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U.S. DEPARTMENT OF COMMERCE / National Bureau of Standards

A Bibliography of Sources of Experimental Data Leading to Thermal Properties of Binary Aqueous Electrolyte Solutions

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No. 537
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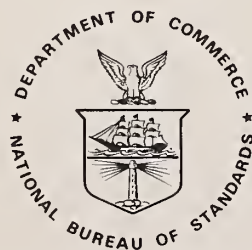
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Foreword

The National Standard Reference Data System was established in 1963 for the purpose of promoting the critical evaluation and dissemination of numerical data of the physical sciences. The program is coordinated by the Office of Standard Reference Data of the National Bureau of Standards but involves the efforts of many groups in universities, government laboratories, and private industry. The primary aim of the program is to provide compilations of critically evaluated physical and chemical property data. These tables are published in the *Journal of Physical and Chemical Reference Data*, in the NSRDS-NBS series of the National Bureau of Standards, and through other appropriate channels.

The task of critical evaluation is carried out in various data centers, each with a well-defined technical scope. A necessary preliminary step to the critical evaluation process is the retrieval from the world scientific literature of all papers falling within the scope of the center. Each center, therefore, builds up a comprehensive well-indexed bibliographical file which forms the base for the evaluation task. Bibliographies derived from these files are published when they appear to be of value to research workers and others interested in the particular technical area.

Further information on NSRDS and the publications which form the primary output of the program may be obtained by writing to the Office of Standard Reference Data, National Bureau of Standards, Washington, D.C. 20234.

David R. Lide, Jr., Chief
Office of Standard Reference Data

A Bibliography of Sources of Experimental Data Leading to Thermal
Properties of Binary Aqueous Electrolyte Solutions

David Smith-Magowan¹ and Robert N. Goldberg

Center for Thermodynamics and Molecular Science
National Bureau of Standards
Washington, DC 20234

Contained herein is a bibliography of sources of experimental data that can be used to calculate either relative apparent molal enthalpies or apparent molal heat capacities for aqueous electrolyte solutions. The data types included are calorimetric heat capacity measurements, enthalpies of solution as a function of molality, enthalpy of dilution measurements, electromotive force measurements as a function of temperature, and vapor pressure measurements as a function of temperature. Approximately 900 references to the primary literature are included.

Key Words: Apparant molal heat capacity; aqueous systems; bibliography; electrochemistry; electrolytes; enthalpy of dilution; heat capacity; relative apparant molal enthalpy; salt solutions; thermochemistry; vapor pressure.

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Introduction

The object of this bibliography is to identify published experimental measurements that can be used to calculate either relative apparent molal enthalpies (ϕ_L) or apparent molal heat capacities (ϕ_C) for aqueous electrolyte solutions. The reader is referred to standard texts such as Lewis and Randall and Pitzer and Brewer [1] and Harned and Owen [2] for background pertaining to the definition, measurement, and calculation of these thermodynamic functions.

The categories of data with which we are concerned and the abbreviations we shall use to designate them are as follows:

<u>Category</u>	<u>Symbol</u>
Calorimetric heat capacity	C
Electromotive force as a function of temperature	E
Enthalpy of solution as a function of molality	H
Enthalpy of dilution	L
Vapor pressure as a function of temperature	V

Category (C) above also includes enthalpies of solution as a function of temperature that have typically [3] been used to calculate values of the apparent molal heat capacity at infinite dilution (ϕ_C°). We have included a reference under category H only if the data set seemed sufficiently precise to permit calculation of meaningful values of ϕ_L from the slope of the plot of the enthalpy of solution as a function of the molality.

For each compound we have arranged the references that contain the various categories of data according to the above order (note that references are repeated if they contain more than one category of data). We have also specified the temperature(s) to which the data pertain.

We have specifically excluded from this bibliographic coverage data on mixed electrolytes (except for seawater, natural and artificial) and data on non-aqueous systems.

Our literature search encompassed the following: (1) a search of the files of the Chemical Thermodynamic and Electrolyte Data Centers at the National Bureau of Standards; (2) a search of the computerized index to Chemical Abstracts from Volumes 76 to 89 (November 1978); (3) a search of several pertinent reviews and compilations [2,4-10]; and (4) a search of the appropriate citations given in the papers located via procedures (1) to (3) above. The scientific literature is so very large and diverse that we have probably missed some data sources. We shall appreciate it if any readers who find any citations missing or in error will bring such items to our attention.

Several reviews and compilations that are particularly noteworthy are: Parker [4] for the uni-univalent electrolytes; Landolt-Börnstein [5,6] and Latysheva [7], which contains references to hard-to-obtain Soviet works; the NBS 270 Series [8] contains extensive tables of enthalpies of formation as a function of the molality which permits calculation of enthalpies of dilution. Particularly notable mathematical treatments of the experimental data are summarized by Lange [9] and Pitzer and Silvester [10].

Ordering of Compounds

While the standard order of arrangement [4] (see figure 1) has been adopted for the catalogue of inorganic systems, it was felt that this method would greatly reduce the efficiency of this compilation for workers in the field if used for the organic compounds. Therefore the following method was adopted for these systems in an effort to retain their functional identity as a ready reference to them.

The organic compounds are grouped according to functional types. Within each type, subgroups are determined first by standard order of arrangement for the cation (M^+ or $C_nH_mO_p^+$), then by standard order of arrangement for the anion (X^- or $C_nH_mO_p^-$), except for the amino acids, which have been arranged alphabetically. The functional types are arranged as follows.

1. Aminoacids
2. Carboxylic acids
3. Carboxylate salts
4. Ammonium salts
 - A. RNH_3X
 - B. R_2NH_2X
 - C. R_3NHX
 - D. R_4NX
 - E. $R'R_3NX$
 - F. $R'R''R_2NX$
5. Azoniaspiroalkanes
6. Bolaforms
7. Surfactants (organic sulfates and sulfonates)
8. Miscellaneous

References

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- [3] Criss, C. E. and Cobble, J. W., J. Am. Chem. Soc. 83, 3223 (1961).
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- [6] D'Ans, J. D., Surawski, H., and Synowietz, C., Landolt-Börnstein. Neue Serie. Band 1. Teil b. Dichten binärer wässriger Systeme und Wärmekapazitäten Flüssiger Systeme (Kl. Schäfer, editor) Springer-Verlag, Berlin, 1977.
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Acknowledgments

The authors express their appreciation to Drs. George Marinenko, Richard Martinez, Henry Rosenstock, and Masao Kuriyama for their assistance with the papers in foreign languages; to Dr. Bert Staples and Ms. Terry Wobbeking, for their cooperation with this search; to Mr. D. D. Wagman and Dr. W. H. Evans for their very careful reading of this paper; and to the staff of the NBS library for their assistance in locating and obtaining the myriad of difficult references we have required and examined during this effort.

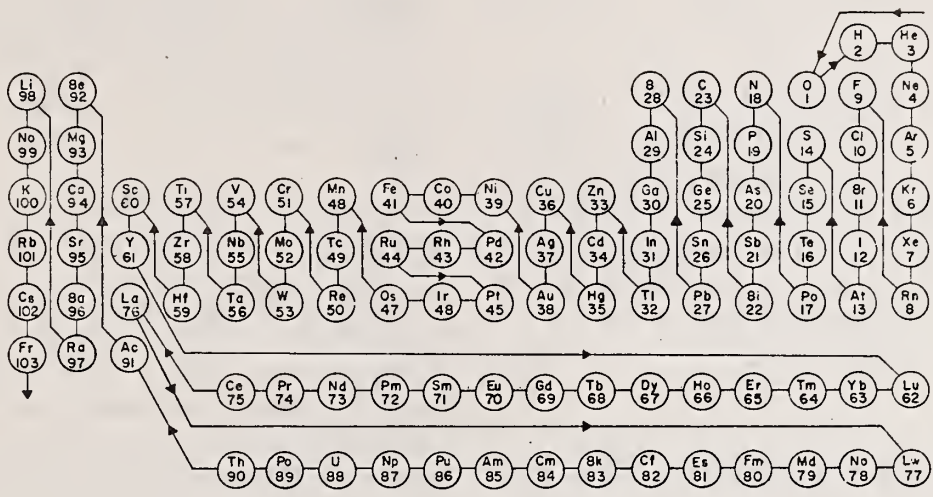


Figure 1. The standard order of arrangement [8]. In this scheme, a compound is listed under the element occurring latest in the list. Within the table for a given element will be found all of the compounds of that element with elements occurring earlier in the order. An exception occurs for carbon compounds which are divided into subgroups consisting of all compounds with one carbon atom, then all with two carbon atoms, etc.

Compound Index

Inorganic CompoundsHF

- Büchner (1931) - C 20°C
 Kolesov, Skuratov and Uvanov (1960) - C 20 to 25°C
 Mulert (1912) - C 17 to 18°C
 Pranschke and Schwiete (1935) - C 18°C
 Ray (1922) - C Room temperature
 Roth and Chall (1928) - C 22 to 50°C
 Roth, Pahlke, Bertram and Börger (1937) - C 20°C
 Thorvaldson and Bailey (1946) - C 18 to 20°C
 Broene and DeVries (1947) - E 15 to 35°C
 Elmore, Hatfield, Mason and Jones (1949) - H 25°C
 Johnson, Smith and Hubbard (1973) - H 25°C
 Cox and Harrop (1965) - L 25°C
 Guntz (1884) - L 17°C
 Guntz (1883) - L 17°C
 Johnson, Smith and Hubbard (1973) - L 25°C
 Petersen (1893) - L 21°C
 Roth and Becker (1931) - L 19°C
 Roth, Pahlke and Bertram (1933) - L 20°C
 Roth, Pahlke, Bertram and Börger (1937) - L 20°C
 Schäfer and Kahlenberg (1958) - L 25°C
 Schäfer and Kahlenberg (1960) - L 25°C
 Vasil'ev and Kozlovski (1974) - L 25°C
- Tucker and Callendar (1915) - C 6 to 13°C
 Wicke, Eigen and Ackermann (1954) - C 20 to 120°C
 Wrewsky and Kaigorodoff (1924) - C 3 to 60°C
 Akerlof and Teare (1936) - E 0 to 50°C
 Bates and Bower (1954) - E 0 to 95°C
 Cerquetti, Longhi and Mussini (1968) - E 25 to 80°C
 Ellis (1916) - E 18 to 35°C
 Greeley, Smith, Stoughton and Lietzke (1960) - E 25 to 200°C
 Grzybowski (1958) - E 0 to 60°C
 Harned and Ehlers (1933) - E 0 to 60°C
 Hayes and Lietzke (1960) - E 25 to 55°C
 Macaskill, Robinson and Bates (1977) - E 5 to 45°C
 Wrewsky and Sawaritzky (1924) - H 3 to 60°C
 Ahrland and Kullberg (1971) - L 25°C
 Berthelot (1875d) - L 10°C
 Böse (1905) - L temperature not given
 Ciavatta and Palombari (1972) - L 25°C
 Danielsson, Nelander, Sunner and Wadšo (1964) - L 25°C
 Doehlemann and Lange (1933) - L 25°C
 Falk and Sunner (1973) - L 25°C
 Grenthe, Ots and Ginstrup (1970) - L 25°C
 Muller (1913) - L 14 to 38°C
 Naudé (1928) - L 18°C
 Olofsson and Olofsson (1973) - L 25 to 140°C
 Paoletti, Usenza and Vacca (1965) - L 25°C
 Payn and Perman (1929) - L 22 to 70°C
 Petersen (1893) - L 21°C
 Richards, Mair and Hall (1929) - L 16 to 20°C
 Richards and Rowe (1920) - L 16 to 20°C
 Richards, Rowe and Burgess (1910) - L 20°C
 Richards and Thorvaldson (1922) - L 20°C
 Rossini (1931a) - L 18°C
 Roth (1944) - L 20°C
 Roth and Becker (1931) - L 19°C
 Roth and Bertram (1937) - L 20°C
 Roth, Umbach and Chall (1930) - L 96°C
 Roth and Wienert (1934) - L 20°C
 Schäfer, Wittig and Jori (1956) - L 25°C
 Sturtevant (1940a) - L 25°C
 Sturtevant (1942) - L 25°C

HCl

- Ackermann (1958) - C 10 to 120°C
 Büchner (1931) - C 20°C
 Desnoyers, DeVisser, Perron and Picker (1976) - C 25°C
 Drucker (1934) - C 18°C
 Fortier, Leduc and Desnoyers (1974) - C 25°C
 Gucker and Schminke (1932) - C 25°C
 Magie (1907) - C temperature not given
 Maignac (1878) - C 20 to 24°C
 Radulescu and Jula (1934) - C 15°C
 Randall and Ramage (1927) - C 25°C
 Richards, Mair and Hall (1929) - C 16 to 20°C
 Richards and Rowe (1908 a and b) - C 16°C
 Richards and Rowe (1913 a and b) - C 16 to 20°C
 Rossini (1931b) - C 18°C
 Singh, Woolley, McCurdy and Hepler (1976) - C 25°C
 Thomsen (1883a) - C 18°C
 Thorvaldson, Brown and Peaker (1930) - C 20°C

HCl (continued)

Thomsen (1883b) - L 18°C
Tucker and Callendar (1912) - L 16 to 22°C
Vanderzee and Myers (1961) - L 25°C
Van Nuys (1943) - L 0 to 100°C
Von Steinwehr (1901) - L 16°C
Vrevskii and Zavaritskii (1923) - L 3 to 63°C
Wrewsky and Sawaritzky (1924) - L 14°C

HCIO₄

Babakulov and Latysheva (1974) - C 25°C
Berthelot (1881) - C 15 to 40°C
Berthelot (1882) - C 15 to 40°C
Grigor'eva, Latysheva and Shchukarev (1977) - C 25°C
Jauch (1921) - C 18°C
Richards and Rowe (1913 a and b) - C 16 to 20°C
Singh, McCurdy, Woolley and Hepler (1977) - C 25°C
Krivtsov, Rosolovsky and Zinov'ev (1960) - H 25°C
Austin and Mair (1962) - L 25°C
Berthelot (1881a) - L 13 to 21°C
Berthelot (1882) - L 13 to 21°C
Bidinosti and Biermann (1956) - L 25°C
Vanderzee and Swanson (1963a) - L 25°C
Vanderzee and Swanson (1963b) - L 25°C
Vasil'ev, Kochergina and Orlova (1976) - L 25°C

HBr

Johnson, Gilliland and Prosen (1959) - C 25 to 27°C
Richards and Rowe (1913 a and b) - C 16 to 20°C
Rossini (1931b) - C 18°C
Roozeboom (1886) - C 0 to 30°C
Singh, Woolley, McCurdy and Hepler (1976) - C 25°C
Augustynski, Faita and Mussini (1967) - E 20 to 40°C
Biermann and Yamasaki (1955) - E 20 to 30°C
Gupta, Hills and Ives (1963) - E 5 to 45°C
Harned, Keston and Donelson (1936) - E 0 to 60°C
Hetzer, Robinson and Bates (1962) - E 0 to 50°C
Towns, Greeley and Lietzke (1960) - E 25 to 200°C
Biermann and Weber (1954) - L 25°C
Böse (1905) - L temperature not given
Petersen (1893) - L 21°C
Roth and Bertram (1937) - L 20°C

Thomsen (1883b) - L 18°C
Tucker and Callendar (1915) - L 20°C
Vanderzee, Nutter, Rodenburg, Rodenburg and King (1974) - L 25°C

HI

Johnson, Gilliland and Prosen (1959) - C 25 to 27°C
Richards and Rowe (1913 a and b) - C 16 to 20°C
Rossini (1931b) - C 18°C
Böse (1905) - L temperature not given
Thomsen (1883b) - L 18°C
Vanderzee and Gier (1974) - L 25°C

HI₃

Jauch (1921) - C 18°C
Randall and Taylor (1941) - C 25°C
Berthelot (1878) - L 13°C
Moles and Vitoria (1932) - L 20°C
Stern and Passchier (1962) - L 25°C
Woolley, Hill, Hannan and Hepler (1978) - L 25°C

SO₂

Roth and Zeumer (1932) - L 20°C

H₂SO₄

Agde and Holtmann (1926) - C 25 to 45°C
Berthelot (1875c) - C ~10°C
Bode (1889) - C 15°C
Brönsted (1910) - C temperature not given
Cattaneo (1889) - C 5 to 22°C
Craig and Vinal (1940) - C 20°C
Drucker (1934) - C 18°C
Gardner, Jekel and Cobble (1969) - C 0 to 100°C
Hartung (1915) - C 17 to 20°C
Knietzsch (1901) - C 30°C
Kunzler and Giauque (1952) - C 25°C
Magie (1907) - C temperature not given
Maignac (1878) - C 16 to 20°C
Pascal and Garnier (1920) - C 20°C
Pickering (1891) - C -32 to 41°C

H₂SO₄ (continued)

