13386 International Parkway, Jacksonville, FL 32218
Emergency Telephone: Chemtel® United States (800) 255-3924 International – 813-248-0585 (Collect)
Date Prepared: December 20, 2005

Section 2 – HAZARDOUS INGREDIENTS

<u>Ingredient</u>	<u>CAS#</u>	<u>Percent</u>	<u>PEL (OSHA)</u>	<u>TLV (ACGIH)</u>
<u>Methanol</u>	<u>67-56-1</u>		<u>99.37</u>	<u>200</u>
<u>ppm</u>	<u>200 ppm</u>			

Section 3 – PHYSICAL/CHEMICAL PROPERTIES

Appearance and Odor: Clear, green liquid with alcoholic odor.
Specific Gravity: 0.791 Solubility in Water: Complete
Boiling Point: 64.7 C Melting Point: -98 C
Vapor Density: 1.1 Vapor Pressure (mmHg): 96
Evaporation Rate: 5.2 Percent Volatile: 99.37
(ether = 1)

Section 4 – FIRE AND EXPLOSION DATA

Flash Point: 12 C UEL: 31% LEL: 6%
Extinguishing Media: Dry chemical, CO2, water spray, alcohol-resistant foam.
Firefighting Procedures: Cool containers with flooding quantities of water well after fire is out.
Unusual Fire and Explosion Hazards: Sealed containers may explode from build-up of internal pressure when exposed to temperatures above boiling point.

Section 5 – REACTIVITY DATA

Stability: Yes Hazardous Polymerization: No
Incompatibilities: Ignition sources, acids, alkalis, nitrides, peroxides and other strong oxidizers, strong reducing agents.
Hazardous Decomposition Products: CO, CO2, formaldehyde.

Section 6 – HEALTH HAZARD INFORMATION

Health Hazards: Ingestion may be fatal or cause blindness. Causes adverse reproductive and fetal effects on animals.
Routes of Entry and First-Aid Procedures: Causes moderate eye irritation. May cause skin irritation. May be absorbed through skin in harmful amounts. May cause irritation of the digestive tract. May cause kidney damage or toxicity with acidosis.
Eyes: Flush with water for at least 15 minutes. Get medical attention immediately.
Inhalation: Remove to fresh air immediately. If not breathing give artificial respiration. If breathing is difficult give oxygen. Get medical aid.
Skin: Flush skin with soap and water for at least 15 minutes. Get medical aid if irritation develops or persists.
Ingestion: If victim is conscious and alert give 2-4 cupfuls of milk or water. Get medical attention immediately. Induce vomiting by giving one teaspoon of Ipecac.
Signs and Symptoms of Exposure: CNS depression, headache, dizziness, drowsiness, nausea. Extreme overexposure may result in collapse, unconsciousness, coma, or death due to respiratory failure.
Medical Conditions Aggravated by Exposure: Pre-existing eye, skin, respiratory, kidney, and liver disorders.

Section 7 – EXPOSURE CONTROLS

Respirator Protection: NIOSH approved or European standard EN149 when necessary.
Ventilation: Sufficient to maintain below exposure limits.
Protective Gloves: Impervious Eye Protection: Splash goggles or safety glasses.
Other Protective Equipment: Impervious clothing to prevent skin exposure.
Work and Hygienic Practices: Avoid personal exposure by wearing protective equipment. Wash thoroughly after handling.

Section 8 – SPILL OR LEAK PROCEDURES

Steps to be taken if material is spilled or released: Remove all sources of ignition. Absorb spill with non-combustible material.
Waste Disposal Method: Observe all local and regional regulations.



Section 9 – PRECAUTIONS FOR SAFE HANDLING AND USE

Special Precautions: Keep away from heat, sparks, or flame. Empty containers retain product residue and can be fire hazards.

Storage Method: Store in a cool, dry, well-ventilated area away from incompatible materials.

Section 10 – TOXICOLOGICAL DATA

Carcinogenicity:

NPT: No

OSHA: No

IARC: No

Acute Inhalation LC50: 64000 ppm/14 hrs. (rat)

Acute Dermal LD50: 15800 mg/kg (rabbit)

Acute Oral LD50: 7300 mg/kg (mouse); 14200 mg/kg (rabbit); 5628 mg/kg (rat)

Section 11 – ECOLOGICAL DATA

No information reported

Section 12 – TRANSPORTATION IDENTIFICATION

Proper Shipping Name: Methanol

Identification Number: UN 1230 Hazard Class: 3

Packing Group: II