



POCl₃

Phosphorus Oxychloride

Phosphorus Oxychloride (POCl₃) is a liquid dopant used to create N-type areas in the silicon lattice via phosphorus diffusion processing. Peak Sun POCl₃ 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 ₃	Density	1.675 gm/cc
Mole Weight	153.33	Vapor Density	5.3 (air=1)
T _{BP}	105° C (1 Atm)	Flash Point	nonflammable
T _{FP}	1.2°C	TLV	0.5 ppm

Specifications

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

Typical Metals Analysis (ppb)

Aluminum	<4	Gold	<1	Niobium	<1
Arsenic	<7	Iron	<5	Potassium	<3
Barium	<1	Lead	<3	Silver	<1
Bismuth	<1	Lithium	<6	Sodium	<5
Calcium	<6	Magnesium	<5	Strontium	<1
Chromium	<1	Manganese	<1	Tin	<1
Cobalt	<1	Mercury	<8	Titanium	<3
Copper	<1	Molybdenum	<1	Vanadium	<1
Gallium	<1	Nickel	<1	Zinc	<10