



BCFD HAZMAT RAPID RISK ASSESSMENT

	<p>CHEMICAL NAME- NITRIC ACID</p> <p>CAS #- 7697-37-2</p> <p>DOT ID # AND ERG GUIDEBOOK#- 2032(FUMING), 2031(NON-FUMING), ERG GUIDE 157</p> <p>CHEMICAL FORMULA- HN03</p> <p>PHYSICAL DESCRIPTION- COLORLESS, YELLOW, OR RED FUMING LIQUID WITH ACRID SUFFOCATING ODOR OFTEN USED IN AQUEOUS SOLUTION</p>	 
TOXICITY		<u>QUICK REFERENCE</u>
IDLH	25 PPM	TWA= 8 HR.
NIOSH REL(TWA,C,STEL)	TWA 2 PPM (5 mg/m3), ST 4 PPM(10 mg/m3)	C OR PEAK= MAXIMUM
OSHA PEL(TWA,C,PEAK)	TWA 2 PPM (5 mg/m3)	STEL=15 MIN
IONIZATION POTENTIAL	11.95 eV PID= NO	(10.6 eV bulb)
CONVERT MGM3 TO PPM	MULTIPLY 25 X MG\M3 THEN DIVIDE BY MW	PID CF= N/A
FLAMMABILITY		NFPA 704 RATING
FLAMMABLE RANGE	NOT FLAMMABLE	1-PREHEATED BEFORE IGNITION
FLASH POINT	NOT FLAMMABLE	2-HEATED OR HI AMBIENT TEMP.
AUTO IGNITION	NOT FLAMMABLE	3-IGNITED UNDER AMBIENT TEMP.
		4-VAPORIZE AND BURN READILY
RADIATION		
RADIATION HAZARD	NO	DOT GUIDES 161-166
O2 LEVELS		
ASPHYXIANT?	NO	HAZARD CLASS 2.2 GASES
INCREASED FIRE HAZARD?	YES	HAZARD CLASS 5 OXIDIZR
PROPERTIES		
VAPOR PRESSURE	48 mmHg	14.7 psi=760mmHg=1 ATM
STATE OF MATTER(S,L,G)	LIQUID, POSSIBLY FUMING	1 ATM=S,L< >1 ATM=G
MOLECULAR WEIGHT	63.0 HEAVIER THAN AIR	MW OF AIR IS 29
VAPOR DENSITY	N/A	VD OF AIR IS 1
SPECIFIC GRAVITY	1.50 AT 77 DEGREES F SINK IN WATER	SG OF WATER IS 1
WATER SOLUBILITY	MISCIBLE	>10% SOLUBLE IN WATER
EXPOSURE ROUTES	INHALATION, INGESTION, ABSORPTION	
REACTIVITIES	COMBUSTIBLE MATERIALS,METALLIC POWDERS, H2S,CARBIDES, ALCOHOLS	
PPE		
MOST SEVERE HAZARD	TOXICITY	
PROBABLE SELECTION	RESPIRATORY PROTECTION- SCBA	
	SKIN PROTECTION- TO GEAR LEVEL A LEVEL B TYCHEM TYVEK	
	HAND PROTECTION- MEDICAL NITRILE BUTYL CRYOGENIC COTTON FIRE	
	FOOT PROTECTION- LATEX CHEMICAL(TINGLEY) FIRE	
SPECIAL INSTRUCTION	REACTS VIOLENTLY WITH WATER GIVING OFF HEAT, CORROSIVE TO METALS	HAZMAT IQ- RED ZERO