Porter (1918) - C 15 to 200°C
 Radulescu (1934) - C 16°C
 Randall and Taylor (1941) - C 25°C
 Rhodes and Nelson (1938) - C 18°C
 Schlesinger (1909) - C 0 to 70°C
 Socolik (1932) - C 20 to 80°C
 Thomsen (1883a) - C 18°C
 Beck, Dobson and Wynne-Jones (1960) - E 5 to 55°C
 Beck, Singh and Wynne-Jones (1959) - E 5 to 55°C
 Cowperthwaite and Shrawder (1934) - E 0 to 50°C
 Hamer (1935) - E 0 to 60°C
 Harned and Hamer (1935) - E 0 to 60°C
 Shrawder and Cowperthwaite (1934) - E 0 to 50°C
 Thibaut (1913) - E 15 to 50°C
 Brønsted (1910) - H temperature not given
 Karve (1924) - H 0 to 40°C
 Knietsch (1901) - H 20°C
 Berthelot (1875d) - L 10°C
 Bewley (1960) - L 25°C
 Bose (1905) - L temperature not given
 Craig and Vinal (1940) - L 25°C
 DeForcrand (1884b) - L 10°C
 Favre and Silbermann (1853) - L temperature not given
 Giauque, Hornung, Kunzler and Rubin (1960) - L 25°C
 Graham (1843) - L temperature not given
 Grau and Roth (1931) - L 15 to 20°C
 Kirkbride and Wyatt (1958) - L 25°C
 Mathias (1890) - L 16°C
 Morgan (1942) - L 18°C
 Muller (1913) - L 14 to 38°C
 Naudé (1928) - L 18°C
 Porter (1918) - L 15 to 200°C
 Prétat (1930) - L 20 to 25°C
 Roth and Meichsner (1931) - L 19°C
 Rümelin (1907) - L 14°C
 Thomsen (1883b) - L 18°C
 Tucker and Callendar (1915) - L 20°C
 Von Hermann (1941) - L 18°C
 Wu (1957) - L 25°C
 Yudin (1939) - L 25°C
 Brønsted (1910) - V 20 to 100°C
 Burt (1904) - V 55 to 105°C
 Hornung and Giauque (1955) - V 23 to 70°C
 Von Meyereren (1932) - V 0 to 40°C

H₂SeO₃

Selivanova and Pakorukov (1961) - C 25°C

H₂SeO₄

Selivanova, Kapustinskii and Zubova (1959) - L 25°C
 Selivanova, Zubova and Finkelstein (1959) - L 25°C

NH₄OH

Chernen'kaya (1971a) - C 25°C
 Chernen'kaya (1971b) - C 25°C
 Chernen'kaya and Bratash (1975) - C 35 to 90°C
 Gawlick (1977) - C 18°C
 Hildenbrand and Giauque (1953) - C 78 to -10°C
 Thomsen (1883a) - C 18°C
 Wrewsky and Kaigorodoff (1924) - C 3 to 60°C
 Wrewsky and Sawaritzky (1924) - H 3 to 60°C
 Baud and Gay (1909) - L 10°C
 Berthelot (1875d) - L 10°C
 Berthelot (1875f) - L 14°C
 Calvet (1933) - L 17°C
 Ramstetter and Hantke (1931) - L 20°C
 Thomsen (1883b) - L 18°C
 Vrevskii and Zavaritskii (1923) - L 3 to 63°C
 Wrewsky and Sawaritzky (1924) - L 15°C

N₂H₄

Bushnell, Hughes and Gilbert (1937) - C 25°C
 Bushnell, Hughes and Gilbert (1937) - L 25°C

HNO₃

Boomann, Elverum and Mason (1955) - C 0°C
 Bump and Sibbitt (1955) - C -40 to 137°C
 Drucker (1934) - C 18°C
 Enea, Singh, Woolley, McCurdy and Hepler (1977) - C 25°C
 Kharbanda (1957) - C 93°C
 Marignac (1878) - C 20 to 52°C
 Mishchenko (1931) - C 2 to 60°C
 Mishchenko and Ponomareva (1952) - C 25°C
 Mondain-Monval (1923a) - C 0 to 19°C

HNO₃ (continued)

Pascal and Garnier (1920) - C 20°C
 Richards and Rowe (1913 a and b) - C 16 to 20°C
 Rossini (1931b) - C 18°C
 Thomsen (1883a) - C 18°C
 Becker and Roth (1935) - L 20°C
 Berthelot (1874) - L 11°C
 Berthelot (1875b) - L 10 to 26°C
 Berthelot (1875d) - L 10°C
 Booman, Elverum and Mason (1955) - L 0°C
 Böse (1905) - L temperature not given
 Chédin and Dhers (1953) - L 25°C
 Forsythe and Giauque (1942) - L 25°C
 Lloyd and Wyatt (1957) - L 25°C
 Naudé (1928) - L 18°C
 Petersen (1893) - L 21°C
 Pretat (1930) - L 20 to 25°C
 Rhodes and Nelson (1938) - L 18°C
 Richards and Rowe (1921) - L 16 to 20°C
 Rossini (1931a) - L 18°C
 Thomsen (1883b) - L 18°C
 Tucker and Callendar (1915) - L 20°C
 Vasil'ev, Kochergina and Orlova (1976) - L 25°C
 Wilson and Miles (1940) - V 0 to 20°C

NH₄NO₃

Chauvenet (1938) - C 15°C
 Cohen, Helderman and Moesveld (1924a) - C 32°C
 Cohen, Helderman and Moesveld (1924b) - C 32°C
 Drucker (1934) - C 20°C
 Epikhin, Bazlova and Karapet'yants (1977) - C 25°C
 Gucker, Ayres and Rubin (1936) - C 25°C
 Maignac (1878) - C 20 to 52°C
 Roux, Musbally, Perron, Desnoyers, Singh, Woolley and Hepler (1978) - C 25°C
 Rutskov (1946) - C 25 to 75°C
 Rutskov (1948) - C 25 to 75°C
 Sorina, Kozlovskaya, Tsekanskaya, Bezlyudova and Shmakov (1977) - C 25 to 100°C
 Thomsen (1883a) - C 18°C
 Winkelman (1873) - C 16 to 35°C
 Fedorov and Sil'chenko (1937) - H 23°C
 Becker and Roth (1934) - L 20°C
 Dunnington and Hoggard (1899) - L 25°C
 Lerner-Steinberg (1926) - L 25°C
 Ping-Lu, Schäfer, Schuller, and Stiern (1970) - L 19.5°C

Poczopko and Mecik (1971) - L 25°C
 Rant (1954) - L 20°C
 Rümelin (1907) - L 11°C
 Thomsen (1883b) - L 18°C
 Tollinger (1875) - L 21°C
 Van Deventer and Van destadt (1891) - L 18°C
 Von Wartenberg and Lerner-Steinberg (1926) - L 18°C
 Wassermann (1930a) - L 18°C
 Campbell, Fishmann, Rutherford, Schaefer and Ross (1956) - V 30 to 105°C

NH₄F

Labowitz and Westrum (1961) - C -220 to -20°C

NH₄Cl

Chernen'kaya (1971b) - C 25°C
 Chernen'kaya and Bratash (1975) - C 25 to 90°C
 Colson (1915) - C 15 to 22°C
 D'Ans and Tollert (1937) - C 20 to 86°C
 Desnoyers, DeVisser, Perron and Picker (1976) - C 25°C
 Drucker (1934) - C 18°C
 Epikhin, Bazlova and Karapet'yants (1977) - C 25°C
 Leduc and Desnoyers (1973) - C 25°C
 Magie (1907) - C temperature not given
 Maignac (1878) - C 20 to 52°C
 Mishchenko and Ponomareva (1952) - C 25°C
 Mishchenko and Ponomareva (1956) - C 25 to 75°C
 Roux, Musbally, Perron, Desnoyers, Singh, Woolley and Hepler (1978) - C 25°C
 Thomsen (1883a) - C 18°C
 Urban (1932) - C 10 to 40°C
 Winklemann (1873) - C 2 to 40°C
 Fedorov and Sil'chenko (1937) - H 23°C
 Mishchenko and Ponomareva (1956) - H 25 to 75°C
 Doehlmann and Lange (1934) - L 25°C
 Dunnington and Hoggard (1899) - L 25°C
 Kratz and Lange (1933) - L 15°C
 Magie (1912) - L 3 to 22°C
 Pratt (1918) - L 0 to 35°C
 Rümelin (1907) - L 13°C
 Streeck (1934) - L 25°C
 Thomsen (1883b) - L 18°C

NH₄Cl (continued)

Van Deventer and Van destadt (1891) 18°C
Vichutinskii and Golikov (1978) - L 25°C
Von Stackelberg (1898) - L 18°C

N₂H₅Cl

Cobb and Gilbert (1935) - C 20 to 25°C

N₂H₆Cl₂

Cobb and Gilbert (1935) - C 20 to 25°C

NH₄ClO₄

Roux, Musbally, Perron, Desnoyers, Singh, Woolley and Hepler (1978) - C 25°C

N₂H₅ClO₄

Cobb and Gilbert (1935) - C 20 to 25°C

NH₄Br

Desnoyers, DeVisser, Perron and Picker (1976) - C 25°C

Faasch (1977b) - C 18°C

Leduc and Desnoyers (1973) - C 25°C

Leduc, Fortier and Desnoyers (1974) - C 25°C

Fedorov and Sil'chenko (1937) - H 23°C

Leduc, Fortier and Desnoyers (1974) - L 25°C

N₂H₅Br

Cobb and Gilbert (1935) - C 20 to 25°C

N₂H₆Br₂

Cobb and Gilbert (1935) - C 20 to 25°C

Gilbert and Bushnell (1935) - L 25°C

(NH₄)HSO₄

Thomsen (1883b) - L 18°C

(NH₄)₂SO₄

Drucker (1934) - C 17°C

Marignac (1878) - C 19 to 51°C

Thomsen (1883a) - C 18°C

Thomsen (1883b) - L 18°C

Van Deventer and Van destadt (1891) - L 18°C

N₂H₆SO₄

Gilbert and Bushnell (1935) - C 25°C

H₃PO₂

Petersen (1893) - L 21°C

H₃PO₄

Egan, Luff and Wakefield (1958) - C 15 to 80°C

Poppoff, Skuratoff and Feodossjeff (1933) - C 22 to 100°C

Smirnova, Matveichuk, Mikhailin and Illarionov (1969) - C 25 to 100°C

Böse (1905) - L temperature not given

Egan and Luff (1961) - L 25°C

Irani and Taulli (1966) - L 25°C

Jones and Lee (1970) - L 50°C

Luff, Reed and Wakefield (1971) - L 25°C

Petersen (1893) - L 21°C

Rümelin (1907) - L 14°C

Thomsen (1883b) - L 18°C

Wakefield, Luff and Reed (1972) - L 25 to 200°C

Yudin (1939) - L 25°C

Kablukov and Zagwosdkin (1935) - V 25 to 80°C

NH₄H₂PO₄

Perreu (1940a) - C 18°C

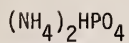
Rutskov (1946) - C 25 to 75°C

Voskresenskaya and Rutskov (1940) - C 25 to 95°C

Egan and Luff (1963) - H 25°C

Chomjakov, Jaworowskaja and Schirokich (1933) - L 23°C

Perreu (1940a) - L 18°C



Chomjakow, Jaworowskaja and Schirokich (1933) - L
23°C

Komyakov, Yavorovskaya and Shirokikh (1933) - L
22°C



Bjellerup, Sunner and Wadsö (1957) - C 25°C



Chernen'kaya (1971a) - C 25°C

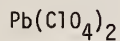
Chernen'kaya and Bratash (1972) - C 35 to 50°C

Chernen'kaya and Bratash (1975) - C 60°C

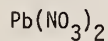
Thomsen (1883b) - L 18°C



Hannan (1936) - E 0 to 50°C



Drakin and Yu-min (1964) - H 25°C



Drakin, Lantukhova and Karapet'yants (1967) - C
25°C

Jauch (1921) - C 18°C

Marignac (1878) - C 21 to 51°C

Perreu (1941b) - C 11°C

Sergeeva, Drakin and Karapet'yants (1970b) - C
18 to 32°C

Berthelot (1873c) - L temperature not given

Perreu (1941b) - L 10°C

Plake (1932) - L 20°C

Stern, Parker, Peak and Volland (1963) - L 25°C

Thomsen (1883b) - L 18°C



Scholle, Szmigielska and Dlabac (1965) - H 20°C

Smisko and Mason (1950) - H 25°C

Davis, Mason and Stegeman (1949) - L 25°C

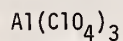
Lange and Miederer (1957a) - L 10 to 40°C

Ward and Millero (1973) - L 10 to 50°C

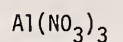


Jauch (1921) - C 18°C

Lange and Miederer (1957b) - L 25°C

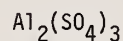


Babakulov and Latysheva (1975) - C 25°C



Jauch (1921) - C 18°C

Myasnikova, Drakin, Karapet'yants and Latuknova
(1968) - C 25°C

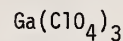


Doerinckel (1910) - C temperature not given

Marignac (1878) - C 21 to 53°C

Doerinckel (1910) - L temperature not given

Perreu (1934a) - L 17°C

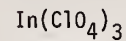


Babakulov and Latysheva (1974) - C 25°C



Campbell, Kartzmark and Bhatnagar (1974) - L 25°C

Campbell, Kartzmark and Bhatnagar (1974) - H 25°C



Babakulov and Latysheva (1974) - C 25°C

Vasil'ev and Kozlovskii (1974) - L 25°C



Jauch (1921) - 18°C

In₂(SO₄)₃

Hattox and DeVries (1947) - E 0 to 35°C
Lietzke and Stoughton (1956) - E 15 to 70°C

TIF

Jauch (1921) - C 18°C

Tl(ClO₄)₃

Babakulov and Latysheva (1974) - C 25°C
Kul'ba, Yakovlev and Kopylov (1973) - L 25°C

TlNO₃

Stern, Parker, Peak and Volland (1963) - L 25°C

ZnF₂

Cook, Davis and Stavelly (1971) - H 25°C

ZnCl₂

Blümcke (1884) - C 15 to 17°C
Karapet'yants, Drakin and Lantukhova (1967) - C 25°C
Maignac (1878) - C 19 to 51°C
Robinson and Stokes (1940) - E 0 to 40°C
Fricke and Lüke (1929) - L 20°C
Fricke and Havestadt (1927) - L 0 to 10°C
Thomsen (1883b) - L 18°C

Zn(ClO₄)₂

Spitzer, Singh, Olofsson and Hepler (1978) - C 25°C
Berg and Vanderzee (1975) - L 25°C
Letysheva and Karavan (1968) - H 25 to 45°C
Shchukarev, Andreev and Borisova (1959) - H 25°C

ZnBr₂

Stokes and Stokes (1945) - E 20 to 40°C

ZnI₂

Bates (1938) - E 10 to 40°C

ZnSO₄

Cohen, Helderma and Moesveld (1924a) - C 19°C
Cohen, Helderma and Moesveld (1924b) - C 19°C
Maignac (1878) - C 20 to 52°C
Cowperthwaite and LaMer (1931) - E 0 to 50°C
LaMer and Cowperthwaite (1933) - E 0 to 50°C
Fedorov and Sil'chenko (1937) - H 23°C
Berthelot (1873c) - L temperature not given
Giauque, Barieau and Kunzler (1950) - L 25°C
Lange and Monheim (1933) - L 25°C
Lange, Monheim and Robinson (1933) - L 25°C
Larson (1970) - L 25°C
Naudé (1928) - L 10 to 18°C
Nernst and Orthmann (1926) - L 16°C
Nernst and Orthmann (1927) - L 18°C
Nernst and Orthmann (1928) - L 18°C
Perreu (1934a) - L 17°C
Plake (1932) - L 20°C
Poczopko and Orzeszko (1973) - L 25°C
Robinson and Wallace (1941) - L 25°C
Thomsen (1883b) - L 18°C

Zn(NO₃)₂

Chauvenet (1938) - C 15°C
Drakin, Lantukhova and Karapet'yants (1967) - C 25°C
Maignac (1878) - C 20 to 52°C
Ewing, Brandner and Guyer (1939) - L 25°C
Thomsen (1883b) - L 18°C
Ewing and Fisher (1937) - V 20 to 60°C

CdCl₂

Drucker (1934) - C 19°C
Krestov and Abrosimov (1967) - C 0 to 100°C
Vasil'ev and Burlai (1977) - C 25°C
Harned and Fitzgerald (1936) - E 0 to 40°C
Quintin (1935a) - E 0 to 45°C
Quintin (1936) - E 0 to 45°C
Quintin (1935b) - E temperature not given

CdCl₂ (continued)

Drucker (1931) - L 18°C
Robinson and Wallace (1942) - L 15 to 25°C

Cd(ClO₄)₂

Latysheva and Andreeva (1975) - C 25°C
Spitzer, Singh, Olofsson and Hepler (1978) - C 25°C
Berg and Vanderzee (1978) - L 25°C
Lilich and Chernykh (1966) - L 25°C

CdBr₂

Bates (1939) - E 5 to 40°C
Ishikawa and Ueda (1933) - E 20 to 52°C
Robinson and Wallace (1942) - L 15 to 25°C

CdI₂

Cohen, Helderman and Moesveld (1924a) - C 19°C
Cohen, Helderman and Moesveld (1924b and c) - C 19°C
Bates (1941) - E 5 to 40°C
Bates and Vosburgh (1937) - E 25 to 35°C
Robinson and Wallace (1942) - L 15 to 25°C

CdSO₄

Cohen and Moesveld (1920) - C 19°C
Cohen, Helderman and Moesveld (1920) - E 15 to 25°C
LaMer and Parks (1933) - E 0 to 30°C
Dunkleberger and Robinson (1938) - L 10 to 20°C
Lange and Monheim (1933) - L 25°C
Lange, Monheim and Robinson (1933) - L 25°C
Plake (1932) - L 20°C
Robinson and Wallace (1941) - L 10 to 25°C

