

**SECTION 1: CHEMICAL PRODUCT IDENTIFICATION**

Product Name : Gold, Silver, Platinum and neutralizer test solution

**SECTION 2: COMPOSITION INFORMATION**

COMPONENT	PERCENT
Nitric Acid	50 to 70%

**SECTION 3: HAZARDS IDENTIFICATION**
**EMERGENCY OVERVIEW**

STRONG OXIDIZER. Contact with other material may cause fire. CORROSIVE! Liquid and mist cause severe burns to all body tissue.


**POTENTIAL ACUTE HEALTH EFFECTS**
**Eye Contact:** Corrosive! Vapours are irritating and may cause damage to the eyes.

**Skin Contact:** Corrosive! Can cause redness, pain, and severe skin burns.

**Inhalation:** Corrosive! Vapor is extremely hazardous. Inhalation of vapours can cause breathing difficulties and can cause irritation of the mucous membranes and respiratory tract with burning pain in the nose and throat, coughing, choking, sneezing, wheezing, shortness of breath, bronchial infection and pulmonary edema.

**POTENTIAL CHRONIC HEALTH EFFECTS**

Eye Contact: Corrosive! Contact may cause severe burns and permanent eye damage. Skin Contact: Corrosive! Poison! Causes skin burns and may cause deep and penetrating ulcers of the skin with a characteristic yellow to brownish discoloration.

**SECTION 4 - FIRST AID MEASURES**
**EYE CONTACT**

Immediately flush eyes with cold water for at least 15 minutes while lifting upper and lower eyelids. Be sure to remove any contact lenses. Obtain immediate medical attention.

**SKIN CONTACT**

Immediately flush skin with plenty of water for at least 15 minutes while removing any contaminated clothing or shoes. Cover the irritated skin with an emollient. Obtain immediate medical attention. Wash any contaminated clothing and/or shoes before reuse.

**INGESTION**

DO NOT INDUCE VOMITING. If person is fully conscious, give one to two glasses of water or milk and obtain immediate medical attention.

**SECTION 5 - PERSONAL PROTECTION**
**EYE**

Wear Chemical Safety Goggles and/or Face Shield to protect eyes and face.


**SKIN**

Sleeved Length Impervious Rubber Gloves or approved equivalent for handling and use. Wear Rubber boots, Impervious Rubber Apron or Suit when appropriate for use.

**SECTION 6 - FIRE FIGHTING MEASURES**
**FIRE**

Not combustible, but substance is a strong oxidizer and its heat of reaction with reducing agents or combustibles may cause ignition.

**SECTION 7 - STABILITY AND REACTIVITY**
**STABILITY**

Stable under ordinary conditions of use and storage. Containers may burst when heated.

**HAZARDOUS DECOMPOSITION PRODUCTS**

When heated to decomposition, emits toxic nitrogen oxides fumes and hydrogen nitrate. Will react with water or steam to produce heat and toxic and corrosive fumes. (Nitric acid, fuming)

**HAZARDOUS POLYMERIZATION**

Will not occur.

**INCOMPATIBILITIES**

Nitric Acid is a dangerously powerful oxidizing agent and is incompatible with most substances, especially strong bases, metallic powders, carbides, hydrogen sulfide, turpentine, charcoal and combustible organics.

# Material Safety Data Sheet

## CONDITIONS TO AVOID

Light, heat and incompatible materials

## SECTION 8 - PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE;	Light yellowish liquid
ODOR;	Suffocating, acrid.
SOLUBILITY;	Infinitely soluble.
pH;	1.0 (Extremely acidic!)
BOILING POINT;	122C (252F)
MELTING POINT;	-42C (-44F)

## SECTION 9 - HANDLING AND STORAGE

Oxidizing materials should be stored in a separate safety storage cabinet or room that is cool, dry, ventilated and acid resistant. Protect from physical damage. Keep out of direct sunlight and away from heat, water, and incompatible materials. Do not wash out container and use it for other purposes. When diluting, the acid should always be added slowly to water and in small amounts. Never use hot water and never add water to the acid. Water added to acid can cause uncontrolled boiling and splashing. Containers of this material may be hazardous when empty since they retain product residues of vapours and liquid

