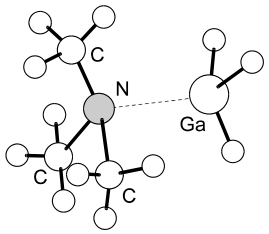
**462** **$C_3H_{12}GaN$** **Trimethylamine – gallium trihydride (1/1)** **$C_{3v}$** assumed
ED, MW, *ab initio* calculations
*N,N*-Dimethylmethanamine – gallium trihydride (1/1)
$(CH_3)_3N \cdot GaH_3$

| $r_a$ | Å [a]) |
|---|---|
| Ga–H | 1.522(13) |
| Ga…N | 2.139(4) |
| N–C | 1.479(3) |
| C–H | 1.111(4) |

| $\theta_\alpha^0$ | deg [a]) |
|---|---|
| C–N…Ga | 108.8(2) |
| N…Ga–H | 99.3(8) |
| N–C–H | 111.7(13) |
| $\tau_1$ [b]) | 60 [c]) |
| $\tau_2$ [d]) | 60 [c]) |

ED data from [1] were reanalyzed. Local $C_{3v}$ symmetry and no tilt were assumed for the $CH_3$ groups. Results of MP2/6-31G(d), *etc*. calculations guided the determination of some parameters.
The measurements were made at room temperature.




[a]) Estimated standard errors.
[b]) H–Ga…N–C torsional angle from the *syn* position.
[c]) Assumed.
[d]) H–C–N…Ga torsional angle from the *syn* position.

Brain, P.T., Brown, H.E., Downs, A.J., Greene, T.M., Johnsen, E., Parsons, S., Rankin, D.W.H., Smart, B.A., Tang, C.Y.: J. Chem. Soc., Dalton Trans. (1998) 3685.
[1] Baxter, P.L., Downs, A.J., Rankin, D.W.H.: J. Chem. Soc., Dalton Trans. (1984) 1755.

Replaces II/25C (**3**, 1444), ED