Cd(NO₃)₂

Drakin, Lantukhova and Karapet'yants (1967) - C 25°C
Drucker (1934) - C 19°C
Spitzer, Singh, McCurdy and Hepler (1978) - C 25°C
Ewing, Brandner and Guyer (1939) - L 25°C
Yatsimirskii and Shutkov (1954) - L 25°C

Braunstein and Braunstein (1971) - V 100 to 150°C
Ewing and Guyer (1938) - V 20 to 75°C
Kovyrzina, Sidorova, Zhakharova and Berg (1966) - V 40 to 70°C

HgCl₂

Blümcke (1884) - C temperature not given
Jauch (1921) - C temperature not given

Hg(NO₃)₂

Yatsimirskii and Shutov (1954) - L 25°C

CuCl₂

Marignac (1878) - C 19 to 51°C
Vasil'ev, Karapet'yants, Sanaev and Novikov (1974) - C 25°C
Fedorov and Sil'chenko (1937) - H 23°C
Berthelot (1873c) - L temperature not given
Partington and Soper (1929) - L 25°C
Reicher and Van Deventer (1910) - L 18°C
Thomsen (1883b) - L 18°C

Cu(ClO₄)₂

Spitzer, Singh, McCurdy and Hepler (1978) - C 25°C
Shchukarev, Orlova and Borisova (1960) - H 25°C
Gier and Vanderzee (1975) - L 25°C

CuSO₄

Kapustinsky, Yakushevskii and Drakin (1953a) - C 25°C
Marignac (1878) - C 18 to 53°C
Pagliani (1880) - C 12 to 17°C
Podgornaya (1960) - C 18 to 75°C
Vaillant (1905) - C 15°C
Quintin (1933) - E 0 to 45°C
Quintin (1934) - E temperature not given
Quintin and Lebette (1934) - E 0 to 45°C
Wetmore and Gordon (1937) - E 15 to 45°C
Fedorov and Sil'chenko (1937) - H 23°C

CuSO₄ (continued)

Berthelot (1873c) - L 18°C
Birnthaler and Lange (1937) - L 25°C (D₂O)
Birnthaler and Lange (1938) - L 25°C (D₂O)
Lange and Monheim (1933) - L 25°C
Lange, Monheim and Robinson (1933) - L 25°C
Perreu (1929b) - L 11°C
Perreu (1929a) - L 11°C
Perreu (1929c) - L 12°C
Plake (1932) - L 20°C
Robinson and Wallace (1941) - L 25°C
Scholz (1892) - L 0°C
Thomsen (1883b) - L 18°C

Cu(NO₃)₂

Kapustinsky and Stakhanova (1958) - C 0 to 25°C
Maignac (1878) - C 18 to 50°C
Berthelot (1873c) - L temperature not given
Thomsen (1883b) - L 18°C

AgF

Jahn-Held and Jellinek (1936) - C 25°C
Jahn-Held and Jellinek (1936) - L 25°C

AgClO₄

Drakin and Yu-min (1964) - H 25°C
Jackson, Smith, Gatty and Wolfenden (1934) - L 25°C
Singh, Spitzer, McKay, McCurdy and Hepler (1978) - C 25°C

AgNO₃

Kapustinsky, Yakushevsky and Drakin (1953a) - C 25°C
Sergeeva, Drakin and Karapet'yants (1970b) - C 18 to 32°C
Jackson, Smith, Gatty and Wolfenden (1934) - L 25°C
Singh, Spitzer, McKay, McCurdy and Hepler (1978) - C 25°C
Stearn, Parker, Peak and Volland (1963) - L 25°C
Wagman and Kilday (1973) - L 25°C
Campbell, Fishman, Rutherford, Schaefer and Ross (1956) - V 30 to 105°C

Kangro and Groeneveld (1962) - V 20 to 25°C

NiCl₂

Kapustinsky, Yakushevskii and Drakin (1953a) - C 25°C
Karapet'yants, Vasil'ev and Sanaev (1977) - C 25°C
Maignac (1878) - C 24 to 55°C
Spitzer, Singh, McCurdy and Hepler (1978) - C 25°C
Vasil'ev and Sanaev (1973) - C 25°C
Plake (1932) - L 0 to 20°C
Thomsen (1883b) - L 18°C

Ni(ClO₄)₂

Spitzer, Singh, Olofsson and Hepler (1978) - C 25°C
Gier and Vanderzee (1974a) - L 25°C
Shchukarev, Borisova and Orlova (1960) - H 25°C
Latysheva and Karavan (1968) - H 25 to 45°C

NiSO₄

Maignac (1878) - C 25 to 55°C
Perreu (1934b) - C 20°C
Goldberg, Riddell, Wingard, Hopkins, Wulff and Hepler (1966) - H 25°C
Lange and Miederer (1956a) - L 25°C
Perreu (1934b) - L 15°C
Plake (1932) - L 20°C

Ni(NO₃)₂

Maignac (1878) - C 24 to 55°C
Perreu (1941b) - C 12°C
Perreu (1941b) - L 12°C

CoCl₂

Galinker and Belova (1963) - C 25 to 300°C
Kapustinsky, Yakushevskii and Drakin (1953a) - C 25°C
Mishchenko and Podgornaya (1961) - C 2 to 75°C

CoCl₂ (continued)

Spitzer, Singh, McCurdy and Hepler (1978) - C 25°C
Vasil'ev, Sanaev and Karapet'yants (1973) - C 25°C
Mishchenko and Podgornaya (1961) - H 2 to 75°C

Co(ClO₄)₂

Spitzer, Singh, Olofsson and Hepler (1978) - C 25°C
Shchukarev, Borisova and Orlova (1960) - H 25°C
Gier and Vanderzee (1974a) - L 25°C

FeCl₂

Karapet'yants, Vasil'ev and Sanaev (1977) - C 25°C
Perreu (1941b) - C 12°C
Vasil'ev, Sanaev and Karapet'yants (1973) - C 25°C
Perreu (1941b) - L 12°C

FeCl₃

Blümcke (1884) - C 15 to 18°C
Kangro and Flügge (1935) - C 20°C
Roth and Flügge (1931) - C 20°C
Roth, Umbach and Chall (1930) - H 97°C
Kangro and Flügge (1935) - L 20°C
Sabatier (1881b) - L 18°C

Fe(ClO₄)₂

Hugus and Latimer (1951) - L 25°C

Fe(NO₃)₃

Myasnikova, Drakin, Karapet'yants and Lantukhova
(1968) - C 25°C

FeSO₄

Agde and Holtmann (1926) - C 25 to 45°C
Berthelot (1873c) - L temperature not given

Fe(NO₃)₂

Berthelot (1873c) - L temperature not given

Pd(ClO₄)₂

Izatt, Eatough, Morgan and Christensen (1970) - E
10 to 40°C

MnCl₂

Blümcke (1884) - C temperature not given
Kapustinsky (1942 a and b) - C 25°C
Kaganovich and Mishchenko (1952) - C 25°C
Maignac (1878) - C 19 to 52°C
Voskresenkaya and Ponomereva (1946) - C 25 to 75°C
Kapustinsky (1941) - L 25°C

Mn(ClO₄)₂

Spitzer, Singh, Olofsson and Hepler (1978) - C
25°C
Gier and Vanderzee (1974b) - L 25°C
Latysheva and Karavan (1968) - H 25 to 45°C

MnSO₄

Maignac (1878) - C 19 to 51°C
Perreu (1934a) - L 17°C
Plake (1932) - L 20°C
Van Deventer and Van destadt (1891) - L 18°C

Mn(NO₃)₂

Drakin, Lantukhova and Karapet'yants (1967) - C
25°C
Maignac (1878) - C 17 to 52°C
Thomsen (1883b) - L 18°C

MnCO₃

Kapustinsky (1941) - H 20°C

Zn(MnO₄)₂

Kapustinsky and Samoilov (1946) - C 25°C

Re₂O₇

Roth and Becker (1932) - L 20°C



Ahluwalia and Cobble (1964a) - C 0 to 100°C



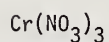
Büchner and Prins (1912) - C 15°C

Marignac (1878) - C 21 to 53°C

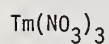
Büchner and Prins (1912) - L 15°C



Vanderzee and King (in press) - L 25°C

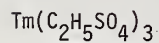


Myasnikova, Drakin, Karapet'yants and Lantukhova
(1968) - C 25°C



Baker (1971) - C 25°C

Spedding, Derer, Mohs and Rard (1976) - L 25°C



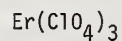
Staveley, Markham and Jones (1968) - L 25°C



Krestov, Kobenin and Semenovskii (1973) - C 14 to
50°C

Spedding and Jones (1966) - C 25°C

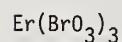
Spedding and Flynn (1954) - H 25°C



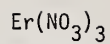
Baker (1971) - C 25°C

Spedding, Baker and Walters (1975) - C 25°C

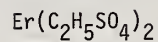
Spedding, Mohs, Derer and Habenschuss (1977) - L
25°C



Staveley, Markham and Jones (1968) - L 25°C



Spedding, Derer, Mohs and Rard (1976) - L 25°C



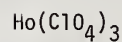
Staveley, Markham and Jones (1968) - L 25°C



Spedding, Walters and Baker (1975) - C 25°C

Spedding, Csejka and DeKock (1966) - L 25°C

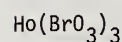
Spedding, DeKock, Pepple and Habenschuss (1977)
- L 25°C



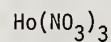
Baker (1971) - C 25°C

Grenthe, Hessler and Ots (1973) - C 25°C

Spedding, Baker and Walters (1975) - C 25°C

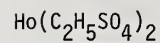


Staveley, Markham and Jones (1968) - L 25°C



Baker (1971) - C 25°C

Spedding, Derer, Mohs and Rard (1976) - L 25°C



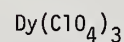
Staveley, Markham and Jones (1968) - L 25°C



Spedding and Jones (1966) - C 25°C

Spedding, Csejka and DeKock (1966) - L 25°C

Spedding, DeKock, Pepple and Habenschuss (1977)
- L 25°C



Baker (1971) - C 25°C

Grenthe, Hessler and Ots (1973) - C 25°C

Dy(C10₄)₃ (continued)

Spedding, Baker and Walters (1975) - C 25°C
Spedding, Mohs, Derer and Habenschuss (1977) - L
25°C

Dy(BrO₃)₃

Staveley, Markham and Jones (1968) - L 25°C

Dy(NO₃)₃

Baker (1971) - C 25°C
Spedding, Derer, Mohs and Rard (1976) - L 25°C

Dy(C₂H₅SO₄)₃

Staveley, Markham and Jones (1968) - L 25°C

TbCl₃

Krestov, Kobenin and Semenovskii (1973) - C 25°C
Spedding, Walters and Baker (1975) - C 25°C
Spedding, Csejka and DeKock (1966) - L 25°C
Spedding, DeKock, Pepple and Habenschuss (1977)
- L 25°C

(NH₄)₂CrO₄

Marignac (1878) - C 22 to 53°C

VO₂

Bailey and Larson (1971) - L 25°C

TiCl₄

Vasil'ev and Vorob'ev (1969) - H 25°C

ScCl₃

Vasil'ev, Novikov and Karapet'yants (1977) - C
25°C

Sc(C10₄)₃

Babakulov and Latysheva (1974) - C 25°C

YCl₃

Karapet'yants, Vasil'ev and Novikov (1976) - C
25°C
Krestov, Kobenin and Semenovskii (1973) - C 14
to 50°C
Spedding and Flynn (1954) - H 25°C

Y(C10₄)₃

Babakulov and Latysheva (1974) - C 25°C

LuCl₃

Spedding, Walters and Baker (1975) - C 25°C
Spedding, DeKock, Pepple and Habenschuss (1977)
- L 25°C

Lu(C10₄)₃

Spedding, Baker and Walters (1975) - C 25°C
Spedding, Mohs, Derer and Habenschuss (1977) - L
25°C

Lu(BrO₃)₃

Staveley, Markham and Jones (1968) - L 25°C

Lu(NO₃)₃

Spedding, Derer, Mohs and Rard (1976) - L 25°C

Lu(C₂H₅SO₄)₃

Staveley, Markham and Jones (1968) - L 25°C

YbCl₃

Spedding and Jones (1966) - C 25°C
Spedding and Flynn (1954) - H 25°C
Spedding, Csejka and DeKock (1966) - L 25°C

YbCl₃ (continued)

Spedding, DeKock, Pepple and Habenschuss (1977)
- L 25°C
Spedding, Naumann and Eberts (1959) - L 25°C

Yb(ClO₄)₃

Baker (1971) - C 25°C
Grenthe, Hessler and Ots (1973) - C 25°C
Spedding, Baker and Walters (1975) - C 25°C

Yb(BrO₃)₃

Staveley, Markham and Jones (1968) - L 25°C

Yb(NO₃)₃

Baker (1971) - C 25°C
Spedding, Derer, Mohs and Rard (1976) - L 25°C
Spedding, Naumann and Eberts (1959) - L 25°C

Yb(C₂H₅SO₄)₃

Staveley, Markham and Jones (1968) - L 25°C

TmCl₃

Spedding, Walters and Baker (1975) - C 25°C
Spedding, Csejka and DeKoch (1966) - L 25°C
Spedding, DeKock, Pepple and Habenschuss (1977)
- L 25°C

Tm(ClO₄)₃

Baker (1971) - C 25°C
Spedding, Baker and Walters (1975) - C 25°C

Tm(NO₃)₃

Baker (1971) - C 25°C
Spedding, Derer, Mohs and Rard (1976) - L 25°C

Tm(C₂H₅SO₄)₃

Staveley, Markham and Jones (1968) - L 25°C

ErCl₃

Krestov, Kobenin and Semenovskii (1973) - C 14 to
50°C
Spedding and Jones (1966) - C 25°C
Spedding and Flynn (1954) - H 25°C

Er(ClO₄)₃

Baker (1971) - C 25°C
Spedding, Baker and Walters (1975) - C 25°C
Spedding, Mohs, Derer and Habenschuss (1977) - L
25°C

Er(BrO₃)₃

Staveley, Markham and Jones (1968) - L 25°C

Er(NO₃)₃

Spedding, Derer, Mohs and Rard (1976) - L 25°C

HoCl₃

Spedding, Walters and Baker (1975) - C 25°C
Spedding, Csejka and DeKoch (1966) - L 25°C
Spedding, DeKock, Pepple and Habenschuss (1977)
- L 25°C

Ho(ClO₄)₃

Baker (1971) - C 25°C
Grenthe, Hessler and Ots (1973) - C 25°C
Spedding, Baker and Walters (1975) - C 25°C

Ho(BrO₃)₃

Staveley, Markham and Jones (1968) - L 25°C

Ho(NO₃)₃

Baker (1971) - C 25°C
Spedding, Derer, Mohs and Rard (1976) - L 25°C

Ho(C₂H₅SO₄)₂

Staveley, Markham and Jones (1968) - L 25°C

DyCl₃

Spedding and Jones (1966) - C 25°C
Spedding, Csejka and DeKoch (1966) - L 25°C
Spedding, DeKock, Pepple and Habenschuss (1977)
- L 25°C

Dy(C10₄)₃

Baker (1971) - C 25°C
Grenthe, Hessler and Ots (1973) - C 25°C
Spedding, Baker and Walters (1975) - C 25°C
Spedding, Mohs, Derer and Habenschuss (1977) - L
25°C

Dy(BrO₃)₃

Staveley, Markham and Jones (1968) - L 25°C

Dy(NO₃)₃

Baker (1971) - C 25°C
Spedding, Derer, Mohs and Rard (1976) - L 25°C

Dy(C₂H₅SO₄)₃

Staveley, Markham and Jones (1968) - L 25°C

TbCl₃

Krestov, Kobenin and Semenovski (1973) - C 25°C
Spedding, Walters and Baker (1975) - C 25°C
Spedding, Csejka and DeKock (1966) - L 25°C
Spedding, DeKock, Pepple and Habenschuss (1977)
-L 25°C

Tb(C10₄)₃

Baker (1971) - C 25°C
Spedding, Baker and Walters (1975) - C 25°C

Tb(BrO₃)₃

Staveley, Markham and Jones (1968) - L 25°C

Tb(NO₃)₃

Baker (1971) - C 25°C
Spedding, Derer, Mohs and Rard (1976) - L 25°C

GdCl₃

Jekel, Criss and Cobble (1964) - C 0 to 100°C
Spedding, Walters and Baker (1975) - C 25°C
Spedding and Flynn (1954) - H 25°C
Spedding, Csejka and DeKock (1966) - L 25°C
Spedding, DeKock, Pepple and Habenschuss (1977)
- L 25°C

Gd(C10₄)₃

Grenthe, Hessler and Ots (1973) - C 25°C
Spedding, Baker and Walters (1975) - C 25°C

Gd(C10₃)₃

Spedding, Mohs, Derer and Habenschuss (1977) - L
25°C

Gd(BrO₃)₃

Staveley, Markham and Jones (1968) - L 25°C

Gd(NO₃)₃

Spedding, Derer, Mohs and Rard (1976) - L 25°C

Gd(C₂H₅SO₄)₃

Staveley, Markham and Jones (1968) - L 25°C

EuCl₃

Spedding, Walters and Baker (1975) - C 25°C
Spedding, DeKock, Pepple and Habenschuss (1977)
- L 25°C

