





Substance	Hazard	Comment
<b>Concentrated nitric acid</b> (If 10 M or more)	  CORROSIVE OXIDISING	DANGER: It causes severe skin burns and eye damage; skin is stained yellow and then peels. For a 15-minute exposure, the vapour concentration in the atmosphere should not exceed $2.6 \text{ mg m}^{-3}$ . Use a fume cupboard. May cause or intensify a fire in contact with combustible materials. Usually supplied in plastic bottles which will be attacked by the acid after a few years – transfer to borosilicate bottles with chemically-resistant cap.
<b>Moderately-concentrated nitric acid</b> (If less than 10 M but 0.8 M or more)	 CORROSIVE	DANGER: It causes severe skin burns and eye damage.
<b>Moderately dilute nitric acid</b> (If less than 0.8 M but 0.1 M or more)	 IRRITANT	It is irritating to the eyes and skin.
<b>Dilute nitric acid</b> (If less than 0.1 M)	LOW HAZARD	It may still cause harm in the eyes, in a cut or on the skin.

### Typical control measures to reduce risk

- Use the lowest concentration possible.
- Use the smallest volume possible.
- Wear eye protection including when making or disposing of solutions.
- Wear protective gloves if concentrated acid is handled, especially if more than test tube amounts
- Ensure good ventilation if oxides of nitrogen could be formed

### Assessing the risks

- **What are the details of the activity to be undertaken? What are the hazards?**
- **What is the chance of something going wrong?**  
*eg, could hazardous products (such as oxides of nitrogen) be formed in reactions with the acid or corrosive fumes produced if concentrated acid is over-heated?*
- **How serious would it be if something did go wrong?**  
*eg, peeling skin, from burns caused by concentrated acid, may be very painful.*
- **How can the risk(s) be controlled for this activity?**  
*eg, can it be done safely? Does the procedure need to be altered? Should goggles or safety spectacles be worn?*

### Emergency action

- **In the eye** Flood the eye with gently-running tap water for 10 minutes. Consult a medic.
- **Fumes breathed in** Remove the casualty to fresh air. Keep him/her warm. Consult a medic even if no symptoms are apparent.
- **Swallowed** Do no more than wash out the mouth with drinking water. Do **not** induce vomiting. Consult a medic .
- **Spilt on the skin or clothing** Quickly use a dry cloth or paper towel to wipe as much liquid off the skin as possible. Then drench with plenty of water. If a large area is affected or blistering occurs, consult a medic . Remove contaminated clothing and rinse it well.
- **Spilt on the floor, bench, etc** Wipe up small amounts with a damp cloth and rinse it well.  
For larger amounts, and especially for (moderately) concentrated acid, cover with mineral absorbent (eg, cat litter) and scoop into a bucket. Neutralise with sodium carbonate. Rinse with plenty of water.