

^a θ_0^S refers to the Debye temperature at 0°K or to a temperature which is as close to 0°K as possible. If the temperature is different from 0°K, it is noted in a footnote.

^b θ_{298}^S refers to the Debye temperature at 298°K as calculated from the specific heat at constant volume (Table XIV), unless otherwise noted. The values taken from the references cited are generally for Debye temperatures determined at $\sim 10^8$.

^c θ^M refers to the Debye temperature calculated from the Lindemann equation, using the constant 138.5; see text for further discussion.

^d Calculated by Kaufman and Clougherty⁴ from the data of Johnston *et al.*¹⁰ This value applied to a temperature of 13°K.

^e See text for further discussion.

^f Estimated value; see text for further discussion.

^g This value applies to 40°K. From an extrapolation of high-temperature data to 0°K a value of 105°K is obtained for θ_0^S .

^h Rajdev and Whitmore¹⁰ re-evaluated Martin's data¹⁴ and obtained a value of $\theta_0^S = 220$ which lies within the error listed above.

ⁱ Mean value of Debye temperature calculated from C_v (Table XIV) and Debye temperatures given by Murao¹⁰³ and Arajs and Colvin¹⁰².

REFERENCES TO TABLE XV

1. L. M. Roberts, *Proc. Phys. Soc. (London)* **B70**, 744 (1957).
2. D. L. Martin, *Proc. Roy. Soc. A263*, 378 (1961).
3. R. W. Hill and P. L. Smith, *Phil. Mag. [7]* **44**, 636 (1953).
4. L. Kaufman and E. V. Clougherty, "Investigation of Boride Compounds for Very High Temperature Applications," Semi-Annual Rept. No. 2. Man. Labs., Inc., April, 1963.
5. P. H. Keesom and N. Pearlman, *Phys. Rev.* **99**, 1119 (1955).
6. P. H. Keesom and B. J. C. van der Hoeven, Jr., *Phys. Rev.* **130**, 1318 (1963).
7. D. L. Burk and S. A. Friedberg, *Phys. Rev.* **111**, 1275 (1958); and *Proc. 5th Intern. Conf. Low Temp. Phys. Chem., Madison, Wisconsin, 1957*, p. 412. Univ. of Wisconsin Press, Madison, Wisconsin, 1958.
8. D. L. Martin, *Phys. Rev.* **124**, 438 (1961).
9. D. H. Parkinson and J. E. Quarlington, *Proc. Phys. Soc. (London)* **A68**, 762 (1955).
10. R. E. Gaumer and C. V. Heer, *Phys. Rev.* **118**, 955 (1960).
11. W. H. Lien and N. E. Phillips, *Phys. Rev.* **118**, 958 (1960).
12. I. Estermann, S. A. Friedberg, and J. E. Goldman, *Phys. Rev.* **87**, 582 (1952).
13. P. L. Smith, *Phil. Mag. [7]* **46**, 744 (1955).
14. D. L. Martin, *Proc. Phys. Soc. (London)* **78**, 1482 (1961).
15. J. A. Kok and W. H. Keesom, *Physica* **4**, 835 (1937).
16. N. E. Phillips, *Phys. Rev.* **114**, 676 (1959).
17. P. H. Keesom and N. Pearlman, *Phys. Rev.* **88**, 398 (1952).
18. P. H. Keesom and G. Seidel, *Phys. Rev.* **113**, 33 (1959).
19. E. D. Eastman and W. C. McGavock, *J. Am. Chem. Soc.* **59**, 145 (1937).
20. L. M. Roberts, *Proc. Phys. Soc. (London)* **B70**, 738 (1957).
21. M. Griffel, R. W. West, and J. F. Smith, *J. Chem. Phys.* **27**, 1267 (1957).
22. H. Montgomery and G. P. Pells, *Proc. Phys. Soc. (London)* **78**, 622 (1961).
23. N. M. Walcott, in "Conf. Phys. Basses Temp.," p. 286. Inst. Intern. du Froid, Paris, 1956.
24. M. H. Aven, R. S. Craig, T. R. Waite, and W. E. Wallace, *Phys. Rev.* **102**, 1263 (1956).
25. G. D. Kneip, Jr., J. O. Betterton, Jr., and J. O. Scarbrough, *Phys. Rev.* **130**, 1687 (1963).