Eu(C10₄)₃

Spedding, Baker and Walters (1975) - C 25°C

Eu(BrO₃)₃

Staveley, Markham and Jones (1968) - L 25°C

Eu(C₂H₅SO₄)₃

Staveley, Markham and Jones (1968) - L 25°C

SmCl₃

Krestov, Kobenin and Semenovskii (1972) - C 15 to 93°C

Spedding, Walters and Baker (1975) - C 25°C

Spedding and Flynn (1954) - H 25°C

Spedding, Csejka and DeKock (1966) - L 25°C

Spedding, DeKock, Pepple and Habenschuss (1977) - L 25°C

Sm(ClO₄)₃

Baker (1971) - C 25°C

Grenthe, Hessler and Ots (1973) - C 25°C

Spedding, Baker and Wlaters (1975) - C 25°C

Spedding, Mohs, Derer and Habenschuss (1977) - L 25°C

Sm(NO₃)₃

Baker (1971) - C 25°C

Jauch (1921) - C 18°C

Spedding, Derer, Mohs and Rard (1976) - L 25°C

Sm(C₂H₅SO₄)₃

Staveley, Markham and Jones (1968) - L 25°C

NdCl₃

Krestov, Kobenin and Semenovskii (1972) - C 15 to 93°C

Spedding and Miller (1952) - C 25°C

Spedding and Jones (1966) - C 25°C

Spedding, DeKock, Pepple and Habenschuss (1977) - L 25°C

Spedding and Miller (1952) - L 25°C

Spedding, Naumann and Eberts (1959) - L 25°C

Nd(ClO₄)₃

Spedding, Mohs, Derer and Habenschuss (1977) - L 25°C

Grenthe, Hessler and Ots (1973) - C 25°C

Spedding, Baker and Walters (1975) - C 25°C

Nd(NO₃)₃

Spedding, Derer, Mohs and Rard (1976) - L 25°C

Nd(C₂H₅SO₄)₃

Staveley, Markham and Jones (1968) - L 25°C

PrCl₃

Krestov, Kobenin and Semenovskii (1972) - C 15 to 93°C

Spedding, Walters and Baker (1975) - C 25°C

Spedding and Flynn (1954) - H 25°C

Spedding, Csejka and DeKock (1966) - L 25°C

Spedding, DeKock, Pepple and Habenschuss (1977) - L 25°C

Pr(ClO₄)₃

Baker (1971) - C 25°C

Grenthe, Hessler and Ots (1973) - C 25°C

Spedding, Baker and Walters (1975) - C 25°C

Spedding, Mohs, Derer and Habenschuss (1977) - L 25°C

Pr(BrO₃)₃

Staveley, Markham and Jones (1968) - L 25°C

Pr(NO₃)₃

Baker (1971) - C 25°C

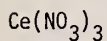
Spedding, Derer, Mohs and Rard (1976) - L 25°C

Pr(C₂H₅SO₄)₃

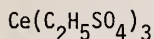
Staveley, Markham and Jones (1968) - L 25°C



- Spedding and Miller (1952) - C 25°C
Vasil'ev, Novikov and Karapet'yants (1975) - C
25°C
Spedding and Miller (1952a) - L 25°C



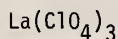
- Myasnikova, Drakin, Karapet'yants and Lantukhova
(1969) - C 25°C



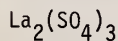
- Staveley, Markham and Jones (1968) - L 25°C



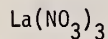
- Krestov, Kobenin and Semenovskiy (1972) - C 15 to
93°C
Spedding and Jones (1966) - C 25°C
Spedding and Flynn (1954) - H 25°C
Nathan, Wallace and Robinson (1943) - L 25°C
Spedding, DeKock, Pepple and Habenschuss (1977)
- L 25°C
Spedding, Naumann and Eberts (1959) - L 25°C



- Babakulov and Latysheva (1974) - C 25°C
Grenthe, Hessler and Ots (1973) - C 25°C
Spedding, Baker and Walters (1975) - C 25°C
Spedding, Mohs, Derer and Habenschuss (1977) - L
25°C
Vanderzee and Nutter (1974) - L 25°C

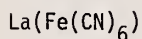


- Nathan, Wallace and Robinson (1943) - L 25°C

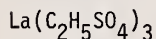


- Drucker (1934) - C 18°C
Jauch (1921) - C 18°C
Myasnikova, Drakin, Karapet'yants and Lantukhova
(1968) - C 25°C
Lange and Miederer (1956b) - L 25°C

- Spedding, Derer, Mohs and Rard (1976) - L 25°C
Spedding, Naumann and Eberts (1959) - L 25°C



- Lange and Miederer (1956b) - L 25°C



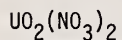
- Staveley, Markham and Jones (1968) - L 25°C



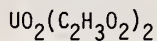
- Kapustinsky and Lipilina (1955) - C 25°C



- Bailey and Larson (1971) - L 25°C
Soldano and Patterson (1962) - V 25 to 120°C



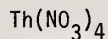
- Kapustinsky and Lipilina (1955) - C 25°C
Lange and Miederer (1957b) - L 25°C
Katzin, Simon and Ferraro (1952) - H 25°C



- Salman and White (1957) - L 25°C



- Jauch (1921) - C 18°C



- Apelblat and Sahar (1975) - C 25°C
Morss and McCue (1976) - C 15 to 35°C
Apelblat and Sahar (1975) - L 25°C
Fricke and Lüke (1929) - L 20°C
Lange and Miederer (1957b) - L 25°C
Apelblat, Azoulay and Sahar (1973) - V 25 to 45°C

BeCl₂

Karapet'yants, Vasil'ev and Fedayainov (1969) - C
Vasil'ev, Fedayainov, Karapet'yants and Serafimova
(1971) - C 25°C

Be(SO₄)

Kapustinsky, Yakushevskii and Drakin (1953a) - C
25°C
Birnthaler and Lange (1937) - L 25°C (D₂O)
Birnthaler and Lange (1938) - L 25°C (D₂O)

Be(NO₃)₂

Drucker (1934) - C 18°C
Jauch (1921) - C 18°C

MgCl₂

D'Ans and Tollert (1937) - C 20 to 86°C
Desnoyers, DeVisser, Perron and Picker (1976) - C
25°C
Drucker (1934) - C 19°C
Eigen and Wicke (1951) - C 10 to 130°C
Fedayainov, Vasil'ev and Karapet'yants (1970) - C
25°C
Gerlach (1926) - C 0 to 100°C
Karapet'yants, Vasil'ev and Fedayainov (1969) - C
25°C
Koch (1922) - C -30 to 50°C
Küpper (1920) - C 20 to 100°C
Likke and Bromley (1973) - C 80 to 200°C
Marignac (1878) - C 18 to 52°C
Mishchenko and Ponomareva (1952) - C 25°C
Nikolaeva, Kogan and Ogorodnikov (1936) - C 25°C
Perron, Desnoyers and Millero (1974) - C 25°C
Rutskov (1946) - C 25 to 75°C
Rutskov (1948) - C 25 to 75°C
Vasil'ev, Fedayainov and Kurenkov (1973) - C 25°C
Voskresenskaya and Ponomareva (1946) - C 25 to 75°C
Voskresenskaya and Rutskov (1940) - C 25 to 70°C
Zdanovskii and Matsenok (1938) - C 25°C
Brönsted (1906) - L -20°C
Dunnington and Hoggard (1899) - L 25°C
Fricke and Lüke (1929) - L 20°C
Fricke and Havestadt (1927) - L 0 to 10°C
Lange and Streeck (1931a) - L 25°C

Mayrath and Wood (1978) - L 100 to 200°C
Newman (1955) - L 25°C
Snipes, Manly and Ensor (1975) - L 40 to 80°C
Thomsen (1883b) - L 18°C
Vichutinskii and Golikov (1978) - L 25°C
Mishchenko and Yakovlev (1959) - H -6 to 2°C
Lindsay and Liu (1968) - V 125 to 300°C
Serowy and Soika (1964) - V 20 to 45°C
Fricke and Lüke (1929) - V 0 to 15°C

Mg(ClO₄)₂

Latysheva and Andreeva (1975) - C 25°C
Spitzer, Singh, McCurdy and Hepler (1978) - C
25°C
Drakin and Yu-min (1964) - H 25°C
Nosova (1966) - H 25°C
Jongenburger and Wood (1965) - L 25°C

MgBr₂

Jauch (1921) - C 18°C
Lange and Streeck (1931a) - L 25°C

MgSO₄

Bindel (1890) - C temperature not given
D'Ans and Tollert (1937) - C 20 to 86°C
Drucker (1934) - C 17°C
Gerlach (1926) - C 14 to 90°C
Kaganovich and Mishchenko (1951) - C 25 to 45°C
Küpper (1920) - C 20 to 100°C
Likke and Bromley (1973) - C 80 to 200°C
Marignac (1878) - C 19 to 52°C
Pagliani (1880) - C 12 to 21°C
Perreu (1935a) - C 20°C
Thomsen (1883a) - C 18°C
Voskresenskaya and Yankovskaya (1945) - C 25 to
50°C
Bindel (1890) - L temperature not given
Lange and Messner (1927 a and b) - L 25°C
Lange and Monheim (1933) - L 25°C
Lange and Streeck (1931b) - L 25°C
Mayrath and Wood (1978) - L 100 to 200°C
Perreu (1930) - L 11°C

MgSO₄ (continued)

Plake (1932) - L 20°C
Poczoplo and Orzeszko (1972) - L 25°C
Snipes, Manly and Ensor (1975) - L 40 to 80°C
Thomsen (1883b) - L 18°C
Kangro and Groeneveld (1962) - V 20 to 25°C
Soldano and Patterson (1962) - V 25 to 120°C

Mg(NO₃)₂

Drakin, Lantukhova and Karapet'yants (1967) - C
25°C
Drucker (1934) - C 19°C
Marignac (1878) - C 17 to 52°C
Dunnington and Hoggard (1899) - L 25°C
Ewing, Glick and Rasmussen (1942) - L 25°C
Ewing, Klinger and Brandner (1934) - L 25°C
Hammerschmid and Lange (1932) - L 15°C
Lange and Streeck (1931b) - L 25°C
Thomsen (1883b) - L 18°C
Ewing, Klinger and Brandner (1934) - V 20 to 60°C
Mashovets, Baron and Zavodnaya (1966) - V 40 to
100°C

Mg₂(Fe(CN)₆)

Lange and Miederer (1956b) - L 25°C

CaCl₂

Chernen'kaya and Bratach (1975) - C 25 to 90°C
D'Ans and Tollert (1937) - C 20°C
Desnoyers, DeVisser, Perron and Picker (1976) - C
25°C
Dickinson, Mueller and George (1909) - C -35 to
20°C
Drecker (1888) - C 18 to 22°C
Drucker (1934) - C 19°C
Fedyainov, Vasil'ev and Karapet'yants (1970) - C
25°C
Karapet'yants, Vasil'ev and Fedyainov (1970) - C
25°C
Karapet'yants, Vasil'ev and Fedyainov (1969) - C
25°C
Marignac (1878) - C 20 to 51°C
Mishchenko and Ponomareva (1952) - C 25°C
Nernst and Orthmann (1926) - C 16°C
Perron, Desnoyers and Millero (1974) - C 25°C

Person (1851) - C 0 to 20°C
Richards and Dole (1929) - C 20 to 25°C
Rutskov (1946) - C 25 to 75°C
Rutskov (1948) - C 25 to 75°C
Shields (1951) - C -20 to 25°C
Spitzer, Singh, McCurdy and Hepler (1978) - C
25°C
Varasova, Mishchenko and Frost (1937) - C 25°C
Mussini and Pagella (1971) - E 25 to 70°C
Brönsted (1906) - L 16 to 22°C
Dunnington and Hoggard (1899) - L 25°C
Harrison and Perman (1927) - L 40 to 80°C
Hunter and Bliss (1944) - L 30°C
Lange and Streeck (1931a) - L 25°C
Leung and Millero (1975) - L 30°C
Nernst and Orthmann (1927) - L 18°C
Nernst and Orthmann (1928) - L 18°C
Plake (1932) - L 0 to 20°C
Richards and Dole (1929) - L 20 to 25°C
Rümelin (1907) - L 14°C
Thomsen (1883b) - L 18°C
Tucker and Callendar (1915) - L 20°C
Van Deventer and Van destadt (1891) - L 18°C
Van Deventer and Van destadt (1892) - L 15°C
Bechtold and Newton (1940) - V 25 to 45°C
Jakli, Chan and Van Hook (1975) - V 0 to 90°C
Jakli and Van Hook (1972) - V 0 to 90°C

Ca(ClO₄)₂

Latysheva and Andreeva (1975) - C 25°C
Spitzer, Singh, Olafsson and Hepler (1978) - C
25°C
Drakin and Yu-min (1964) - H 25°C
Gier and Vanderzee (1974b) - L 25°C
Lilich and Chernykh (1966) - L 25°C

CaBr₂

Lange and Streeck (1931a) - L 25°C

CaSO₄

Lange and Messner (1927a and b) - L 25°C
Lange and Monheim (1930b) - L 25°C

CaSO₄ (continued)

Lange and Monheim (1933) - L 25°C
Lange and Streeck (1931b) - L 25°C

CaS₂O₃

Bichowsky (1923) - C 25°C
Bichowsky (1923) - L 25°C
Nernst and Orthmann - L 16°C

Ca(NO₃)₂

Drucker (1934) - C 19°C
Krestov and Abrosimov (1967) - C 0 to 100°C
Maignac (1878) - C 20 to 51°C
Ewing, Rogers, Miller and McGovern (1932) - H 25°C
Scholle and Brunclikova (1968) - H 25°C
Dunnington and Hoggard (1899) - L 25°C
Ewing and Rogers (1933) - L 25°C
Lange and Messner (1927a and b) - L 25°C
Lange and Streeck (1931b) - L 25°C
Nernst and Orthmann (1926) - L 16°C
Nernst and Orthmann (1927) - L 18°C
Nernst and Orthmann (1928) - L 18°C
Partington and Soper (1929) - L 25°C
Plake (1932) - L 20°C
Rümelin (1907) - L 14°C
Yatsimirskii and Karacheva (1959) - L 25°C

Ca₃(Fe(CN)₆)₂

Lange and Miederer (1957c) - L 25°C

Ca₂Fe(CN)₆

Lange and Miederer (1957c) - L 25°C

Ca(MnO₄)₂

Kapustinsky and Klokman (1943) - C 25°C

SrCl₂

Desnoyers, DeVisser, Perron and Picker (1976) - C
25°C

Fedyainov, Vasil'ev and Karapet'yants (1970) - C
25°C

Kapustinsky and Dezideryeva (1946) - C 25°C

Karapet'yants, Vasil'ev and Fedyainov (1969) - C
25°C

Krestov and Abrosimov (1967) - C 0 to 100°C

Magie (1907) - C temperature not given

Maignac (1878) - C 20 to 51°C

Perron, Desnoyers and Millero (1974) - C 25°C

Pickering (1887) - C 0 to 25°C

Vasil'ev, Fedyainov, Karapet'yants and Serafimova
(1971) - C 25°C

Mishchenko and Stagis (1970) - H 0 to 45°C

Longhi, Mussini and Vaghi (1975) - E 10 to 70°C

Dunnington and Hoggard (1899) - L 25°C

Lange and Streeck (1931a) - L 25°C

Leung and Millero (1975) - L 30°C

Magie (1912) - L 4 to 24°C

Pratt (1918) - L 0 to 25°C

Stearn and Smith (1920) - L temperature not given

Sr(ClO₄)₂

Latysheva and Andreeva (1975) - C 25°C

Drakin and Yu-min (1965) - L 25°C

Jongenburger and Wood (1965) - L 25°C

SrBr₂

Lange and Streeck (1931a) - L 25°C

Sr(NO₃)₂

Magie (1907) - C 25°C

Maignac (1878) - C 21 to 51°C

Pickering (1887) - C 0 to 25°C

Sergeeva, Drakin and Karapet'yants (1970b) - C
18 to 32°C

Shpakova, Drakin and Karapet'yants (1973) - C
12 to 38°C

Ewing and Rogers (1933) - L 25°C

Hammerschmid and Lange (1932) - L 15°C

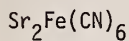
Lange and Streeck (1931b) - L 25°C

Pratt (1918) - L 0 to 35°C

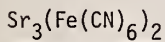
Thomsen (1883b) - L 18°C



Pickering (1887) - C 0 to 25°C



Lange and Miederer (1957c) - L 25°C



Lange and Miederer (1957c) - L 25°C



Ginzburg, Kochkalda and Ved' (1976) - C 25 to 79°C



Blümcke (1889) - C temperature not given

Criss and Cobble (1961) - C 0 to 100°C

Besnoyers, DeVisser, Perron and Picker (1976) - C 25°C

Drucker (1934) - C 19°C

Fedainov, Vasil'ev and Karapet'yants (1970) - C 25°C

Ginzburg and Kochkalda (1976) - C 25 to 150°C

Karapet'yants, Vasil'ev and Fedayainov (1969) - C 25°C

Magie (1907) - C temperature not given

Marignac (1878) - C 20 to 51°C

Perron, Desnoyers and Millero (1974) - C 25°C

Richards and Dole (1929) - C 20 to 25°C

Schwartz and Coblans (1936) - C 25°C

Urban (1932) - C 10 to 40°C

Varasova, Mishchenko and Frost (1937) - C 25°C

Vasil'ev, Fedayainov and Kurenkov (1973) - C 25°C

Ardizonne, Longhi, Mussini and Rondinini (1976) - E 10 to 70°C

Tippetts and Newton (1934) - E 0 to 45°C

Fedorov and Sil'chenko (1937) - H 23°C

Schwartz and Coblans (1936) - H 25°C

Lange and Streeck (1931a) - L 25°C

Leung and Millero (1975) - L 30°C

Magie (1912) - L 7, 16 and 24°C

Perreu (1929b) - L 11°C

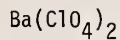
Pratt (1918) - L 0 to 35°C

Richards and Dole (1929) - L 20 to 25°C

Smith, Stearn and Schneider (1920) - L temperature not given

Bechtold and Newton (1940) - V 25, 35 and 45°C

Soldano and Patterson (1962) - V 25 to 120°C



Latysheva and Andreeva (1975) - C 25°C

Drakin and Yu-min (1964) - H 25°C

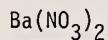
Vanderzee and Swanson (1972) - L 25°C



Lange and Streeck (1931a) - L 25°C



Muller (1918) - L 14 to 38°C



Drucker (1934) - C 19°C

Magie (1907) - C 25°C

Marignac (1878) - C 21 to 51°C

Sergeeva, Drakin and Karapet'yants (1970b) - C 18 to 32°C

Birnthaler and Lange (1937) - L 25°C (D₂O)

