

# NITRIC ACID

## Hazard Description

Nitric acid (HNO<sub>3</sub>) is a colorless liquid with yellow or red fumes and an acrid odor. Nitric acid is toxic and corrosive. Exposure to nitric acid can cause irritation to the eyes, skin, and mucous membrane; it can also cause delayed pulmonary edema, pneumonitis, bronchitis, and dental erosion. Nitric acid is a strong oxidizer. Nitric acid reacts violently with alcohols, alkalis, reducing agents, combustible materials, organic materials, metals, acids, cyanides, terpenes, charcoal, and acetone.

## Prior to Use of Nitric Acid

- Complete a research specific laboratory risk assessment.
- Ensure that all required materials are available in case of spill, emergency and waste collection.

## Handling

- Always work in a chemical fume hood.
- Keep away from combustibles.
- Avoid contact with metals! Nitric acid is extremely corrosive in the presence of aluminum, copper, and oxides and attacks all base metals.
- For small spills, absorb nitric acid with an inert dry material (universal or acid absorbent), place in an appropriate waste container, and wash remaining area with water.

## Emergency Procedures

Always review SDS of purchased product for manufacture specific recommendations. Look at SDS for other modes of exposure.

<b>Contacts</b>	
<b>Emergency: 911</b>	
UW Special Constables: 519-888-4911 or ext. 22222	
Poison Control: 1-800-268-9017	
Whenever 911 is called, if possible, UW Special Constables should also be informed to make them aware of the emergency on campus and allow them to support as needed. Ask them to meet the paramedics and direct them to the incident location.	
Inhalation	<ul style="list-style-type: none"><li>▪ Remove individual from contaminated area</li><li>▪ Call 911 for transport to hospital</li><li>▪ Corrosive substances may cause severe lung damage if inhaled</li><li>▪ Perform CPR and artificial respiration if necessary</li></ul>
Skin Contact	<ul style="list-style-type: none"><li>▪ Call 911 for transport to hospital</li><li>▪ Remove contaminated clothing and quickly but gently wipe material off skin</li><li>▪ Flush with water</li></ul>
Eye Contact	<ul style="list-style-type: none"><li>▪ Call 911 for transport to hospital</li><li>▪ Flush eyes using eyewash station for a minimum of 15 minutes</li></ul>

## Storage

Storage Group OA – Oxidizing Acids

## Hazardous Waste

- Must be disposed of as per the [University's Hazardous Waste Standard](#).
- Do not mix nitric acid waste with any other waste streams, including other inorganic acids.
- Use secondary containers (Nalgene/ polypropylene tray or tub) to segregate from other waste and chemical containers.