



ELRASA – NTA™ (Nitric Acid)

Technical Datasheet

1. Technical Datasheet

Property	Specification
Physical Properties	
Appearance	Colorless to yellow liquid
Physical Form	Colorless to yellow liquid
Odor	Acrid, suffocating
Assay / Purity	Min 68% HNO ₃
Molecular Weight	63.012 g/mol
Density	1.51 g/cm ³
Specific Gravity	1.405 min (@ 20°C)
Viscosity	0.75 mPa·s
Refractive Index	1.397 (@ 16.5 °C)
pH (aqueous solution)	<1
Chemical Properties	
pKa	-1.3
Ionic Nature	Strong acid, fully dissociated in dilute solution.
Incompatibilities	Alcohols, strong bases, reducing agents, finely powdered metals, organic materials, cyanides, ammonia, acetic acid, acetone, and combustible materials.
Hazardous Reactions	A powerful oxidizing agent that can ignite on contact or react explosively with many organic and inorganic substances. Reacts violently with water, releasing heat. Contact with metals can form flammable and explosive hydrogen gas.
Hazardous Decomposition Products	Thermal decomposition releases toxic and corrosive nitrogen oxides (NO _x).
Thermal Properties	
Melting Point	-42 °C
Boiling Point	83 °C
Flash Point	Not flammable.
Decomposition Temperature	83 °C



Property	Specification
Thermal Stability	Decomposes upon exposure to heat or light, forming nitrogen dioxide, which can cause a yellow or brown color.
Solubility	
Solubility in Water	Miscible
Solubility in Ethanol	Miscible (Reacts violently)

2. Dosing by Application

Application	Recommended / Max Dosage
Water Treatment (pH control)	Add slowly until target pH is reached.
Cleaning / Descaling	5-15% solutions are typically used.

The information and data contained herein are believed to be accurate but may not be all inclusive and should only be used as a guide. The information is furnished upon the condition that the person receiving it shall make his own determination of the suitability of the product for his particular use and on condition that they assume the risk of the use thereof.

EXPLORE ELCHEMY'S PRODUCT PORTFOLIO

[ELRASA - NTA™ \(Nitric Acid\)](#) | [Browse Catalog](#) | [Connect with us](#)