Birnthaler and Lange (1938) - L 25°C (D₂O)

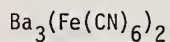
Bishop (1908) - L 25°C

Hammerschmid and Lange (1932) - L 15°C

Lange and Streeck (1931b) - L 25°C

Pratt (1918) - L 0 to 35°C

VonStackelberg (1898) - L 16°C



Lange and Miederer (1956b) - L 25°C



Karapet'yants, Vasil'ev and Fedayainov (1971) - C 25°C

Karapet'yants, Vasil'ev and Fedayainov (1969) - C 25°C

LiOH

Gucker and Schminke (1933) - C 25°C
Richards and Rowe (1913a and b) - C 16 to 20°C
Rossini (1931b) - C 18°C
Richards and Rowe (1921) - L 16 to 20°C
Rossini (1931a) - L 18°C
Ueda (1933a) - L 25°C

LiF

Vasil'ev and Shevchenko (1970) - C 25°C
Cox and Harrop (1965) - H 25°C
Lange and Leighton (1931) - L 25°C
Lange and Meixner (1929a) - L 25°C

LiHF₂

Cox and Harrop (1965) - H 25°C

LiCl

Bennewitz and Kratz (1936) - C 20°C
Bonner and Cerutti (1976) - C 25°C (D₂O)
Chernyak (1938) - C 25 to 50°C
Desnoyers, DeVisser, Perron and Picker (1976) - C 25°C
Drucker (1934) - C 18°C
Fortier, Leduc and Desnoyers (1974) - C 25°C
Gucker and Schminke (1932) - C 25°C
Hüttig and Wehling-Jena (1926) - C 3 to 40°C
Jauch (1921) - C 18°C
Kapustinsky, Stakhanova and Vasil'ev (1960) - C 25°C
Krestov and Abrosimov (1967) - C 0 to 100°C
Lange and Dürr (1926) - C 25°C
Richards and Rowe (1921) - C 16 to 20°C
Rossini (1931b) - C 18°C
Rüterjans, Schreiner, Sage and Ackermann (1969) - C 30 to 130°C
Vasil'ev and Shevchenko (1970) - C 25°C
Vasil'ev and Shevchenko (1972) - C 25°C
Drakin and Yu-min (1964) - H 25°C
Birnthaler and Lange (1938) - L 25°C (D₂O)
Dunnington and Hoggard (1899) - L 25°C
Fortier, Leduc and Desnoyers (1974) - L 25°C
Johnson and Molstad (1951) - L 30 to 70°C
Joly, Tourey and Pérachon (1973) - L 25°C

Lange and Dürr (1926) - L 25°C
Lange and Messner (1927a and b) - L 25°C
Lemoine (1897) - L 10°C
Mayrath and Wood (1978) - L 100 to 200°C
Naudé (1928) - L 0 to 25°C
Nernst and Orthmann (1926) - L 16°C
Nernst and Orthmann (1927) - L 18°C
Nernst and Orthmann (1928) - L 18°C
Richards and Rowe (1921) - L 16 to 20°C
Rossini (1931) - L 18°C
Tucker and Callendar (1915) - L 20°C
Vaslow (1971) - L 25°C
Vichutinskii and Golikov (1978) - L 25°C
Wood, Rooney and Braddock (1969) - L 25°C (D₂O)
Wu and Friedman (1966a) - L 25°C (D₂O)
Braunstein and Braunstein (1971) - V 100 - 150°C
Johnson and Molstad (1951) - V 30 to 70°C
Kangro and Groeneveld (1962) - V 20 to 25°C
Lindsay and Liu (1968) - V 125 to 275°C
Lindsay and Liu (1971) - V 125 to 275°C
Pupezin, Jakli, Jancso and Van Hook (1972) - V -5 to 100°C

LiClO₃

Jauch (1921) - C 18°C
Campbell and Bhatnagar (1972) - L 25°C

LiClO₄

Drakin and Yu-min (1964) - H 25°C
Austin and Mair (1962) - L 25°C
Jones and Wood (1963) - L 25°C

LiBr

Birnthaler and Lange (1938) - L 25°C (D₂O)
Fortier, Leduc and Desnoyers (1974) - L 25°C
Joly, Thourey and Pérachon (1973) - L 25°C
Lange (1959) - L 25°C
Lange (1928) - L 25°C
Lange and Messner (1927a and b) - L 25°C
Lange and Mishchenko (1930) - L 25°C
Lange and Schwartz (1928) - L 25°C
Marcus (1975) - L 25°C

LiBr (continued)

Pennington (1955) - L 25°C
Rosenfel'd and Karnaukh (1958) - L 0 to 120°C
Vaslow (1971) - L 25°C
Desnoyers, DeVisser, Perron and Picker (1976) - C 25°C
Eigen and Wicke (1951) - C 10 to 130°C
Fortier, Leduc and Desnoyers (1974) - C 25°C
Fortier, Philip and Desnoyers (1974) - C 25°C (D₂O)
Jauch (1921) - C 18°C
Lange and Schwartz (1928) - C 26°C
Rossini (1931b) - C 18°C
Vasil'ev and Shevchenko (1970) - C 25°C
Vasil'ev and Shevchenko (1972) - C 25°C
Braunstein and Braunstein (1971) - V 100 to 150°C
Löwer (1961) - V 0 to 180°C

LiI

Jauch (1921) - C 18°C
Rossini (1931b) - C 18°C
Vasil'ev and Shevchenko (1972) - C 25°C
Vasil'ev and Shevchenko (1970) - C 25°C
Joly, Thourey and Pérachon (1973) - L 25°C
Lange, Monheim and Streeck (1931) - L 25°C

LiIO₃

Jauch (1921) - C 18°C

Li₂SO₄

Thompson, Smith and Wood (1974) - L 25°C
Lange and Streeck (1931b) - L 25°C
Ueda (1933b) - L 25°C

LiNO₃

Chauvenet (1938) - C 15°C
Drucker (1934) - C 18°C
Richards and Rowe (1921) - C 16 to 20°C
Rossini (1931b) - C 18°C
Shpakova, Drakin and Karapet'yants (1973) - C 12 to 38°C
Richards and Rowe (1921) - L 16 to 20°C

Rossini (1931a) - L 18°C
Braunstein and Braunstein (1971) - V 100 to 150°C
Campbell, Fishman, Rutherford, Schaefer and Ross (1956) - V 30 to 105°C
Kangro and Groeneveld (1962) - V 20 to 25°C

LiAlH₄

Davis, Mason and Stegeman (1949) - L 25°C

NaOH

Ackermann (1957) - C temperature not given
Ackermann (1958) - C 10 to 210°C
Bertetti and McCabe (1936b) - C 5 to 30°C
Desnoyers, DeVisser, Perron and Picker (1976) - C 25°C
Ginzburg (1962) - C 350°C
Gucker and Schminke (1933) - C 25°C
Magie (1907) - C temperature not given
Perron, Desnoyers and Millero (1975) - C 25°C
Richards and Gucker (1925) - C 16 to 20°C
Richards and Hall (1929a and b) - C 18°C
Richards and Rowe (1913a and b) - C 16 to 20°C
Rossini (1931b) - C 18°C
Roth, Wirths and Berendt (1942) - C 20 to 80°C
Singh, Woolley, McCurdy and Hepler (1976) - C 25°C
Thomsen (1883a) - C 18°C
Wilson and McCabe (1942) - C 25 to 130°C
Akerlof and Kegeles (1940) - E 0 to 70°C
Harned and Hecker (1933) - E 0 to 40°C
Shibata and Murata (1937) - E 20 to 30°C
Bertetti and McCabe (1936a) - L 18°C
Berthelot (1875b) - L 10 to 24°C
Berthelot (1875d) - L 10°C
Berthelot (1875f) - L 10 to 15°C
Berthelot (1875 g) - L 10°C
Calvet (1933) - L 17°C
Fricke and Lüke (1929) - L 20°C
Fricke and Havestadt (1927) - L 0 to 10°C
Ginzburg (1962) - L 330 to 500°C
Haltenberger (1939) - L 5 to 90°C
Hayward and Perman (1931) - L 20 to 60°C
Pyan and Perman (1929) - L 22 to 70°C
Pratt (1918) - L 0 to 35°C
Richards and Gucker (1929) - L 20°C

- Richards and Hall (1929b) - L 20°C
 Richards and Rowe (1908a and b) - L 16°C
 Richards and Rowe (1921) - L 16 to 20°C
 Rossini (1931a) - L 18°C
 Roth, Wirths and Berendt (1942) - L 19 to 80°C
 Sabatier (1879) - L 17°C
 Sturtevant (1940b) - L 25°C
 Thomsen (1883b) - L 18°C
 Tucker and Callendar (1915) - L 20°C
 Wilson and McCabe (1942) - L 90°C
 Dibrov, Mal'tsev and Mashovets (1964) - V 25 to 350°C
 Fricke and Havestadt (1927) - V 0 to 10°C
 Kangro and Groeneveld (1962) - V 20 to 25°C
 Kiyama and Kitahara (1957) - V 200 to 500°C
 Krumgal'z and Mashovets (1964) - V 150 to 400°C
 Mashovets, Dibrov and Krumgal'z (1965) - V 150 to 400°C
 Mashovets, Krumgal'z and Dibrov (1965) - V 150 to 350°C
 Mashovets, Puchkova and Matveeva (1967) - V 0 to 300°C
- NaOD
- Goldberg and Hepler (1968) - L 25°C (D₂O)
- NaF
- Desnoyers, DeVisser, Perron and Picker (1976) - C 25°C
 Fortier, Leduc and Desnoyers (1974) - C 25°C
 Fortier, Philip and Desnoyers (1974) - C 25°C (D₂O)
 Vasil'ev and Shevchenko (1970) - C 25°C
 Vasil'ev and Shevchenko (1972) - C 25°C
 Fortier, Leduc and Desnoyers (1974) - L 25°C
 Leung and Millero (1975) - L 30°C
 Lange, Monheim and Streeck (1931) - L 25°C
 Nuttall, Churney and Kilday (1978) - L 25°C
- NaCl
- Ackermann (1958) - C 10 to 120°C
 Błazkowska (1924) - C temperature not given
 Blümcke (1884) - C 14 to 17°C
 Bonner and Cerutii (1976) - C 25°C (D₂O)
 Borodenko and Galinker (1975) - C ~300°C
 Borodenko and Galinker (1976) - C 200 to 300°C
- Bousfield and Bousfield (1919) - C 7 to 40°C
 Chernen'kaya (1971b) - C 25°C
 Chernen'kaya and Bratash (1975) - C 35 to 90°C
 Chipman, Johnson and Maass (1929) - C 18 to 25°C
 D'Ans and Tollert (1937) - C 20 to 26°C
 Desnoyers, DeVisser, Perron and Picker (1976) - C 25°C
 Drucker (1934) - C 18°C
 Eigen and Wicke (1951) - C 10 to 130°C
 Epikhin and Stakhanova (1967) - C 25°C
 Fortier, Leduc and Desnoyers (1974) - C 25°C
 Fortier, Philip and Desnoyers (1974) - C 25°C (D₂O)
 Gardner, Mitchell and Cobble (1969) - C 100 to 200°C
 Gerlach (1926) - C 15 to 90°C
 Grenthe, Hessler and Ots (1973) - C 25°C
 Gulbransen and Robinson (1934) - C 10 to 25°C
 Hess (1941) - C 25°C
 Hess and Gramkee (1940) - C 15 to 45°C
 Kaganovich and Mischenko (1952) - C 25°C
 Leitner (1928) - C 25 to 100°C
 Leitner (1931) - C 23 to 100°C
 Likke and Bromley (1973) - C 80 to 200°C
 Liphard, Jost and Schneider (1977) - C 20°C
 Lipsett, Johnson and Maass (1927) - C 25°C
 Lipsett, Johnson and Maass (1927b) - C 20 to 25°C
 Magie (1907) - C temperature not given
 Marniac (1878) - C 16 to 52°C
 Nikolaeva, Kogan and Ogorodnikov (1936) - C 25°C
 Perron, Fortier and Desnoyers (1975) - C 0 to 45°C
 Person (1851) - C 0 to 20°C
 Picker, Leduc, Philip and Desnoyers (1971) - C 25°C
 Pickering (1887) - C 0 to 25°C
 Puchkov, Styazhkin and Fedorov (1976) - C 25 to 350°C
 Randall and Bisson (1920) - C 25°C
 Randall and Ramage (1927) - C 25°C
 Randall and Rossini (1929) - C 25°C
 Richards and Gucker (1925) - C 18°C
 Richards and Rowe (1921) - C 16 to 20°C
 Rossini (1931b) - C 18 to 25°C
 Rutskov (1946) - C 25 to 75°C
 Rutskov (1948) - C 25 to 75°C
 Shields (1951) - C 0 to 25°C
 Singh, Woolley, McCurdy and Hepler (1976) - C 25°C
 Stakhanova and Vasil'ev (1960) - C 25°C
 Stakhanova and Vasil'ev (1963) - C 25°C

NaCl (continued)

- Tanner and Lamb (1978) - C 5 to 85°C
Thomsen (1883) - C 18°C
Vasil'ev and Shevchenko (1970) - C 25°C
Vasil'ev and Shevchenko (1972) - C 25°C
Voskresenskaya and Ponomareva (1946) - C 25 to 75°C
Voskresenskaya and Rutskov (1940) - C 25 to 75°C
Voskresenskaya and Yankovskaya (1945) - C 25 to 50°C
White (1940) - C 18 to 25°C
Winklemann (1873) - C 17 to 46°C
Young and Machin (1936) - C 25°C
Zdanovskii and Matsenok (1938) - C 25°C
Allmand and Polack (1939) - E 18 to 25°C
Harned and Nims (1932) - E 0 to 40°C
Janz and Gordon (1943) - E 15 to 45°C
Truesdell (1968) - E 15 to 50°C
Abrosimov, Ionov and Krestov (1977) - H 25°C
Arnett and Campion (1970) - H 6 to 48°C
Benjamin (1963) - H 25°C
Benson and Benson (1955) - H 25°C
Brönsted (1906) - H 18°C
Chipman, Johnson and Maass (1929) - H ~22°C
Craft and Van Hook (1975) - H 10 to 75°C (D₂O)
Lipsett, Johnson and Maass (1927a) - H 25°C
Lipsett, Johnson and Maass (1927b) - H 20 to 25°C
Mishchenko and Yakovlev (1959) - H 2 to 6°C
Scholz (1892) - H 0°C
Anderson, Malcolm and Parton (1960) - L 25°C
Backlund (1911) - L 17°C
Bindel (1890) - L temperature not given
Birch and Hall (1972) - L 25°C
Birnthaler and Lange (1937) - L 25°C (D₂O)
Birnthaler and Lange (1938) - L 25°C (D₂O)
Craft and Van Hook (1975) - L 5 to 75°C (D₂O)
Dunnington and Hoggard (1899) - L 25°C
Ensor and Anderson (1973) - L 40 to 80°C
Fortier, Leduc and Desnoyers (1974) - L 25°C
Fortier, Leduc, Picker and Desnoyers (1973) - L 25°C
Gulbransen and Robinson (1934) - L 10 to 25°C
Joly, Thourey and Pérachon (1973) - L 25°C
Lange (1959) - L 25°C
Lange and Messner (1927a and b) - L 25°C
Lange and Robinson (1931) - L 25°C
Leitner (1928) - L 20 to 100°C
Magie (1912) - L 17 to 27°C
Messikomer and Wood (1975) - L 25 to 100°C
Naudé (1928) - L 18°C
Naudé (1927) - L 18°C
Pratt (1918) - L 0 to 35°C
Randall and Bisson (1920) - L 25°C
Richards and Rowe (1921) - L 16 to 20°C
Robinson (1932) - L 25°C
Rossini (1931a) - L 18°C
Rümelin (1907) - L 14°C
Sandonnini and Gerosa (1925) - L temperature not given
Scholz (1892) - L 0°C
Smith, Stearn and Schneider (1920) - L temperature not given
Stearn and Smith (1920) - L temperature not given
Thomsen (1883b) - L 18°C
Van Deventer and Van destadt (1891) - L 18°C
Van Deventer and Van destadt (1892) - L 18°C
Vichutinskii and Golikov (1978) - L 25°C
Von Stackelberg (1898) - L 16°C
Wood, Rooney and Braddock (1969) - L 25°C to (D₂O)
Wu and Friedman (1966a) - L 25°C (D₂O)
Wüst and Lange (1924) - L 25°C
Wüst and Lange (1925) - L 25°C
Young and Machin (1936) - L 25°C
Young and Vogel (1932) - L 25°C
Gardner (1969) - V 125 to 270°C
Gardner, Jones and de Nordwall (1963) - V 125 to 270°C
Gibbard, Scatchard, Rousseau and Creek (1974) - V 25 to 100°C
Keevil (1942) - V 183 to 700°C
Kovryrzina, Sidorova, Zakharova and Berg (1966) - V 25 to 90°C
Liu and Lindsay (1970) - V 125 to 130°C
Liu and Lindsay (1972) - V 75 to 300°C
Lindsay and Liu (1968) - V 125 to 300°C
Lindsay and Liu (1968) - V 125 to 300°C (D₂O)
Lindsay and Liu (1971) - V 125 to 300°C
Mashovets, Zarembo and Fedorov (1973) - V 150 to 350°C
Olynyk and Gordon (1943) - V 20 to 30°C
Pupezin, Jakli, Jansco and Van Hook (1972) - V -5 to 100°C
Robinson (1939) - V 0 to 60°C

