

## POTENTIAL HAZARDS

### HEALTH

Toxic; inhalation, ingestion, or contact (skin, eyes) with vapors, dusts or substance may cause severe injury, burns, or death.

Reaction with water or moist air will release toxic, corrosive or flammable gases.

Reaction with water may generate much heat, which increase the concentration of fumes in the air.

Fire will produce irritating, corrosive and / or toxic and cause pollution

### FIRE OR EXPLOSION

Non-combustible, substance itself does not burn but may decompose upon heating to produce corrosive and / or toxic fumes.

Vapors may accumulate in confined areas (basement, tanks, hopper / tanks cars etc.).

Substance will react with water (some violently), releasing corrosive and / or toxic gases.

Reaction with water may generate much heat, which will increase the concentration of fumes in the air.

Contact with metals may evolve flammable hydrogen gas. Containers may explode when heated or if contaminated with water.

## PUBLIC SAFETY

CALL Emergency Response Telephone Number on Shipping Paper First. If Shipping Paper not answer, refer appropriate telephone number listed on the inside back cover.

Isolate spill or leak area immediately for at least 50 to 100 meters (160 to 330 feet) in all directions.

Keep unauthorized personnel away.

Stay upwind.

Keep out of low areas.

Ventilate enclosed areas.

### PROTECTIVE CLOTHING

Wear positive pressure self-contained breathing apparatus (SCBA).

Wear chemical protective clothing, which is specifically recommended by the manufacturer.

Structural firefighter's protective clothing is recommended for situations ONLY; it is not effective in spill situations.

## EVACUATION

### Spill

See the -Table of Initial Isolation and Protective Action Distances for highlighted substances.

For non-highlighted substances, increase, in the downwind direction, as necessary, the isolation distance shown under PUBLIC SAFETY.

### Fire

If tank, rail car or tank truck is involved in a fire ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

## EMERGENCY RESPONSE

### FIRE

#### Note:

Most foams will react with the material and release corrosive / toxic gases.

#### Small Fires

- CO<sub>2</sub> (except for Cyanides), dry chemical, dry sand, alcohol-resistant foam.

#### Large fires

- Water spray, fog or alcohol -resistant foam.
- Move containers from fire area if you can do it without risk.
- Do not use straight streams.
- Dike fire control water for later disposal; do not scatter the material.

#### Fire involving Tanks or Car / Trailer Loads.

- Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- Do not get water inside containers.
- Cool containers with flooding quantities of water until well after fire is out.

- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- ALWAYS stay away from the ends of tanks.

## SPILL OR LEAK

- ELIMINATE all ignition sources (no smoking), flares, sparks or flames in immediate area.
- All equipment used when handling the product must be grounded.
- Do not touch damaged containers or spilled materials unless wearing appropriate protective clothing.
- Stop leak if you can do it without risk.
- A vapor suppressing foam may be used to reduce vapors.
- DO NOT GET WATER INSIDE CONTAINERS.
- Use water spray to reduce vapors or divert vapor cloud drift.
- Prevent entry into waterways, sewers, basements or confined areas.
- Small Spills Cover with DRY earth, DRY sand, or other non-combustible material followed with plastic sheet to minimize spreading or contact with rain.
- Use clean non-sparking tools to collect material and place it into loosely covered plastic containers for later disposal.

## FIRST AID

- Move victim to fresh air.- Call emergency medical care.
  - Apply artificial respiration if victim is not breathing.
  - Do not use mouth-to-mouth method if victim ingested or inhaled the substance; include artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.
  - Administer oxygen if breathing is difficult.
  - Remove and isolate contaminated clothing and shoes.
  - In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
  - For minor skin contact, avoid spreading material on unaffected skin.
  - Keep victim warm and quiet.
  - Effects of exposures (inhalation, ingestion or skin contact) to substance may be delayed.
  - Ensure that medical personnel are aware of the material (s) involved, and take precautions to protect themselves.
  - Give demulcents as cold milk ,egg white by mouth.
  - Give pethidine to relief severe pain.
  - Give dextrose 5% and saline 0.9% 500 ml. I.V. to correct fluid and electrolyte imbalance.
  - Steroids should be started immediately by giving 0.1 mg/kg body weight or give prednisone 1-2 mg/kg body weight .this should be continued for 3 weeks and then diminish the dose gradually.
  - Give antibiotics if there are specific indications for it.
- **NEVER** give carbonate or bicarbonate .
  - **NEVER** induce emesis .
  - **NEVER** do gastric lavage .
  - **NEVER** give weak alkalis as calcined magnesia or lime water by mouth because they produce exothermic reaction heat more destruction of the tissues

## DISPOSAL AND WASTE TREATMENT

- Add slowly to a large amount of solution of soda ash and a label lime by stirring.
- Discharge the solution with large amount of water into a sink lined with protective matting and filled with shipped marble.*
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## Emergency Numbers

- EEAA Emergency Room:  
TEL 00202-52564912  
Fax 00202-5256494
- Corrosive Poisoning Center:  
Ain Shams TEL: 00202-4828212  
00202-4823314  
Alexandria TEL: 00203-4822244
- Civil Defense:  
TEL 00202-4014097



Arab Republic of Egypt  
Cabinet of Ministries  
Egyptian Environmental Affairs Agency



## HAZARDOUS SUBSTANCES INFORMATION & MANAGEMENT SYSTEM **HSIMS**

### *Nitric Acid*



*Cas No:7697-37-2*  
*UN No:2031*

*Toxic*  
*Corrosive*  
*Non flammable*  
*Water Sensitive*