

**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**

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**Section I: Product Identification**

CATALOG NUMBER: 100/4010/4012/4013/6010/6012	PRODUCT NAME: Demand
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**Section II - Hazardous Ingredients/Identity Information**

Chemical Name	CAS Reg. No.	OSHA PEL	% Composition*
Hydrochloric Acid	7647 - 01 - 0	CL 5ppm	Less than 1.0%

**Non-Hazardous Ingredients/Identity Information**

Chemical Name	CAS Reg. No.	OSHA PEL (TWA)	% Composition*
Water	7732-18-5	NA	>97%
Glucose	492-62-6	NA	<1%
Glutamic Acid	56-86-0	NA	<1%

\* components are calculated on a weight/weight basis.

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

BOILING POINT: 110° C	SPECIFIC GRAVITY: (water=1) 1.19		
VAPOR PRESSURE: 160 mmHg @ 20° C	SOLUBILITY IN WATER: Complete	APPEARANCE/ODOR: Clear colorless liquid with pungent 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: Non-flammable, use extinguisher media appropriate for the surrounding fire.				
SPECIAL FIRE FIGHTING PROCEDURES: NA				
UNUSUAL FIRE AND EXPLOSION HAZARDS: NA				

**Section V - Reactivity Data**

STABILITY:	Unstable <input type="checkbox"/>	Stable <input checked="" type="checkbox"/>	Conditions to Avoid: Incompatible materials.
INCOMPATIBILITY (Materials to avoid): Water reactive materials.			
HAZARDOUS DECOMPOSITION PRODUCTS: None known			
HAZARDOUS POLYMERIZATION:	May Occur <input type="checkbox"/>	Will Not Occur <input checked="" type="checkbox"/>	Conditions to Avoid: None Known.

**Section VI - Health Hazard Data**

<b>ROUTES OF ENTRY</b>	Inhalation? No	Skin? No	Ingestion? Yes
HEALTH HAZARDS (Acute and Chronic): ACUTE: N/A CHRONIC: N/A			

COMPONENTS LISTED AS CARCINOGENS OR POTENTIAL CARCINOGENS: None Known			
SIGNS AND SYMPTOMS OF EXPOSURE: N/A			
MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: N/A			
EMERGENCY AND FIRST AID PROCEDURES: EYE CONTACT: Flush with water    SKIN CONTACT: Flush with water    INHALATION: N/A    INGESTION: Treat as ingestion of dilute acid, drink excess water, milk, induce vomiting. Suggest use of antacid aids.			

### Section VII - Precautions for Safe Handling and Use

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Absorb and dispose of material, may be flushed to sewer.
WASTE DISPOSAL METHOD: Dispose as non-hazardous waste, flush to sewer.
PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE: Treat as non-hazardous sample.
OTHER PRECAUTIONS* None known, but 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: N/A	
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.

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.

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