NaClO₃

Colomina and Nicolás (1949) - C 24°C
Epikhin and Stakhanova (1967) - C 25°C
Roux, Musbally, Perron, Desnoyers, Singh, Woolley
and Hepler (1978) - C 25°C
Colomina and Nicolás (1949) - L 25°C
Lange and Robinson (1930) - L 25°C

NaClO₄

Bonner and Cerutti (1976) - C 25°C (D₂O)
Colomina and Nicolás (1949) - C 25°C
Mastroianni and Criss (1972b) - C 0 to 90°C
Roux, Musbally, Perron, Desnoyers, Singh, Woolley
and Hepler (1978) - C 25°C
Singh, McCurdy, Woolley and Hepler (1977) - C 25°C
Drakin and Yu-min (1964) - H 25°C
Grenthe, Hessler and Ots (1973) - H 25°C
Austin and Mair (1962) - L 25°C
Colomina and Nicolás (1949) - L 25°C
Jackson, Smith, Gatty and Wolfenden (1934) - L
25°C
Kasner (1962) - L 25°C
Lange (1959) - L 25°C
Vanderzee and Swanson (1963) - L 25°C
Vanderzee and Swanson (1963b) - L 25°C

NaBr

Bender and Kaiser (1954) - C 25°C and 30°C
Chipmann, Johnson and Maass (1929) - C 18 to 25°C
Desnoyers, DeVisser, Perron and Picker (1976) - C
25°C
Fortier, Leduc and Desnoyers (1974) - C 25°C
Fortier, Philip and Desnoyers (1974) - C 25°C
(D₂O)
Jauch (1921) - C 18°C
Maignac (1878) - C 20 to 52°C
Randall and Rossini (1929) - C 25°C
Rossini (1931b) - C 25°C
Singh, Woolley, McCurdy and Hepler (1976) - C 25°C
Tanner and Lamb (1978) - C 5 to 85°C
Vasil'ev and Shevchenko (1970) - C 25°C
Vasil'ev and Shevchenko (1972) - C 25°C
Chipman, Johnson and Maass (1929) - H ~22°C
Craft and Van Hook (1975) - H 10 to 75°C (D₂O)
Dunnington and Hoggard (1899) - L 25°C

Hammerschmid and Lange (1931) - L 25°C
Hammerschmid and Robinson (1932) - L 25°C
Joly, Thourey and Pérachon (1973) - L 25°C
Leung and Millero (1975) - L 30°C
Mayrath and Wood (1978) - L 100 to 200°C
Van Deventer and Van destadt (1892) - L 16°C
Vaslow (1971) - L 25°C
Wallace (1949) - L 25°C
Wood, Rooney and Braddock (1969) - L 25°C (D₂O)
Wüst and Lange (1924) - L 25°C
Wüst and Lange (1925) - L 25°C
Jakli, Chan and Van Hook (1975) - V 0 to 90°C
Jakli and Van Hook (1972) - V 0 to 90°C
Keevil (1942) - V 293 to 678°C
Mashovets, Zarembo and Fedorov (1973) - V 150 to
350°C

NaBrO₃

Roux, Musbally, Perron, Desnoyers, Singh, Woolley
and Hepler (1978) - C 25°C
Lange and Robinson (1930) - L 25°C

NaI

Desnoyers, DeVisser, Perron and Picker (1976) - C
25°C
Fortier, Leduc and Desnoyers (1974) - C 25°C
Fortier, Philip and Desnoyers (1974) - C 25°C
(D₂O)
Jauch (1921) - C 18°C
Maignac (1878) - C 20 to 51°C
Novoselov and Mishchenko (1968) - C 25°C
Novoselov and Mishchenko (1971a) - C 25 to 50°C
Novoselov and Mishchenko (1971b) - C 0.8°C
Novoselov and Mishchenko (1971c) - C 0.8 to 50°C
Randall and Rossini (1929) - C 25°C
Rossini (1931b) - C 25°C
Vasil'ev and Shevchenko (1970) - C 25°C
Vasil'ev and Shevchenko (1972) - C 25°C
Craft and Van Hook (1975) - H 10 to 75°C (D₂O)
Lonkevich, Mishchenko and Shadskii (1969) - H 10
to 50°C
Fortier, Leduc and Desnoyers (1974) - L 25°C
Joly, Thourey and Pérachon (1973) - L 25°C
Leung and Millero (1975) - L 30°C

NaI (continued)

Mayrath and Wood (1978) - L 100 to 200°C
Thomsen (1883b) - L 18°C
Vaslow (1971) - L 25°C
Wu and Friedman (1966) - L 25 (D₂O)
Wüst and Lange (1924) - L 25°C
Wüst and Lange (1925) - L 25°C
Jakli, Chan and Van Hook (1975) - V 0 to 90°C
Jakli and Van Hook (1972) - V 0 to 90°C
Keevil (1942) - V 185 to 600°C
Mashovets, Zarembo and Fedorov (1973) - V 150 to 350°C

NaIO₃

Roux, Musbally, Perron, Desnoyers, Singh, Woolley and Hepler (1978) - C 25°C
Lange and Robinson (1930) - L 25°C

Na₂S

Sabatier (1881a) - L 17°C

Na₂SO₄

Auméras (1931) - C 20°C
D'Ans and Tollert (1937) - C 20 to 86°C
Desnoyers, DeVisser, Perron and Picker (1976) - C 25°C
Drucker (1934) - C 18°C
Gardner, Jekel and Cobble (1969) - C 0 to 100°C
Gerlach (1926) - C 12 to 100°C
Kaganovich and Mishchenko (1951) - C 25 to 45°C
Kobe and Anderson (1936) - C 34 to 103°C
Likke and Bromley (1973) - C 80 to 200°C
Marignac (1878) - C 19 to 52°C
Olofsson, Spitzer and Hepler (1978) - C 25°C
Pagliani (1880) - C 12 to 23°C
Perreu (1935a) - C 20°C
Perron, Desnoyers and Millero (1975) - C 25°C
Randall and Rossini (1929) - C 25°C
Readhour and Cobble (1969) - C 4 to 95°C
Thomsen (1883a) - C 18°C
Voskresenskaya and Yankovskaya (1945) - C 25 to 50°C
Wallace and Robinson (1941) - C 25°C

Harned and Hecker (1934) - E 0 to 40°C
Shibata and Murata (1931) - E 22 to 31°C
Shibata, Murata and Toyoda (1931) - E 22 to 31°C
Shibata, Oda and Furukawa (1930a and b) - E 20 to 30°C
Shibata, Oda and Furakawa (1933) - E 20 to 30°C
Gritsus, Akhumov and Zhilina (1971) - H 10 to 50°C
Gritsus, Akhumov and Zhilina (1969) - H 25°C
Brodale and Giauque (1958) - L 25°C
Gritsus, Akhumov and Zhilina (1971) - L 10 to 50°C
Lange and Messner (1927a and b) - L 25°C
Lange and Streeck (1931b) - L 25°C
Mayrath and Wood (1978) - L 100 to 200°C
Perreu (1929b) - L 11°C
Perreu (1929a) - L 11°C
Perreu (1935b) - L 20°C
Plake (1932) - L 0 to 20°C
Snipes, Manly and Ensor (1975) - L 40 to 80°C
Thomsen (1883b) - L 18°C
Thompson, Smith and Wood (1974) - L 25°C
Vichutinskii and Golikov (1978) - L 25°C
Wallace and Robinson (1941) - L 25°C
Jakli, Chan and Van Hook (1975) - V 0 to 90°C
Kangro and Groeneveld (1962) - V 20 to 25°C
Keevil (1942) - V 158 to 367°C
Lindsay and Liu (1968) - V 125 to 300°C
Soldano and Patterson (1962) - V 25 to 120°C

Na₂S₂O₃

Kapustinsky and Stakhanova (1958) - C 0 to 25°C
Olofsson, Spitzer and Hepler (1978) - C 25°C
Perreu (1930) - C 14 to 34°C
Perreu (1930) - L 11°C
Plake (1932) - L 0 to 20°C

Na₂S₂O₈

Olofsson, Spitzer and Hepler (1978) - C 25°C

NaHSO₄

Thomsen (1883b) - L 18°C

NaNO₂

Cases, Parker and Kilday (1977) - L 25°C

NaNO₃

Bonner and Cerutti (1976) - C 25°C (D₂O)
 Chauvenet (1938) - C 15°C
 D'Ans and Tollert (1937) - C 20°C
 Drucker (1934) - C 18°C
 Enea, Singh, Woolley, McCurdy and Hepler (1977)
 - C 25°C
 Epikhin and Stakhanova (1967) - C 25°C
 Gerlach (1926) - C 16 to 90°C
 Magie (1907) - C 25°C
 Marignac (1878) - C 18 to 52°C
 Mondain-Monval (1923) - C 0 to 16°C
 Puchkov, Matveeva and Baranova (1973) - C 25 to
 340°C
 Randall and Rossini (1929) - C 25°C
 Richards and Gucker (1925) - C 18°C
 Richards and Rowe (1921) - C 16 to 20°C
 Rossini (1931b) - C 18 to 25°C
 Roux, Musbally, Perron, Desnoyers, Singh, Woolley
 and Hepler (1978) - C 25°C
 Thomsen (1883) - C 18°C
 Voskresenskya and Ponomareva (1946) - C 25 to 75°C
 Winkelmann (1873) - C 1 to 60°C
 Mishchenko and Shpigel (1967) - H 1 to 75°C
 Bindel (1890) - L temperature not given
 Bishop (1908) - L 25°C
 Dunnington and Hoggard (1889) - L 20 to 25°C
 Lange (1959) - L 25°C
 Lange and Robinson (1930) - L 25°C
 Mondain-Monval (1925) - L 16°C
 Mondain-Monval (1923b) - L 16°C
 Naudé (1928) - L 11 to 18°C
 Naudé (1927) - L 18°C
 Pratt (1918) - L 0 to 35°C
 Richards and Rowe (1921) - L 16 to 20°C
 Rossini (1931) - L 18°C
 Rümelin (1907) - L 14°C
 Scholtz (1892) - L 0°C
 Stahlberg (1914) - L 18°C
 Thomsen (1883b) - L 18°C
 Van Deventer and Van destadt (1891) - L 18°C
 Van Deventer and Van destadt (1892) - L 17°C
 Von Stackelberg (1898) - L 0 to 16°C

Na₄P₂O₇

Perreu (1940b) - C 18°C

Perreu (1940b) - L 18°C

Sodium polyphosphate

Mita, Okubo and Ise (1975) - L 25°C

NaH₂PO₄

D'Ans and Tollert (1937) - C 20°C

Marignac (1878) - C 24 to 55°C

Na₂HPO₄

Marignac (1878) - C 23 to 54°C

Perreu (1929b) - L 11°C

Perreu (1929a) - L 11°C

NaPF₆Bonner and Cerutti (1976) - C 25°C (D₂O)Na₂HAsO₄

Marignac (1878) - C 25 to 56°C

Na₂CO₃

Bindel (1890) - C temperature not given

Chernen'kaya (1971a) - C 25°C

Chernen'kaya and Bratash (1972) - C 35°C and
50°CChernen'kaya and Bratash (1975) - C 60°C and
90°CDesnoyers, DeVisser, Perron and Picker (1976) - C
25°C

Ginzburg and Kochkalda (1972a) - C 200°C

Marignac (1878) - C 21 to 52°C

Perron, Desnoyers and Millero (1975) - C 25°C

Swallow and Alty (1931) - C 17 to 98°C

Thomsen (1883a) - C 18°C

Taylor (1955) - E 15 to 95°C

Donnan and Hope (1909) - H temperature not given

Ginzburg and Kochkalda (1972a) - H 25 to 200°C

Berg and Vanderzee (1978) - L 25°C

Na₂CO₃ (continued)

Leung and Millero (1975) - L 30°C
 Perreu (1929b) - L 11°C
 Perreu (1929a) - L 11°C
 Rümelin (1907) - L 16°C
 Swallow and Alty (1931) - L 30°C
 Thomsen (1883b) - L 18°C
 Keevil (1942) - V 112 to 388°C

NaHCO₃

Chernen'kaya (1971a) - C 25°C
 Chernen'kaya and Bratash (1972) - C 35°C and 50°C
 Chernen'kaya and Bratash (1975) - C 60°C and 90°C
 Desnoyers, DeVisser, Perron and Picker (1976) - C 25°C
 Perreu (1940a) - C 18°C
 Perron, Desnoyers and Millero (1975) - C 25°C
 Berg and Vanderzee (1978) - L 25°C
 Leung and Millero (1975) - L 30°C
 Perreu (1940a) - L 18°C

NaSCN

Partington and Soper (1929) - H 25°C
 Partington and Soper (1929) - L 25°C

NaBO₂

Sidorova, Puchkov and Fedorov (1975) - C 25 to 300°C

Na₃Fe(CN)₆

Lange and Secrest (1957) - L 25°C

NaReO₄

Ahluwalia and Cobble (1964a) - C 0 to 100°C

Na₂CrO₄

Marignac (1878) - C 21 to 52°C

Na₂MoO₄

Olofsson, Spitzer and Hepler (1978) - C 25°C

Na₂WO₄

Olofsson, Spitzer and Hepler (1978) - C 25°C

KOH

Gawlik (1935) - C 20°C
 Ginzburg, Kochkalda and Guba (1973) - C 25 to 250°C
 Gucker and Schminke (1932) - C 25°C
 Magie (1907) - C temperature not given
 Puchkov, Baranova and Lapidus (1970) - C 25 to 400°C
 Richards and Hall (1929a) - C 18°C
 Richards and Rowe (1913a and b) - C 16 to 20°C
 Rossini (1931b) - C 18°C
 Singh, Woolley, McCurdy and Hepler (1976) - C 25°C
 Thomsen (1883) - C 18°C
 Voskresenskaya and Ponomereva (1946) - C 25 to 75°C
 Akerlof and Bender (1948) - E 0 to 70°C
 Harned and Cook (1937a) - E 0 to 35°C
 Berthelot (1875b) - L 11 to 24°C
 Berthelot (1875d) - L 10°C
 Berthelot (1875f) - L 10 to 15°C
 Biermann (1960) - L 25°C
 Pratt (1918) - L 0 to 35°C
 Richards and Rowe (1921) - L 16 to 20°C
 Rossini (1931a) - L 18°C
 Thomsen (1883b) - L 18°C
 Kangro and Groeneveld (1962) - V 20 to 25°C
 Mashovets, Krungal'z, Dibrov and Matveeva (1965) - V 150 to 400°C

KF

Bonner and Cerutti (1976) - C 25°C (D₂O)
 Desnoyers, DeVisser, Perron and Picker (1976) - C 25°C
 Epikhin, Stakhanova and Karapet'yants (1966) - C 25°C
 Fortier, Leduc and Desnoyers (1974) - C 25°C
 Fortier, Philip and Desnoyers (1974) - C 25°C (D₂O)
 Jauch (1921) - C 18°C

KF (continued)

Rüterjans, Schreiner, Sage and Ackermann (1969) - C 30 to 130°C
Vasil'ev and Shevchenko (1970) - C 25°C
Vasil'ev and Shevchenko (1972) - C 25°C
Birnthaler and Lange (1937) - L 25°C (D₂O)
Birnthaler and Lange (1938) - L 25°C (D₂O)
Lange (1928b) - L 25°C
Lange and Eichler (1927) - L 25°C
Jakli, Chan and Van Hook (1975) - V 0 to 90°C
Jakli and Van Hook (1972) - V 0 to 90°C

KCl

Barnes and Maass (1930) - C -78 to 0°C
Bonner and Cerutti (1976) - C 25°C (D₂O)
Borodenko and Galinker (1975) - C ~ 300°C
Borodenko and Galinker (1976) - C 200 to 300°C
Bousfield and Bousfield (1919) - C 7 to 39°C
Chipman, Johnson and Maass (1929) - C 18 to 25°C
Clews (1936) - C 25°C
Cohen and Moesveld (1920) - C 19°C
Colson (1915) - C 5 to 21°C
D'Ans and Tollert (1937) - C 20 to 86°C
Desnoyers, DeVisser, Perron and Picker (1976) - C 25°C
Drecker (1888) - C 18 to 22°C
Drucker (1934) - C 18°C
Epikhin, Stakhanova and Karapet'yants (1964) - C 25°C
Fortier, Leduc and Desnoyers (1974) - C 25°C
Grenthe, Hessler and Ots (1973) - C 25°C
Gucker (1928) - C 25 to 80°C
Hess and Gramkee (1940) - C 15 to 45°C
Kaganovich and Mischenko (1952) - C 25°C
Kapustinsky, Stakhanova and Vasil'ev (1960) - C 25°C
Kapustinsky, Yakushevskii and Drakin (1953a) - C 25°C
Klopov, Kolker and Krestov (1972) - C 25°C
Klopov, Kolker and Krestov (1974) - C 25°C
Koch (1922) - C -30 to 50°C
Küpper (1920) - C 20 to 100°C
Lange and Monheim (1929) - C 12 to 25°C
Likke and Bromley (1973) - C 80 to 200°C
Magie (1907) - C temperature not given
Marignac (1878) - C 17 to 22°C
Mondain-Monval (1923) - C 0 to 18°C

