

# Phosphorus oxychloride SOLAR GRADE

<b>CHEMICAL NAME</b>	Phosphorus oxychloride																																																														
<b>CAS NUMBER</b>	10025-87-3																																																														
<b>FUNCTION</b>	Raw Materials & Intermediates																																																														
<b>TECHNICAL REQUIREMENTS</b>	<table> <tr> <td>Purity (based on metals analyzed), %.....</td> <td>&gt;99,9999</td> </tr> <tr> <td>Boiling point, °C.....</td> <td>105.3</td> </tr> <tr> <td>Solidification point, °C .....</td> <td>1.2</td> </tr> <tr> <td>Silver content, Ag, ppb .....</td> <td>max. 1</td> </tr> <tr> <td>Aluminum content, Al, ppb.....</td> <td>max. 7</td> </tr> <tr> <td>Arsenic content, As, As, ppb .....</td> <td>max. 40</td> </tr> <tr> <td>Gold content, Au, ppb.....</td> <td>max. 1</td> </tr> <tr> <td>Barium content, Ba, ppb.....</td> <td>max. 1</td> </tr> <tr> <td>Bismuth content, Bi, ppb .....</td> <td>max. 1</td> </tr> <tr> <td>Calcium content, Ca, ppb .....</td> <td>max. 2</td> </tr> <tr> <td>Cadmium content, Cd, ppb.....</td> <td>max. 1</td> </tr> <tr> <td>Cobalt content, Co, ppb.....</td> <td>max. 1</td> </tr> <tr> <td>Chromium content, Cr, ppb .....</td> <td>max. 1</td> </tr> <tr> <td>Copper content, Cu, ppb .....</td> <td>max. 5</td> </tr> <tr> <td>Iron content, Fe, ppb .....</td> <td>max. 15</td> </tr> <tr> <td>Gallium content, Ga, ppb.....</td> <td>max. 1</td> </tr> <tr> <td>Mercury content, Hg, ppb .....</td> <td>max. 1</td> </tr> <tr> <td>Potassium content, K, ppm.....</td> <td>max. 0,2</td> </tr> <tr> <td>Lithium content, Li, ppb .....</td> <td>max. 1</td> </tr> <tr> <td>Magnesium content, Mg, ppb .....</td> <td>max. 1</td> </tr> <tr> <td>Manganese content, Mn, ppb .....</td> <td>max. 1</td> </tr> <tr> <td>Molybdenum content, Mo, ppb .....</td> <td>max. 1</td> </tr> <tr> <td>Sodium content, Na, ppm.....</td> <td>max. 0,2</td> </tr> <tr> <td>Niobium content, Nb, ppb .....</td> <td>max. 1</td> </tr> <tr> <td>Nickel content, Ni, ppb .....</td> <td>max. 1</td> </tr> <tr> <td>Lead content, Pb, ppb .....</td> <td>max. 1</td> </tr> <tr> <td>Tin content, Sn, ppb .....</td> <td>max. 1</td> </tr> <tr> <td>Strontium content, Sr, ppb.....</td> <td>max. 1</td> </tr> <tr> <td>Titanium content, Ti, ppb .....</td> <td>max. 2</td> </tr> <tr> <td>Vanadium content, V, ppb .....</td> <td>max. 1</td> </tr> <tr> <td>Zinc content, Zn, ppb.....</td> <td>max. 1</td> </tr> </table>	Purity (based on metals analyzed), %.....	>99,9999	Boiling point, °C.....	105.3	Solidification point, °C .....	1.2	Silver content, Ag, ppb .....	max. 1	Aluminum content, Al, ppb.....	max. 7	Arsenic content, As, As, ppb .....	max. 40	Gold content, Au, ppb.....	max. 1	Barium content, Ba, ppb.....	max. 1	Bismuth content, Bi, ppb .....	max. 1	Calcium content, Ca, ppb .....	max. 2	Cadmium content, Cd, ppb.....	max. 1	Cobalt content, Co, ppb.....	max. 1	Chromium content, Cr, ppb .....	max. 1	Copper content, Cu, ppb .....	max. 5	Iron content, Fe, ppb .....	max. 15	Gallium content, Ga, ppb.....	max. 1	Mercury content, Hg, ppb .....	max. 1	Potassium content, K, ppm.....	max. 0,2	Lithium content, Li, ppb .....	max. 1	Magnesium content, Mg, ppb .....	max. 1	Manganese content, Mn, ppb .....	max. 1	Molybdenum content, Mo, ppb .....	max. 1	Sodium content, Na, ppm.....	max. 0,2	Niobium content, Nb, ppb .....	max. 1	Nickel content, Ni, ppb .....	max. 1	Lead content, Pb, ppb .....	max. 1	Tin content, Sn, ppb .....	max. 1	Strontium content, Sr, ppb.....	max. 1	Titanium content, Ti, ppb .....	max. 2	Vanadium content, V, ppb .....	max. 1	Zinc content, Zn, ppb.....	max. 1
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**GENERAL DATA**

Appearance at 20-25°C ..... colourless or straw liquid  
Solubility in water at 20°C, mg/L..... reacts violently  
producing high heat of reaction  
Molecular weight, g/mol..... approx. 153,33  
Density at 20°C, g/cm<sup>3</sup> ..... 1.672-1.678  
Odour ..... pungent

**APPLICATION**

Intermediate in electronics, semiconductor and optical glass manufacturing.