

APG**Analytical Products Group, Inc.**2730 Washington Blvd., Belpre, OH 45714
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Section I: Product Identification

CATALOG NUMBER: 1100, 4410, 4412, 4413	PRODUCT NAME: Aluminum High Level
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Section II - Hazardous Ingredients/Identity Information

Chemical Name	CAS Reg. No.	OSHA PEL (TWA)	% Composition*
Nitric Acid	7697 - 37 - 2	2 ppm	<5%

Non-Hazardous Ingredients/Identity Information

Chemical Name	CAS Reg. No.	OSHA PEL (TWA)	% Composition*
Water, Inorganic Salts			>95%

* Components are calculated on a weight/weight basis.

Section III - Physical/Chemical Characteristics of Hazardous Ingredients**Nitric Acid**

BOILING POINT: 181 F (83 C)	SPECIFIC GRAVITY: (H ₂ O=0) 1.5027 @ 25 C		
VAPOR PRESSURE: 47.9 MMHG @ 20 C	SOLUBILITY IN WATER: Complete	APPEARANCE/ODOR: Colorless to pale yellow liquid with a suffocating odor.	

Section IV - Fire and Explosion Hazard Data

FLASH POINT (Method used): N/A	AUTO IGNITION TEMPERATURE: N/A	FLAMMABLE LIMITS	LEL N/A	UEL N/A
EXTINGUISHING MEDIA: Water, dry chemical or soda ash.				
SPECIAL FIRE FIGHTING PROCEDURES: Move containers from fire area if you can do it without risk; apply cooling water to sides of containers that are exposed to flames until well after fire is out. Stay away from ends of tanks. For massive fire in cargo area, use unmanned hose holder or monitor nozzles. If this is impossible withdraw from area and let fire burn. Use flooding amounts of water as fog, cool containers with flooding amounts of water, apply from as far a distance as possible. Avoid breathing corrosive vapors, keep upwind. Consider evacuation of downwind area if material is leaking.				
UNUSUAL FIRE AND EXPLOSION HAZARDS: Concentrated nitric acid is not combustible, but is a strong oxidizer and its heat of reaction with reducing agents or combustibles may cause ignition. Concentrated nitric acid reacts explosively with combustible organic or readily oxidizable materials such as alcohol, wood, turpentine, metal powders, etc.				

Section V - Reactivity Data

STABILITY:	Unstable <input type="checkbox"/>	Stable <input checked="" type="checkbox"/>	Conditions to Avoid: Incompatible Materials.
INCOMPATIBILITY (Materials to avoid): Concentrated nitric acid will react violently with organic and hydrophobic compounds. The analytical standard should not be exposed to water reactive substances.			
HAZARDOUS DECOMPOSITION PRODUCTS: Nitric oxides			
HAZARDOUS POLYMERIZATION:	May Occur <input type="checkbox"/>	Will Not Occur <input checked="" type="checkbox"/>	Conditions to Avoid: None known

Section VI Health Hazard Data

ROUTES OF ENTRY	Inhalation? X	Skin? X	Ingestion? X
HEALTH HAZARDS (Acute and Chronic): ACUTE: Concentrated Nitric Acid vapor or mist is an irritant to the eyes and skin. The sample solution may cause irritation if inhaled, ingested or absorbed through the skin. A burning sensation may occur. With concentrated nitric acid, these symptoms are very severe. CHRONIC: Repeated and prolonged contact with concentrated nitric acid can result in mouth and bronchial problems. Prolonged skin contact results in dermatitis.			
COMPONENTS LISTED AS CARCINOGENS OR POTENTIAL CARCINOGENS: None Known			
SIGNS AND SYMPTOMS OF EXPOSURE: Irritation of eyes with coughing and burning sensation on skin.			
MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: Individuals with bronchial symptoms and sensitive dermatitis.			
EMERGENCY AND FIRST AID PROCEDURES: EYE CONTACT: Corrosive may cause pain, flush with water. Get Immediate medical attention. SKIN CONTACT: Corrosive may cause burns, flush with water, get medical attention. INHALATION: Remove to fresh air, if breathing has stopped, start artificial respiration, get medical attention. INGESTION: Corrosive, immediate pain, dilute the acid immediately by giving large amounts of water. If vomiting persists, administer fluids repeatedly. Ingested acid must be diluted 100 times to render it harmless to tissue. Obtain medical attention.			

Section VII - Precautions for Safe Handling and Use

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Samples and solutions may be diluted with water, neutralized to a pH of seven and flushed to sewer if local regulations permit. Sample spills may be neutralized with sodium bicarbonate.
WASTE DISPOSAL METHOD: See above.
PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE: Treat as non-hazardous sample.
OTHER PRECAUTIONS* Analytical standard samples should never be concentrated by evaporating or heating.

Section VIII - Control Measures

RESPIRATORY PROTECTION (Please specify): None needed with sample or diluted solution.	
VENTILATION: Local exhaust.	
PROTECTIVE GLOVES: Vinyl or latex	EYE PROTECTION: Safety glasses
OTHER PROTECTIVE EQUIPMENT: Impervious Clothing.	
EMERGENCY WASH FACILITIES: Maintain eye wash and quick drench showers in work area.	

The information stated in this Material Safety Data Sheet (MSDS) is believed to be correct on the date of publication and must not be considered all conclusive. The information has been obtained only by a search of available literature and is only a guide for handling the chemicals. Persons not specifically and properly trained should not handle this chemical or its container. This MSDS is provided without any warranty expressed or implied, including merchantability or fitness for any particular purpose.

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