

# Chloro derivatives in the p-block

(bp/°C)

→reaction with H<sub>2</sub>O/HCl

<b>BCl<sub>3</sub> (12.5)</b> → <b>B(OH)<sub>3</sub></b>	<b>CCl<sub>4</sub> (76.7)</b>	<b>NCl<sub>3</sub> (71)</b> → <b>HNO<sub>2</sub></b>	<b>ClO<sub>2</sub> (11)</b> → <b>HClO<sub>2</sub> + ClO<sub>3</sub><sup>-</sup></b>	<b>FCl (-100)</b>
<b>AlCl<sub>3</sub> Al<sub>2</sub>Cl<sub>6</sub> (sub 180)</b> → <b>AlCl<sub>4</sub><sup>-</sup></b> <b>Al(H<sub>2</sub>O)<sub>6</sub><sup>3+</sup></b>	<b>SiCl<sub>4</sub> (57.6)</b> → <b>Si(OH)<sub>4</sub></b>	<b>PCl<sub>5</sub> (subl 160)</b> → <b>POCl<sub>3</sub></b> <b>PCl<sub>3</sub> (76)</b> → <b>H<sub>3</sub>PO<sub>3</sub></b>	<b>S<sub>2</sub>Cl<sub>2</sub> (14)</b> → <b>H<sub>2</sub>S</b> <b>SCl<sub>2</sub> (59)</b> → <b>H<sub>2</sub>S<sub>x</sub>O<sub>y</sub></b>	<b>Cl<sub>2</sub> (-34)</b>
	<b>GeCl<sub>4</sub> (83)</b>	<b>AsCl<sub>3</sub> (130)</b> → <b>H<sub>3</sub>AsO<sub>3</sub></b> <b>AsCl<sub>5</sub> (d)</b> → <b>H<sub>3</sub>AsO<sub>4</sub></b>	<b>SeCl<sub>2</sub> (130 d)</b>	<b>ClBr (5)</b>
	<b>SnCl<sub>4</sub>(114)</b> → <b>SnCl<sub>x</sub>(OH)<sub>6-x</sub><sup>2-</sup></b>	<b>SbCl<sub>3</sub>(223)</b> → <b>SbCl<sub>4</sub><sup>-</sup></b> <b>SbCl<sub>5</sub> (140 d)</b> → <b>SbCl<sub>6</sub><sup>-</sup></b>	<b>Te<sub>4</sub>Cl<sub>4</sub> (s)</b>	<b>I<sub>2</sub>Cl<sub>6</sub> (s)</b>
	<b>PbCl<sub>2</sub> (s)</b> → <b>PbCl<sub>3</sub><sup>-</sup></b>			