Better Chemistry.

12/6/22

NITRIC ACID 42 DEGREE

4041001

Industrial applications




Nitric Acid	Aqua Fortis	7697-37-2	50-70%

Get medical attention immediately. Call a poison control center or physician. If suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If product vapor or mists cause respiratory irritation or distress, move the exposed person to fresh air immediately. If breathing is difficult or irregular, administer oxygen; if respiratory arrest occurs, start artificial respiration by trained personnel. Do not use the mouth to mouth method if the victim inhaled the substance; give artificial respiration with aid of a pocket mask equipped with a one-way valve or other proper respiratory device. If unconscious, maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Immediately remove contaminated clothing under a safety shower. Flush all affected areas with large amounts of water for 15 minutes. DO NOT attempt to neutralize with chemical agents. Obtain medical advice.

Immediately flush the eyes with large quantities of running water for 15 minutes. Hold the eyelids apart during the flushing to ensure rinsing of the entire surface of the eyelids with water. DO NOT attempt to neutralize with chemical agents. Obtain medical attention as soon as possible. Oils or ointments should not be used. Continue rinsing for an additional 15 minutes if the physician is not available.

If swallowed: Rinse mouth. Do NOT induce vomiting.

Immediately call poison center or doctor and explain the type of exposure to the chemical(s) and provide the name of the chemical(s).

Effects may be delayed

Wear rubber protective gloves, chemical protective clothing, eye protective goggles and face shield for face protection.

Keep container tightly closed.

Keep only in original container .

Store in well ventilated place. Keep container tightly closed.

Store locked up and away from incompatible chemicals.

Container that have been opened must be carefully resealed and kept upright to prevent leakage.

Nitric Acid	ACGIH	2 ppm	4 ppm

Use local exhaust to keep personal exposures below the OSHA Permissible Exposure Limit (s) (PEL) or the ACGIH threshold Limit Values (TLV)Time Weight Average (TWA).

A respiratory protection program that meets OSHA 29 CFR 1910.134 and ANSI 788.2 or applicable federal requirements must be followed whenever work place conditions warrant respirator use. NIOSH's Respirator Decision Logic" may be useful in determining the suitability of various types of respirators.

Acid resistant rubber.

Wear chemical safety goggles with face shield.

Wear chemical resistant boots.

Wear chemical resistant clothing.

Clear colorless to pale yellow or brown liquid

Acrid pungent

0.75 - 2.5 ppm

<1

-20 to -31.7 °C

117-120 °C

N/A

N/A

N/A

N/A

9-10 mm Hg @ 25 °C

>1 (Air=1)

1.3551 - 1.4078 g/ml

Complete in water

Log Pow = -2.3

N/A

N/A

N/A

Nitric Acid is a strong oxidizer. It attacks many metals producing extremely flammable hydrogen gas which can form explosive mixtures with air.Reactive or incompatible with alkali and metals. Violent reactions possible with combustible materiald, organic solvents, oxidizable substances, alcohols,ketones,aldehydes,acid anhydrides,amines,anilines,nitriles,organic nitro compounds,hydrazine,acetylidenes,metal alloys,metal oxides,alkali metals alkaline earth metals,ammonia,acids,hydrides,halogens,nonmetallic oxides,nitrides,hydrogen peroxide,charcoal,turpene and many other substances.
Stable under recommended storage conditions. Decomposes in the presence of air, light or organic matter. Yellow/brown color is due to the release of nitrogen dioxide upon exposure to light.
Extreme temperatures. Contact with incompatible material. Light. Moisture.
Nitric Acid reacts or is incompatible with over 150 chemical combinations.Refer to NFPA

Nitric Acid-SARA 313 listed

SARA 302 - Extremely Hazardous Substances; Nitric Acid

No Proposition 65 listed components in this formula