

NITRIC ACID (HNO₃)

OTHER NAMES

- aqua fortis
- spirit of niter

USES

fertilizers, precursor to organic nitrogen compounds, nylon production, explosives, rocket propellant, woodworking, cleaning, etching, analytical reagent

HAZARDS

Corrosive to metal and skin: can cause severe skin burns and eye damage.



Oxidizing liquid: may intensify fires. Reacts with incompatibles to produce gas and heat, which can overpressure and burst storage containers.



Incompatible with: flammables, bases, hydrogen sulfide, organic materials, metals, and metal compounds.

REDUCE RISKS



Before beginning work—familiarize yourself with the dangers and precautions needed when handling nitric acid. Read the SDS.



All work should be performed in a fume hood (clear away all organics, flammables, and other incompatibles).



Never work alone.



Wear long pants, goggles, gloves, laboratory coat, and fully enclosed shoes.



Choose gloves appropriate to the hazard using... C_3D_2

Chemicals	Duration
Concentration	Dexterity
Contact Type	



Store nitric acid properly: do not store with incompatibles. Ensure the bottle is within secondary containment. Keep a fully stocked acid spill kit in the laboratory in case of spills.



Dispose of nitric acid properly: do not place into a bottle containing incompatibles. Ensure the bottle has been completely cleaned/rinsed before using it for nitric acid waste if it previously contained incompatibles.

IN CASE OF EXPOSURE

(For all exposures, seek immediate medical attention)



If on skin: wash with plenty of soap and water and seek medical advice.



If in eyes: rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so. Continue rinsing and seek medical attention.

Reviewed 2022