

## ChemLogic® Long-Life Mineral Acids Cassettes

ChemLogic Long-Life Mineral Acids Cassettes are designed to be selective, quick responding and highly sensitive to target gases.

**The following list includes the substances that will react on a ChemLogic Long-Life Mineral Acid Cassette:**

Hydrogen Fluoride (HF) <sup>1</sup>	Nitric Acid (HNO <sub>3</sub> ) <sup>1</sup>	Phosphoric Acid (H <sub>3</sub> PO <sub>4</sub> )
Hydrogen Chloride (HCl) <sup>1</sup>	Nitrogen Trifluoride (NF <sub>3</sub> ) <sup>2</sup>	Boron Trifluoride (BF <sub>3</sub> ) <sup>1</sup>
Hydrogen Bromide (HBr) <sup>1</sup>	Sulfuric Acid (H <sub>2</sub> SO <sub>4</sub> )	

<sup>1</sup> Gas calibrations available on ChemLogic CLPx, CL1, CL8 and CL96

<sup>2</sup> Can be detected when using the pyrolyzer option

Gases or vapors, which react with ambient moisture to form acids, are also detectable with the ChemLogic Long-Life Mineral Acids Cassette.

### Compounds which hydrolyze to HBr:

Boron Tribromide (BBr <sub>3</sub> )
Phosphorus Tribromide (PBr <sub>3</sub> )

### Compounds which hydrolyze to HCl:

Arsenic Trichloride (AsHCl <sub>3</sub> )	Hexachlorodisilane (SiCl <sub>2</sub> )	Phosphorus Pentachloride (PCl <sub>5</sub> )	Tin Tetrachloride (SnCl <sub>4</sub> )
Boron Trichloride (BCl <sub>3</sub> )	Phosphorus Oxychloride (POCl <sub>3</sub> )	Phenyl Trichlorosilane (SiCl <sub>3</sub> Ph)	Trichlorosilane (SiHCl <sub>3</sub> )
Dichlorosilane (SiH <sub>2</sub> Cl <sub>2</sub> )	Phosphorus Trichloride (PCl <sub>3</sub> )	Silicon Tetrachloride (SiCl <sub>4</sub> )	

**Compounds which hydrolyze to HF:**

Arsenic Trifluoride (AsF <sub>3</sub> )	Chlorine Trifluoride (ClF <sub>3</sub> )	Phosphorus Trifluoride (PF <sub>3</sub> )	Sulfur Tetrafluoride (SF <sub>4</sub> )
Arsenic Pentafluoride (AsF <sub>5</sub> )	Fluosilic Acid (H <sub>2</sub> SiF <sub>6</sub> )	Phosphorus Pentafluoride (PF <sub>5</sub> )	Tetrafluorosilane (SiF <sub>4</sub> )
Carbonyl Fluoride (COF <sub>2</sub> )	Germanium Tetrafluoride (GeF <sub>4</sub> )	Silicon Tetrafluoride (SiF <sub>4</sub> )	Tungsten Hexafluoride (WF <sub>6</sub> )

**The ChemLogic Long-Life Mineral Acids Cassette will NOT respond to:**

Alcohols	Fluoromethanes	Isopropyl Alcohol	Solvents
Amines	Freons	Isocyanates	Sulfur Dioxide
Ammonia	Hydrides	Methyl Chloride	Sulfur Hexafluoride
Arsine	Hydrazine	Methylene Chloride	Xenon Difluoride
Carbon Tetrachloride	Hydrocarbons	Nitrogen	
Carbon Tetrafluoride	Hydrogen	Nitric Oxide	
Chloroform	Hydrogen Cyanide	Nitrous Oxide	
Dichloroethylene	Hydrogen Peroxide	Ozone	
Dimethyl Sulfate	Hydrogen Sulfide	Phosgene	