

APG**Analytical Products Group, Inc.**2730 Washington Blvd., Belpre, OH 45714
740-423-4200 800-272-4442 Fax 740-423-5588**Material Safety Data Sheet**

Date prepared on: 3/17/00

Last revised on: 1/20/08

Page 1

Section I: Product Identification

CATALOG NUMBER: 600/4060/4062/4063/5060/5062/6060/6062	PRODUCT NAME: pH
--	------------------

Section II - Hazardous Ingredients/Identity Information

Chemical Name	CAS Reg. No.	OSHA PEL (TWA)	% Composition*
Hydrochloric Acid	7647-01-0	5 ppm	<1%
Sodium Hydroxide	1310-73-2	2 mg/m ³	<1%

Non-Hazardous Ingredients/Identity Information

Chemical Name	CAS Reg. No.	OSHA PEL (TWA)	% Composition*
Potassium Hydrogen Phthalate	877-24-7		<5%
Boric Acid	10043-35-3		<5%
Potassium Dihydrogen Phosphate	7778-77-0		<5%
Potassium Chloride	7447-40-7		<5%
Sodium Borate Decahydrate	1303-96-4	10 mg/m ³	<1%
Sodium Bicarbonate	144-55-8		<1%
Tris (Hydroxymethyl) Aminomethane	77-86-1		<1%
Water			>80%

* components are calculated on a weight/weight basis.

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

BOILING POINT: 230°C	SPECIFIC GRAVITY: (water=1) 1.18	
VAPOR PRESSURE: 160 mm	SOLUBILITY IN WATER: Soluble	APPEARANCE/ODOR: Clear, colorless liquid with pungent odor

Sodium Hydroxide

BOILING POINT: 1390°C	SPECIFIC GRAVITY: 2.12	
VAPOR PRESSURE: 100 mm @ 1111°C	SOLUBILITY IN WATER: Soluble	APPEARANCE/ODOR: White hygroscopic solid

Section IV - Fire and Explosion Hazard Data

FLASH POINT (Method used): Not available	AUTO IGNITION TEMPERATURE: Not available	FLAMMABLE LIMITS Not available	LEL NA	UEL NA
EXTINGUISHING MEDIA: Non-flammable, use extinguisher media appropriate for surrounding the fire.				
SPECIAL FIRE FIGHTING PROCEDURES: NA				
UNUSUAL FIRE AND EXPLOSION HAZARDS: NA				

Section V - Reactivity Data

STABILITY:	Unstable	Stable X	Conditions to Avoid: None known
INCOMPATIBILITY (Materials to avoid): Water reactive materials			
HAZARDOUS DECOMPOSITION PRODUCTS: None known			
HAZARDOUS POLYMERIZATION:	May Occur	Will Not Occur X	Conditions to Avoid: NA

Section VI - Health Hazard Data

ROUTES OF ENTRY	Inhalation? No	Skin? Yes	Ingestion? Yes
HEALTH HAZARDS (Acute and Chronic): ACUTE: None known CHRONIC: None known			
COMPONENTS LISTED AS CARCINOGENS OR POTENTIAL CARCINOGENS: None listed			
SIGNS AND SYMPTOMS OF EXPOSURE: None Known			
MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: None known			
EMERGENCY AND FIRST AID PROCEDURES: Seek medical assistance for treatment, observation and support if necessary. EYE CONTACT: Flush with water SKIN CONTACT: Flush with water. INHALATION: N/A INGESTION: Drink excess water to flush system and/or induce vomiting (salts may modify electrolyte balance of some individuals).			

Section VII - Precautions for Safe Handling and Use

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Absorb and place in waste.
WASTE DISPOSAL METHOD: Dispose of in a manner consistent with Federal, state, and local regulations.
PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE: Treat as non-hazardous sample.
OTHER PRECAUTIONS* Analytical standards should never be heated or evaporated to dryness.

Section VIII - Control Measures

RESPIRATORY PROTECTION (Please specify):	None required	
VENTILATION:	Local exhaust	
PROTECTIVE GLOVES:	None required	EYE PROTECTION: safety glasses
OTHER PROTECTIVE EQUIPMENT: NA		
EMERGENCY WASH FACILITIES: Maintain eye wash and quick drench showers in work area.		

Section IX – WHMIS Class – Not Hazardous

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.

This product is furnished for laboratory use ONLY! Our standards may not be used as drugs, cosmetics, agricultural or pesticidal products, food additives or as house hold chemicals.

* Various Government agencies (i.e., Department of Transportation, Occupational Safety and Health Administration, Environmental Protection Agency, and others) may have specific regulations concerning the transportation, handling, storage or use of this product which may not be contained herein. The customer or user of this product should be familiar with these regulations.