26. R. D. Worley, M. W. Zemansky, and H. A. Boorse, *Phys. Rev.* **99**, 447 (1955).
27. W. S. Corak, B. B. Goodman, C. B. Satterthwaite, and A. Wexler, *Phys. Rev.* **102**, 656 (1956).
28. C. H. Cheng, K. P. Gupta, E. C. van Reuth, and P. A. Beck, *Phys. Rev.* **126**, 2030 (1962).
29. J. A. Rayne and W. R. G. Kemp, *Phil. Mag. [8]* **1**, 918 (1956).
30. K. Clusius and P. Franzosini, *Z. Naturforsch.* **17a**, 522 (1962).
31. R. G. Elson, H. G. Smith, and J. O. Wilhelm, *Can. J. Res.* **A18**, 83 (1940).
32. G. L. Booth, F. E. Hoare, and B. T. Murphy, *Proc. Phys. Soc. (London)* **B68**, 830 (1955).
33. W. H. Keesom and B. Kurrelmeyer, *Physica* **6**, 364 (1939).
34. G. Duyckaerts, *Physica* **6**, 401 (1939).
35. C. H. Cheng, C. T. Wei, and P. A. Beck, *Phys. Rev.* **120**, 426 (1960).
36. R. A. Erickson and C. V. Heer, *Proc. 5th Intern. Conf. Low Temp. Phys. Chem., Madison, Wisconsin, 1957*, p. 408. Univ. of Wisconsin Press, Madison, Wisconsin, 1958.
37. G. Duyckaerts, *Physica* **6**, 817 (1939).
38. W. H. Keesom and C. W. Clark, *Physica* **2**, 513 (1935).
39. W. S. Corak, M. P. Garfunkel, C. B. Satterthwaite, and A. Wexler, *Phys. Rev.* **98**, 1699 (1955).
40. J. A. Rayne, *Australian J. Phys.* **9**, 189 (1956).
41. N. E. Phillips, *Proc. 5th Intern. Conf. Low Temp. Phys. Chem., Madison, Wisconsin, 1957*, p. 414. Univ. of Wisconsin Press, Madison, Wisconsin, 1958.
42. F. D. Manchester, *Can. J. Phys.* **37**, 989 (1959).
43. F. J. du Chaterier and J. de Nobel, *Physica* **28**, 181 (1962).
44. W. H. Keesom and J. N. van den Ende, *Koninkl. Ned. Acad. Wetenschap., Proc. B35*, 143 (1932).
45. A. A. Silvidi and J. G. Daunt, *Phys. Rev.* **77**, 125 (1950).
46. G. Seidel and P. H. Keesom, *Phys. Rev.* **112**, 1083 (1958).
47. C. W. Garland and J. Silverman, *J. Chem. Phys.* **34**, 781 (1961).
48. J. E. Zimmerman and L. T. Crane, *Phys. Rev.* **126**, 513 (1962).
49. R. L. Douglass, R. G. Petersen, and N. E. Phillips, *Proc. 7th Intern. Conf. Low Temp. Phys., Toronto, Ont., 1960*, p. 403. Univ. of Toronto Press, Toronto, Canada, 1961.
50. R. W. Hill and D. H. Parkinson, *Phil. Mag. [7]* **43**, 309 (1952).
51. C. A. Bryant and P. H. Keesom, *Phys. Rev.* **124**, 698 (1961).
52. T. Fukuroi and Y. Muto, *Sci. Rept. Res. Inst., Tohoku Univ.* **A8**, 213 (1956).
53. W. H. Lien and N. E. Phillips, *Proc. 7th Intern. Conf. Low Temp. Phys., Toronto, Ont., 1960*, p. 675. Univ. of Toronto Press, Toronto, Canada, 1961.
54. D. C. McCollum, Jr. and H. E. Silsbee, *Phys. Rev.* **127**, 119 (1962).
55. F. J. Morin and J. P. Maita, *Phys. Rev.* **129**, 1115 (1963).
56. M. Brown, M. W. Zemansky, and H. A. Boorse, *Phys. Rev.* **86**, 134 (1952).
57. A. T. Hirschfeld, H. A. Leupold, and H. A. Boorse, *Phys. Rev.* **127**, 1501 (1962).
58. M. Horowitz and J. G. Daunt, *Phys. Rev.* **91**, 1099 (1953).
59. K. Clusius and P. Franzosini, *Z. Naturforsch.* **14a**, 99 (1959).
60. C. A. Bryant and P. H. Keesom, *J. Chem. Phys.* **35**, 1149 (1961).
61. K. Clusius and C. G. Losa, *Z. Naturforsch.* **10a**, 545 (1955).
62. D. W. Budworth, F. E. Hoare, and J. Preston, *Proc. Roy. Soc. A257*, 250 (1960).

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