Nikolaeva, Kogan and Ogorodnikov (1936) - C 25°C
Pickering (1887) - C 0 to 25°C
Popoff, Bundel and Choller (1930) - C 20°C
Randall and Bisson (1920) - C 25°C
Randall and Rossini (1929) - C 25°C
Richards and Rowe (1921) - C 16 to 20°C
Rossini (1931b) - C 18 to 25°C
Rüterjans, Schreiner, Sage and Ackermann (1969) - C 30 to 130°C
Rutskov (1946) - C 25 to 75°C
Rutskov (1948) - C 25 to 75°C
Rüterjans, Schreiner, Sage and Ackermann (1969) - C 30 to 130°C
Singh, Woolley, McCurdy and Hepler (1976) - C 25°C
Stakhanova, Epikhin and Kharapet'yants (1963) - C 25°C
Stakhanova and Vasil'ev (1960) - C 25°C
Tanner and Lamb (1978) - C 5 to 85°C
Thomsen (1883a) - C 18°C
Tuech and Combet (1976) - C 25°C
Urban (1932) - C 10 to 40°C
Vasil'ev and Shevchenko (1972) - C 25°C
Vasil'ev and Shevchenko (1970) - C 25°C
Voskresenskaya and Ponomareva (1946) - C 25 to 75°C
Voskresenskaya and Rutskov (1940) - C 25 to 75°C
White (1940) - C 18 to 25°C
Winkelman (1873) - C 1 to 60°C
Harned and Cook (1937b) - E 0 to 40°C
Hornibrook, Janz and Gordon (1942) - E 15 to 45°C
Shibata, Oda and Furukawa (1930b) - E 20 to 32°C
Abrosimov, Ionov and Krestov (1977) - H 25°C
Chipman, Johnson and Maass (1929) - H ~22°C
Cox and Harrop (1965) - H 25°C
Craft and Van Hook (1975) - H 10 to 75°C (D₂O)
Fedorova and Silchenko (1937) - H 23°C
Fontell (1938) - H 25°C
Partington and Soper (1929) - H 25°C
Scholtz (1892) - H 0°C
Bishop (1908) - L 25°C
Craft and Van Hook (1975) - L 10 to 75°C (D₂O)
Dunnington and Hoggard (1899) - L 25°C
Harrison and Perman (1927) - L 40 to 80°C
Joly, Thourey and Pérachon (1973) - L 25°C
Lange (1928b) - L 12 to 25°C
Lange and Leighton (1928) - L 12 to 25°C
Lange and Messner (1927a and b) - L 11 to 25°C

KCl (continued)

Lange and Monheim (1929) - L 12 to 25°C
 Lange and Monheim (1930b) - L 12 to 25°C
 Magie (1912) - L 3 to 21°C
 Mayrath (1979) - L 100 to 200°C
 Mishchenko (1930) - L 25°C
 Naudé (1928) - L 12 to 18°C
 Naudé (1927) - L 18°C
 Nernst and Orthmann (1926) - L 16°C
 Nernst and Orthmann (1927) - L 18°C
 Nernst and Orthmann (1928) - L 18°C
 Partington and Soper (1929) - L 25°C
 Pratt (1918) - L 0 to 35°C
 Richards and Rowe (1921) - L 16 to 20°C
 Rossini (1931a) - L 18°C
 Rümelin (1907) - L 14°C
 Sandonnini and Gerosa (1925) - L temperature not given
 Scholtz (1892) - L 0°C
 Snipes, Manly and Ensor (1975) - L 40 to 80°C
 Stearn and Smith (1920) - L temperature not given
 Van Deventer and Van destadt (1891) - L 15°C
 Van Deventer and Van destadt (1892) - L 18°C
 Von Stackelberg (1898) - L 16°C
 Vorob'ev, Monaenkova and Pashlova (1978) - L 25°C (D₂O)
 Wood, Rooney and Braddock (1969) - L 25°C (D₂O)
 Wüst and Lange (1924) - L 25°C
 Wüst and Lange (1925) - L 25°C
 Pupezin, Jakli, Jancso and Van Hook (1972) - V 20 to 100°C
 Shibata and Niwa (1935) - V 0 to 10°C
 Soldano and Patterson (1962) - V 25 to 120°C

KClO₃

Roux, Musbally, Perron, Desnoyers, Singh, Woolley and Hepler (1978) - C 25°C
 Andauer and Lange (1933) - L 15 to 25°C
 Von Stackelberg (1898) - L 16°C

KClO₄

Andauer and Lange (1933) - L 15 to 25°C
 Lange and Hesse (1931) - L 25°C

KBr

Bender and Kaiser (1954) - C 25 to 30°C
 Chipman, Johnson and Maass (1929) - C 18 to 25°C
 Desnoyers, DeVisser, Perron and Picker (1976) - C 25°C
 Fortier, Leduc and Desnoyers (1974) - C 25°C
 Fortier, Philip and Desnoyers (1974) - C 25°C
 Klopov, Kolker and Krestov (1975) - C 25°C
 Krestov and Abrosimov (1967) - C 0 to 100°C
 Maignac (1878) - C 20 to 51°C
 Randall and Rossini (1929) - C 25°C
 Rossini (1931b) - C 25°C
 Singh, Woolley, McCurdy and Hepler (1976) - C 25°C
 Stakhanova, Epikhin and Karapet'yants (1963) - C 25°C
 Urban (1932) - C 10 to 40°C
 Vasil'ev and Shevchenko (1970) - C 25°C
 Vasil'ev and Shevchenko (1972) - C 25°C
 Brönsted (1906) - H 18°C
 Chipman, Johnson and Maass (1929) - H ~22°C
 Fedorov and Sil'chenko (1937) - H 23°C
 Birnthalder and Lange (1937) - L 25°C (D₂O)
 Birnthalder and Lange (1938) - L 25°C (D₂O)
 Dunnington and Hoggard (1899) - L 25°C
 Hammerschmid and Lange (1931) 25°C
 Hammerschmid and Robinson (1932) - L 25°C
 Joly, Thourey and Pérachon (1973) - L 25°C
 Rümelin (1907) - L 12°C
 Scholz (1892) - L 0°C
 Thomsen (1883b) - L 18°C
 Wüst and Lange (1924) - L 25°C
 Wüst and Lange (1925) - L 25°C

KBrO₃

Roux, Musbally, Perron, Desnoyers, Singh, Woolley and Hepler (1978) - C 25°C
 Kasner (1962) - L 25°C
 Von Stackelberg (1898) - L 16°C

KI

Desnoyers, DeVisser, Perron and Picker (1976) - C 25°C
 Drucker (1934) - C 18°C
 Epikhin, Stakhanova and Karapet'yants (1966) - C 25°C
 Fortier, Leduc and Desnoyers (1974) - C 25°C

KBrO₃

Marignac (1878) - C 20 to 51°C
Randall and Rossini (1929) - C 25°C
Rossini (1931b) - C 25°C
Vasil'ev and Shevchenko (1972) - C 25°C
Vasil'ev and Shevchenko (1970) - C 25°C
Abrosimov, Ionov and Krestov (1977) - H 25°C
Dunnington and Hoggard (1899) - L 25°C
Joly, Thourey and Pérachon (1973) - L 25°C
Lange, Monheim and Streeck (1931) - L 25°C
Scholz (1892) - L 0°C
Vorob'ev, Monaenkova and Pashlova (1978) - L 25°C
(D₂O)
Wüst and Lange (1924) - L 25°C
Wüst and Lange (1925) - L 25°C

KIO₃

Randall and Taylor (1941) - C 25°C
Roux, Musbally, Perron, Desnoyers, Singh, Woolley
and Hepler (1978) - C 25°C
Kasner (1962) - L 25°C
Von Stackelberg (1898) - L 16°C

K₂S

Sabatier (1881a) - L 17°C

K₂SO₄

D'Ans and Tollert (1937) - C 20 to 41°C
Desnoyer, DeVisser, Perron and Picker (1976) - C
25°C
Drucker (1934) - C 18°C
Marignac (1878) - C 19 to 52°C
Mishchenko and Pronina (1936) - C 20 to 25°C
Mondain-Monval (1923a) - C 0 to 18°C
Olofsson, Spitzer and Hepler (1978) - C 25°C
Perron, Desnoyers and Millero (1975) - C 25°C
Randall and Rossini (1929) - C 25°C
Murata (1932) - E 22 to 31°C
Shibata, Oda and Furukawa (1930a) - E 20 to 30°C
Shibata, Oda and Furukawa (1933) - E 20 to 30°C
Brönsted (1911) - H 18°C
Gritsus, Akhumov and Zhalina (1971) - H 10 to 50°C
Scholz (1892) - H 0°C
Shmalin and Shidlovskii (1971) - H 25°C

Gritsus, Akhumov and Zhilina (1971) - L 10 to 50°C
Lange and Streeck (1931b) - L 25°C
Mayrath and Wood (1978) - L 100 to 200°C
Plake (1932) - L 0 to 20°C
Rümelin (1907) - L 14°C
Scholz (1892) - L 0°C

KHSO₄

Randall and Taylor (1941) - C 25°C
Thomsen (1883b) - L 18°C

KNO₃

Chauvenet (1938) - C 15°C
Colson (1915) - C 5 to 18°C
D'Ans and Tollert (1937) - C 41 to 86°C
Drucker (1934) - C 18°C
Enea, Singh, Woolley, McCurdy and Hepler (1977)
- C 25°C
Epikhin, Stakhanova and Karapet'yants (1964) - C
25°C
Gerlach (1926) - C 12 to 100°C
Gucker (1928) - C 25 to 80°C
Magie (1907) - C temperature not given
Marignac (1878) - C 18 to 52°C
Mondain-Monval (1923a) - C 0 to 18°C
Pickering (1887) - C 0 to 25°C
Puchkov, Matveeva and Baranova (1973) - C 25 to
340°C
Randall and Rossini (1929) - C 25°C
Richards and Gucker (1925) - C 18°C
Richards and Rowe (1921) - C 16 to 20°C
Rossini (1931b) - C 18 to 25°C
Roth and Eymann (1929) - C 15 to 50°C
Rutskov (1946) - C 25 to 75°C
Rutskov (1948) - C 25 to 75°C
Thomsen (1883a) - C 18°C
Voskresenskaya and Ponomereva (1946) - C 25 to
75°C
Winkelman (1873) - C 4 to 60°C
Berenger-Calvet (1927) - H 11 to 16°C
Fedorov and Sil'chenko (1937) - H 23°C
Khrenova and Akhumov (1969) - H 18 to 25°C
Mishchenko and Shpigel' (1967) - H 1 to 75°C
Roth and Eymann (1929) - H 15 to 50°C

KNO₃

Shmagin and Shidlovskii (1971) - H 25°C
Bishop (1908) - L 25°C
Hunter and Bliss (1944) - L 30°C
Lange (1959) - L 25°C
Lange (1928) - L 25°C
Lange and Messner (1927a and b) - L 25°C
Lange and Monheim (1930b) - L 12 to 25°C
Naudé (1928) - L 0 to 30°C
Naudé (1927) - L 18°C
Nernst and Orthmann (1926) - L 16°C
Nernst and Orthmann (1927) - L 18°C
Nernst and Orthmann (1928) - L 18°C
Poczopko and Mecik (1971) - L 25°C
Richards and Rowe (1921) - L 16 to 20°C
Rossini (1931a) - L 18°C
Roth and Eymann (1929) - L 21°C
Rümelin (1907) - L 13°C
Scholz (1892) - L 0°C
Von Stackelberg (1898) - L 15°C

K₃PO₄

Khomyakov, Yavorovskaya and Shirokikh (1933) - L 22°C

KH₂PO₄

Rutskov (1946) - C 25 to 75°C
Voskresenskaya and Rutskov (1940) - C 25 to 75°C
Egan and Luff (1963) - H 25°C
Chomjakov, Jaworowskaja and Schirokikh (1933) - L 23°C
Khomyakov, Yavorovskaya and Shirokikh (1933) - L 22°C
Perreu (1940b) - L 18°C

K₂HPO₄

D'Ans and Tollert (1937) - C 41°C
Luff and Reed (1978) - H 25°C
Khomyakov, Yavorovskaya and Shirokikh (1933) - L 22°C
Luff and Reed (1978) - L 25°C

K₂CO₃

Ginzburg and Kochkalda (1972b) - C 25 to 250°C
Marignac (1878) - C 21 to 52°C
Ginzburg and Kochkalda (1972b) - L 300°C
Rümelin (1907) - L 15°C
Thomsen (1883b) - L 18°C
Puchkov and Kurochkina (1970) - V 25 to 90°C

KCN

Thomsen (1883b) - L 18°C

KNCO

Vanderzee and Myers (1961) - L 25°C

KSCN

Urban (1932) - C 10 to 40°C
Partington and Soper (1929) - H 25°C
Hunter and Bliss (1944) - L 30°C
Partington and Soper (1929) - L 25°C

K₃Co(CN)₆

Heppler, Sweet and Jesser (1960) - H 25°C

K₃Fe(CN)₆

Heppler, Sweet and Jesser (1960) - H 25°C
Lange and Miederer (1956a) - L 25°C

K₄Fe(CN)₆

Lange and Miederer (1956a) - L 25°C

KMnO₄

Kapustinsky and Klokman (1943) - C 25°C
Perreu (1940b) - C 10 to 20°C
Perreu (1940b) - L 18°C
Roth and Becker (1932) - L 16 to 21°C

K₂ReCl₆

Busey, Dearman and Bevan (1962) - H 25°C

K₂CrO₄

Faasch (1977a) - C 18°C

Marignac (1878) - C 20 to 51°C

Olofsson, Spitzer and Hepler (1978) - C 25°C

Roth and Schwartz (1928) - L 18°C

Terasaki (1957) - L temperature not given

K₂Cr₂O₇

Shmagin and Shidlovskii (1971) - L 25°C

K₂S₂O₈

Olofsson, Spitzer and Hepler (1978) - C 25°C

RbOH

Vorob'ev (1965) - L 25°C

RbF

Desnoyers, DeVisser, Perron and Picker (1976)
- C 25°C

Fortier, Leduc and Desnoyers (1974) - C 25°C

Fortier, Philip and Desnoyers (1974) - C 25°C
(D₂O)

Vasil'ev and Shevchenko (1970) - C 25°C

Vasil'ev and Shevchenko (1972) - C 25°C

Fortier, Leduc and Desnoyers (1974) - L 25°C

Lange and Monheim (1930b) - L 25°C

RbCl

Desnoyers, DeVisser, Perron and Picker (1976) - C
25°C

Fortier, Leduc and Desnoyers (1974) - C 25°C

Myasnikova, Drakin and Karapet'yants (1969) - C
25°C

Sergeeva, Drakin and Karapet'yants (1970a) - C
20 to 32°C

Vasil'ev and Shevchenko (1972) - C 25°C

Vasil'ev and Shevchenko (1970) - C 25°C

Abrosimov, Ionov and Krestov (1977) - H 25°C

Vorob'ev, Ibragin and Skuratov (1966) - H 25°C

Fortier, Leduc and Desnoyers (1974) - L 25°C

Lange, Monheim and Streeck (1931) - L 25°C

Leung and Millero (1975) - L 30°C

Vichutinskii and Golikov (1978) - L 25°C

RbBr

Desnoyers, DeVisser, Perron and Picker (1976) - C
25°C

Fortier, Leduc and Desnoyers (1974) - C 25°C

Fortier, Philip and Desnoyers (1974) - C 25°C
(D₂O)

Jauch (1921) - C 18°C

Vasil'ev and Shevchenko (1970) - C 25°C

Vasil'ev and Shevchenko (1972) - C 25°C

Fortier, Leduc and Desnoyers (1974) - L 25°C

RbI

Desnoyers, DeVisser, Perron and Picker (1976) - C
25°C

Fortier, Leduc and Desnoyers (1974) - C 25°C

Vasil'ev and Shevchenko (1970) - C 25°C

Vasil'ev and Shevchenko (1972) - C 25°C

Fortier, Leduc and Desnoyers (1974) - L 25°C

Rb₂SO₄

Vorob'ev, Ibragin and Skuratov (1966) - H 25°C

Lange and Streeck (1931b) - L 25°C

RbNO₃

Krestov and Abrosimov (1967) - C 0 to 100°C

Chauvenet (1938) - L 15°C

Vichutinskii and Golikov (1978) - L 25°C

Vorob'ev, Ibragin and Skuratov (1966) - H 25°C

RbH₂PO₄

Monaenkova, Kon'kova, Mishchenko and Vorob'ev
(1972) - H 25°C

Monaenkova, Kon'kova, Mishchenko and Vorob'ev
(1972) - H 25°C (D₂O)

