



# POCl<sub>3</sub>

## Phosphorus Oxychloride

**FIVE STAR GRADE**



Phosphorus Oxychloride (POCl<sub>3</sub>) is a liquid dopant used to create N-type areas in the silicon lattice via phosphorus diffusion processing. POCl<sub>3</sub> is supplied in standard-dimension, 1500-cc quartz bubblers fitted with "breakseals" to ensure product integrity and a 5-year shelf life.

### Physical Properties

Formula	POCl <sub>3</sub>	Density	1.675 gm/cc
Mole Weight	153.33	Vapor Density	5.3 (air=1)
T <sub>BP</sub>	105° C (1 Atm)	Flash Point	nonflammable
T <sub>FP</sub>	1.2°C	TLV	0.5 ppm

### Specifications

Assay	>99.9%
<b>Purity</b> (Metals Basis)	>99.99999%
Color (APHA)	<5

### Typical Metals Analysis (ppb)

Aluminum	<2	Gold	<1	Potassium	<2
Arsenic	<3	Iron	<3	Silver	<1
Barium	<1	Lead	<1	Sodium	<5
Bismuth	<1	Lithium	<1	Strontium	<1
Cadmium	<2	Magnesium	<2	Tin	<1
Calcium	<3	Manganese	<1	Titanium	<2
Chromium	<1	Mercury	<6	Vanadium	<1
Cobalt	<1	Molybdenum	<1	Zinc	<3
Copper	<1	Nickel	<1		
Gallium	<1	Niobium	<1		