

## (1) General overview

Some representative  $^{11}\text{B}$  chemical shifts referred to  $\text{BF}_3 \cdot \text{OEt}_2$  ( $\text{R}, \text{R}^1, \text{R}^2 = \text{alkyl}$ )

|                               | $\delta/\text{ppm}$ |                                   | $\delta/\text{ppm}$ |
|-------------------------------|---------------------|-----------------------------------|---------------------|
| $\text{RBF}_2$                | 28 to 30            | $\text{R}_2\text{BF}$             | 59 to 60            |
| $\text{RBCl}_2$               | 62 to 64            | $\text{R}_2\text{BCl}$            | 76 to 78            |
| $\text{RBBr}_2$               | 62 to 66            | $\text{R}_2\text{BBr}$            | 79 to 82            |
| $\text{PhBF}_2$               | 24.8                | $\text{Ph}_2\text{BF}$            | 47.4                |
| $\text{PhBCl}_2$              | 54.8                | $\text{Ph}_2\text{BCl}$           | 61.0                |
| $\text{RB}(\text{NMe}_2)_2$   | 33.5 to 34.2        | $\text{R}_2\text{BNMe}_2$         | 44 to 46            |
| $\text{RB}(\text{OMe})_2$     | 29 to 32            | $\text{R}_2\text{B}(\text{OMe})$  | 53 to 54            |
| $[\text{B}(\text{OMe})_4]^-$  | 3                   | $[\text{B}(\text{OH})_4]^-$       | 1.1                 |
| $[\text{BR}_4]^-$             | -16 to -20          | $[\text{BPh}_4]^-$                | -6.3                |
| $[\text{BF}_4]^-$             | -2.2                | $[\text{BCl}_4]^-$                | 6.6                 |
| $[\text{BBr}_4]^-$            | -24.1               | $[\text{BI}_4]^-$                 | -128                |
| $[\text{B}(\text{NO}_3)_4]^-$ | -86.6               | $[\text{B}(\text{OPh})_4]^-$      | 2.                  |
| $(\text{R}^1\text{BNR}^2)_3$  | 23 to 37            | $\text{B}(\text{NR}_2)_2\text{X}$ | 20 to 30            |

