# Supporting information

# The versatile behavior of the germene $Mes_2Ge=CR_2$ towards nitriles

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Table 1. Bond lengths [Å] and angles [°] for **7**.

| | |
|---|---|
| Ge(1)-N(1) | 1.855(4) |
| Ge(1)-C(21) | 1.964(5) |
| Ge(1)-C(30) | 1.979(4) |
| Ge(1)-C(14) | 1.990(5) |
| N(1)-C(1) | 1.306(6) |
| C(1)-C(8) | 1.496(7) |
| C(1)-C(2) | 1.497(6) |
| C(2)-C(7) | 1.396(7) |
| C(2)-C(3) | 1.398(7) |
| C(3)-C(4) | 1.366(6) |
| C(4)-C(5) | 1.354(7) |
| C(5)-C(6) | 1.390(8) |
| C(6)-C(7) | 1.380(7) |
| C(8)-C(13) | 1.395(6) |
| C(8)-C(9) | 1.417(6) |
| C(9)-C(10) | 1.380(7) |
| C(10)-C(11) | 1.376(7) |
| C(11)-C(12) | 1.398(6) |
| C(12)-C(13) | 1.398(6) |
| C(12)-C(16) | 1.470(6) |
| C(13)-C(14) | 1.516(6) |
| C(14)-C(15) | 1.497(7) |
| C(15)-C(20) | 1.374(6) |
| C(15)-C(16) | 1.430(7) |
| C(16)-C(17) | 1.374(6) |
| C(17)-C(18) | 1.387(7) |
| C(18)-C(19) | 1.397(7) |
| C(19)-C(20) | 1.377(7) |
| C(21)-C(22) | 1.391(6) |
| C(21)-C(26) | 1.425(7) |
| C(22)-C(23) | 1.390(7) |

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|---|---|
| C(22)-C(27) | 1.507(6) |
| C(23)-C(24) | 1.396(7) |
| C(24)-C(25) | 1.385(7) |
| C(24)-C(28) | 1.517(7) |
| C(25)-C(26) | 1.396(7) |
| C(26)-C(29) | 1.525(7) |
| C(30)-C(35) | 1.388(6) |
| C(30)-C(31) | 1.402(6) |
| C(31)-C(32) | 1.403(6) |
| C(31)-C(36) | 1.511(6) |
| C(32)-C(33) | 1.372(6) |
| C(33)-C(34) | 1.387(6) |
| C(33)-C(37) | 1.515(6) |
| C(34)-C(35) | 1.413(6) |
| C(35)-C(38) | 1.496(6) |

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|---|---|
| N(1)-Ge(1)-C(21) | 101.16(19) |
| N(1)-Ge(1)-C(30) | 111.19(17) |
| C(21)-Ge(1)-C(30) | 112.6(2) |
| N(1)-Ge(1)-C(14) | 98.74(19) |
| C(21)-Ge(1)-C(14) | 125.5(2) |
| C(30)-Ge(1)-C(14) | 106.2(2) |
| C(1)-N(1)-Ge(1) | 122.8(3) |
| N(1)-C(1)-C(8) | 124.5(4) |
| N(1)-C(1)-C(2) | 116.9(4) |
| C(8)-C(1)-C(2) | 118.5(4) |
| C(7)-C(2)-C(3) | 117.5(4) |
| C(7)-C(2)-C(1) | 124.2(5) |
| C(3)-C(2)-C(1) | 118.2(5) |
| C(4)-C(3)-C(2) | 121.2(5) |
| C(5)-C(4)-C(3) | 120.8(6) |
| C(4)-C(5)-C(6) | 119.9(5) |
| C(7)-C(6)-C(5) | 119.7(5) |
| C(6)-C(7)-C(2) | 120.8(5) |
| C(13)-C(8)-C(9) | 115.9(5) |
| C(13)-C(8)-C(1) | 121.4(4) |
| C(9)-C(8)-C(1) | 122.1(5) |
| C(10)-C(9)-C(8) | 121.6(5) |
| C(11)-C(10)-C(9) | 121.7(5) |
| C(10)-C(11)-C(12) | 118.1(5) |

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|---|---|
| C(11)-C(12)-C(13) | 120.3(5) |
| C(11)-C(12)-C(16) | 131.1(5) |
| C(13)-C(12)-C(16) | 108.6(4) |
| C(8)-C(13)-C(12) | 122.3(4) |
| C(8)-C(13)-C(14) | 127.5(4) |
| C(12)-C(13)-C(14) | 110.2(4) |
| C(15)-C(14)-C(13) | 103.4(4) |
| C(15)-C(14)-Ge(1) | 127.2(4) |
| C(13)-C(14)-Ge(1) | 106.3(3) |
| C(20)-C(15)-C(16) | 119.6(5) |
| C(20)-C(15)-C(14) | 130.8(5) |
| C(16)-C(15)-C(14) | 109.6(4) |
| C(17)-C(16)-C(15) | 119.4(5) |
| C(17)-C(16)-C(12) | 132.4(5) |
| C(15)-C(16)-C(12) | 108.2(4) |
| C(16)-C(17)-C(18) | 120.1(5) |
| C(17)-C(18)-C(19) | 120.4(5) |
| C(20)-C(19)-C(18) | 119.7(5) |
| C(15)-C(20)-C(19) | 120.7(5) |
| C(22)-C(21)-C(26) | 118.0(5) |
| C(22)-C(21)-Ge(1) | 124.8(4) |
| C(26)-C(21)-Ge(1) | 117.1(4) |
| C(23)-C(22)-C(21) | 120.3(5) |
| C(23)-C(22)-C(27) | 118.6(5) |
| C(21)-C(22)-C(27) | 121.1(5) |
| C(22)-C(23)-C(24) | 122.4(5) |
| C(25)-C(24)-C(23) | 117.3(5) |
| C(25)-C(24)-C(28) | 120.5(5) |
| C(23)-C(24)-C(28) | 122.2(6) |
| C(24)-C(25)-C(26) | 121.8(5) |
| C(25)-C(26)-C(21) | 120.1(5) |
| C(25)-C(26)-C(29) | 117.1(5) |
| C(21)-C(26)-C(29) | 122.8(5) |
| C(35)-C(30)-C(31) | 120.4(4) |
| C(35)-C(30)-Ge(1) | 121.2(3) |
| C(31)-C(30)-Ge(1) | 118.3(3) |
| C(30)-C(31)-C(32) | 118.6(4) |
| C(30)-C(31)-C(36) | 124.0(4) |
| C(32)-C(31)-C(36) | 117.4(4) |
| C(33)-C(32)-C(31) | 122.6(4) |

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|---|---|
| C(32)-C(33)-C(34) | 117.6(4) |
| C(32)-C(33)-C(37) | 122.1(4) |
| C(34)-C(33)-C(37) | 120.3(4) |
| C(33)-C(34)-C(35) | 122.3(5) |
| C(30)-C(35)-C(34) | 118.4(4) |
| C(30)-C(35)-C(38) | 124.4(4) |
| C(34)-C(35)-C(38) | 117.3(4) |