CSOH

Vorob'ev (1965) - L 25°C

CsF

Desnoyers, DeVisser, Perron and Picker (1976)
- C 25°C

Fortier, Leduc and Desnoyers (1974) - C 25°C

Fortier, Philip and Desnoyers (1974) - C 25°C
(D₂O)

Vasil'ev and Shevchenko (1972) - C 25°C

Vasil'ev and Shevchenko (1970) - C 25°C

Fortier, Leduc and Desnoyers (1974) - L 25°C

CsCl

Bennewitz and Kratz (1936) - C 20°C

Bonner and Cerutti (1976) - C 25°C

Desnoyers, DeVisser, Perron and Picker (1976) - C
25°C

Fortier, Leduc and Desnoyers (1974) - C 25°C

Myasnikova, Drakin and Karapet'yants (1969) - C
25°C

Richards and Rowe (1921) - C 16 to 20°C

Rüterjans, Schreiner, Sage and Ackermann (1969)
- C 30 to 130°C

Sergeeva, Drakin and Karapet'yants (1970a) - C
20 to 32°C

Stakhanova and Vasil'ev (1963) - C 25°C

Vasil'ev and Shevchenko (1970) - C 25°C

Vasil'ev and Shevchenko (1972) - C 25°C

Vorob'ev, Ibragin and Skuratov (1966) - H 25°C

Lange (1928) - L 25°C

Leung and Millero (1975) - L 30°C

Levine and Wood (1970) - L 25°C

Mayrath and Wood (1978) - L 100 to 200°C

Richards and Rowe (1921) - L 16 to 20°C

Stakhanova, Vlasenko, Karapet'yants and Bazlova
(1968) - L 25°C

Vichutinskii and Golikov (1978) - L 25°C

Lindsay and Liu (1968) - V 125 to 300°C

Lindsay and Liu (1971) - V 125 to 300°C

Pupezin, Jakli, Jancso and Van Hook (1972) - V
-5 to 100°C

Soldano and Patterson (1962) - V 25 to 120°C

CsBr

Desnoyers, DeVisser, Perron and Picker (1976) - C
25°C

Fortier, Leduc and Desnoyers (1974) - C 25°C

Fortier, Philip and Desnoyers (1974) - C 25°C

Jauch (1921) - C 18°C

Vasil'ev and Shevchenko (1970) - C 25°C

Vasil'ev and Shevchenko (1972) - C 25°C

Abrosimov, Ionov and Krestov (1977) - H 25°C

Fortier, Leduc and Desnoyers (1974) - L 25°C

Vorob'ev, Ibragin and Skuratov (1966) - H 25°C

CsI

Bonner and Cerutti (1976) - C 25°C (D₂O)

Desnoyers, DeVisser, Perron and Picker (1976) - C
25°C

Fortier, Leduc and Desnoyers (1974) - C 25°C

Kapustinsky, Lipilina and Samoilov (1957) - C 25°C

Kapustinsky, Lipilina and Samoilov (1956) - C 25°C

Kapustinsky, Yakushevskii and Drakin (1953b) - C
25°C

Mitchell and Cobble (1964) - C 0 to 100°C

Rüterjans, Schreiner, Sage and Ackermann (1969)
- C 30 to 130°C

Vasil'ev and Shevchenko (1970) - C 25°C

Vasil'ev and Shevchenko (1972) - C 25°C

Fortier, Leduc and Desnoyers (1974) - L 25°C

Vorob'ev, Ibragin and Skuratov (1966) - H 25°C

Cs₂SO₄

Vorob'ev, Ibragin and Skuratov (1966) - H 25°C

Lange and Streeck (1931b) - L 25°C

CsNO₃

Chauvenet (1938) - C 15°C

Jauch (1921) - C 18°C

Richards and Rowe (1921) - C 16 to 20°C

Richards and Rowe (1921) - L 16 to 20°C

FrF*

Vasil'ev and Shevchenko (1970) - C 25°C

Vasil'ev and Shevchenko (1972) - C 25°C

* Data was estimated by authors

FrCl*

Karapet'yants, Vasil'ev and Fedyaïnov (1971) - C
25°C

Vasil'ev and Shevchenko (1970) - C 25°C

Vasil'ev and Shevchenko (1972) - C 25°C

FrBr*

Vasil'ev and Shevchenko (1972) - C 25°C

Vasil'ev and Shevchenko (1970) - C 25°C

FrI*

Vasil'ev and Shevchenko (1972) - C 25°C

Vasil'ev and Shevchenko (1970) - C 25°C

Organic Compounds

1. Aminoacids

α -alanine

Gucker and Allen (1942) - C 5 to 40°C

Prasad and Ahluwalia (1976) - C 25 to 35°C

Spink and Wadsö (1975) - C 25°C

Zittle and Schmidt (1935) - C 25°C

Benesi, Mason and Robinson (1946) - L 25°C

β -alanine

Gucker and Allen (1942) - C 5 to 40°C

Prasad and Ahluwalia (1976) - C 25 to 35°C

Benesi, Mason and Robinson (1946) - L 25°C

Aminobutyric acids

Prasad and Ahluwalia (1976) - C 25 to 35°C

Spink and Wadsö (1975) - C 25°C

Mason and Robinson (1947) - L 25°C

Aminocaproic acid

Prasad and Ahluwalia (1976) - C 25 to 35°C

ϵ -Aminocaproic acid

Mason, Offutt and Robinson (1949) - L 25°C

Amino-n-caprylic acids

Prasad and Ahluwalia (1976) - C 25 to 35°C

Amino-n-heptanoic acid

Prasad and Ahluwalia (1976) - C 25 to 35°C

Amino valeric acids

Prasad and Ahluwalia (1976) - C 25 to 35°C

Mason, Offutt and Robinson (1949) - L 25°C

Arginine

Zittle and Schmidt (1935) - L 25°C

Asparagine

Prasad and Ahluwalia (1976) - C 25 to 35°C

* Data was estimated by authors.

betaine

Ahluwalia, Millero, Goldberg and Hepler (1966) - H
25°C

betaine monohydrate

Ahluwalia, Millero, Goldberg and Hepler (1966) - H
25°C

betaine hydrochloride

Ahluwalia, Millero, Goldberg and Hepler (1966) - H
25°C

Glutamine

Prasad and Ahluwalia (1976) - C 25 to 35°C

Glycine

Gucker, Ford and Moser (1939) - L 5 to 40°C

Krescheck (1970) - C 25°C

Prasad and Ahluwalia (1976) - C 25 to 35°C

Spink and Wadsö (1975) - C 25°C

Zittle and Schmidt (1935) - C 25°C

Gucker, Pickard and Ford (1940) - L 25°C

Sturtevant (1940c) - L 25°C

Wallace, Offutt and Robinson (1943) - L 25°C

Zittle and Schmidt (1935) - L 25°C

Glycylglycine

Krescheck and Benjamin (1964) - C 25°C

Lilley and Scott (1976) - L 25°C

Histidine

Zittle and Schmidt (1935) - L 25°C

Hydroxyproline

Prasad and Ahluwalia (1976) - C 25 to 35°C

Zittle and Schmidt (1935) - L 25°C

lactamide

Gucker and Allen (1942) - C 5 to 40°C

Leucine

Krescheck and Benjamin (1964) - C 25°C

Spink and Wadsö (1975) - C 25°C

Lysine

Zittle and Schmidt (1935) - L 25°C

Methionine

Krescheck (1970) - C 25°C

Norleucine

Mason, Offutt and Robinson (1949) - L 25°C

Norvaline

Krescheck (1970) - C 25°C

Phenylalanine

Krescheck and Benjamin (1964) - C 25°C

Prasad and Ahluwalia (1976) - C 25 to 35°C

Spink and Wadsö (1975) - C 25°C

Proline

Prasad and Ahluwalia (1976) - C 25 to 35°C

Spink and Wadsö (1975) - C 25°C

Zittle and Schmidt (1935) - L 25°C

Pyroglutamine acid

Zittle and Schmidt (1935) - L 25°C

Serine

Prasad and Ahluwalia (1976) - C 25 to 35°C

Spink and Wadsö (1975) - C 25°C

Zittle and Schmidt (1935) - L 25°C

Taurine

Zittle and Schmidt (1935) - L 25°C

Threonine

Prasad and Ahluwalia (1976) - C 25 to 35°C

Zittle and Schmidt (1935) - C 25°C

Mason, Offutt and Robinson (1949) - L 25°C

Valine

Prasad and Ahluwalia (1976) - C 25 to 35°C

Spink and Wadsö (1975) - C 25°C

Polyethylenimine hydrochloride

Mita, Okubo and Ise (1975) - L 25°C

2. Carboxylic Acids

CH₂O₂ [Formic acid]

Ackermann and Schreiner (1958) - C 0 to 130°C

Bury and Davies (1932) - C 13 to 16°C

Glagoleva and Cherbov (1936) - C 25 to 80°C

Konicek and Wadsö (1971) - C 20 to 30°C

Lüdeking (1886) - C 16 to 50°C

Pettersson (1881) - C 0 to 100°C

Faucon (1910) - H 9°C

Karve (1924) - H temperature not given

Berthelot (1875h) - L 10°C

Berthelot (1875l) - L 10°C

Böse (1905) - L temperature not given

Glagoleva (1936) - L 25 to 60°C

Thomsen (1883b) - L 18°C

Von Reiss (1880) - C 15 to 20°C

Harned and Ehlers (1932) - E 0 to 35°C

Faucon (1910) - H 9°C

Karve (1924) - H temperature not given

Berthelot (1875h) - L 10°C

Berthelot (1875l) - L 10°C

Böse (1905) - L temperature not given

Campbell and Gieskes (1965) - L 25°C

Payn and Perman (1929) - L 22 to 70°C

Richards and Gucker (1929) - L 20°C

Sandonnini (1926) - L 16 to 18°C

Thomsen (1883b) - L 18°C

C₂H₂O₄ [Oxalic acid]

Becker and Roth (1934) - L 25°C

Spedding and Miller (1952b) - L 25°C

C₂H₄O₃ [Glycolic acid]

DeForcrand (1884a) - L 20°C

Petersen (1893) - L 21°C

C₂H₄O₂ [Acetic acid]

Ackermann and Schreiner (1958) - C 0 to 130°C

Bury and Davies (1932) - C 13 to 16°C

Klibanova and Neiman (1933) - C 25 to 80°C

Konicek and Wadsö (1971) - C 20 to 30°C

Lüdeking (1886) - C 16 to 50°C

Maignac (1878) - C 21 to 52°C

Neiman (1932) - C 25 to 80°C

Neuman (1932) - C 25 to 80°C

Pettersson (1881) - C 0 to 100°C

Richards and Gucker (1925) - C 16 to 20°C

Stern, Yavuz and Swaringen (1972) - C 18 to 40°C

Vasil'ev, Shevchenko, Fedyanin and Golikov (1977)
- C 25°C

C₂Cl₂O₂H₂ [Dichloroacetic acid]

Petersen (1893) - L 21°C

C₂Cl₃O₂H [Trichloroacetic acid]

Karve (1924) - H temperature not given

C₃H₅O₂H [Propanoic acid]

Ackermann and Schreiner (1958) - C 0 to 130°C

Bury and Davies (1932) - C 13 to 16°C

Konicek and Wadsö (1971) - C 20 to 30°C

Lüdeking (1886) - C 22 to 50°C

Faucon (1910) - L 9°C

C₃H₆O₃ [Lactic acid]

Lange and Miederer (1957a) - L 10 to 25°C
Meyerhof (1922) - L 20°C

C₄H₆O₆ [Tartaric acid]

Richards and Gucker (1925) - C 16 to 20°C
Thomsen (1883b) - L 18°C
Wassermann (1930b) - L 18°C

C₄H₈O₂ [Butyric acids]

Bury and Davies (1932) - C 13 to 16°C
Konicek and Wadsö (1971) - C 20 to 30°C
Kresheck and Benjamin (1964) - C 25°C
Lüdeking (1886) - C 23 to 50°C
Berthelot (1875h) - L 10°C
Berthelot (1875l) - L 10°C
Daoust and Lajoie (1976) - L 25°C
Faucon (1910) - L 9°C

C₅H₁₀O₂ [Valeric acid]

Berthelot (1875h) - L 10°C
Berthelot (1875l) - L 10°C

C₆H₈O₇ [Citric acid]

Richards and Gucker (1925) - C 16 to 20°C
Richards and Mair (1929) - L 16 to 20°C

C₇H₁₂O₂ [Cyclohexane carboxylic acid]

Lange and Miederer (1957a) - L 15 to 25°C

Polyacrylic acid

Cartier and Daoust (1971) - L 25°C

Polymethacrylic acid

Daoust and Lajoie (1976) - L 25°C
Daoust and Lajoie (1975) - L 25°C

3. Carboxylate Salts

NH₄C₂H₃O₂ [Ammonium acetate]

Desnoyers, DeVisser, Perron and Picker (1976) - C 25°C
Leduc and Desnoyers (1973) - C 25°C
Dunnington and Hoggard (1899) - L room temperature
Leduc, Fortier and Desnoyers (1974) - L 25°C
Thomsen (1883a) - L 18°C

NH₄C₄H₅O₆ [Ammonium tartrate]

Thomsen (1883b) - L 18°C

Pb(C₂H₃O₂)₂ [Lead acetate]

Marignac (1878) - C 18 to 51°C
Berthelot (1873c) - L temperature not given

Zn(C₂H₃O₂)₂ [Zinc acetate]

Marignac (1878) - C 19 to 51°C
Berthelot (1873c) - L temperature not given
Thomsen (1883b) - L 18°C

Zn(C₃H₅O₃)₂ [Zinc lactate]

Meyerhof (1922) - L 20°C

Cu(C₂H₃O₂)₂ [Copper acetate]

Berthelot (1873c) - L temperature not given

Ni(C₂H₃O₂)₂ [Nickel acetate]

Marignac (1878) - C 25 to 56°C

Fe(C₂H₃O₂)₂ [Iron acetate]

Berthelot (1873c) - L temperature not given

Mn(C₂H₃O₂)₂ [Manganese acetate]

Marignac (1878) - C 19 to 52°C

Mg(C₂H₃O₂)₂ [Magnesium acetate]

Marignac (1878) - C 21 to 52°C

Ca(C₂H₃O₂)₂ [Calcium acetate]

Marignac (1878) - C 22 to 52°C

Plake (1932) - L 0 to 20°C

Sr(C₂H₃O₂)₂ [Strontium acetate]

Marignac (1878) - C 20 to 52°C

Ba(CHO₂)₂ [Barium formate]

Berthelot (1875 λ) - L 10°C

Ba(C₂H₃O₂)₂ [Barium acetate]

Marignac (1878) - C 19 to 52°C

Berthelot (1875 λ) - L 10°C

NaCHO₂ [Sodium formate]

Ackermann and Schreiner (1958) - C 0 to 130°C

Berthelot (1875 λ) - L 10°C

NaC₂H₃O₂ [Sodium acetate]

Ackermann and Schreiner (1958) - C 0 to 130°C

Desnoyers, DeVisser, Perron and Picker (1976) - C 25°C

Drucker (1934) - C 18°C

Grenthe, Hessler and Ots (1973) - C 25°C

Kapustinsky and Stakhanova (1958) - C 0 to 25°C

Leduc and Desnoyers (1973) - C 25°C

Marignac (1878) - C 20 to 52°C

Perreu (1940a) - C 18°C

Pickering (1887) - C 0 to 25°C

Richards and Gucker (1925) - C 0 to 25°C

Thomsen (1883a) - C 18°C

Berthelot (1875h) - L 10°C

Berthelot (1875 λ) - L 10°C

Fricke (1929) - L 20°C

Lindenbaum (1971b) - L 25°C

Perreu (1940) - L 18°C

Richards and Gucker (1929) - L 20°C

Savchenko, Akhumov and Zhilina (1970) - L 18 to 25°C

Thomsen (1883b) - L 18°C

NaC₂H₃O₃ [Sodium Glycolate]

DeForcrand (1884a) - L 20°C

NaC₃H₅O₂ [Sodium propionate]

Ackermann and Schreiner (1958) - C 0 to 130°C

NaC₄H₇O₂ [Sodium butyrate]

Berthelot (1875h) - L 10°C

Berthelot (1875 λ) - L 10°C

Lindenbaum (1971a) - L 25°C

Lindenbaum (1971b) - L 25°C

Petersen (1893) - L 21°C

NaC₄H₅O₆ [Sodium hydrogen tartrate]

Richards and Gucker (1925) - C 16 to 20°C

Na₂C₄H₄O₆ [Sodium tartrate]

Richards and Gucker (1925) - C 16 to 20°C

NaC₅H₉O₂ [Sodium valerate]

Berthelot (1875 λ) - L 10°C

Lindenbaum (1971a) - L 25°C

Lindenbaum (1971b) - L 25°C

NaC₆H₇O₇H₂ [Sodium dihydrogen citrate]

Richards and Gucker (1925) - C 16 to 20°C

NaC₆H₅O₇H₂ [Sodium dihydrogen citrate]

Richards and Mair (1929) - L 16 to 20°C

Na₂HC₃H₅O₇ [Disodium hydrogen citrate]

Richards and Gucker (1925) - L 16 to 20°C

Na₂C₆H₅O₇H [Disodium hydrogen citrate]

Richards and Mair (1929) - L 16 to 20°C

Na₃C₆H₅O₇ [Sodium citrate]

Richards and Gucker (1925) - C 16 to 20°C

Richards and Mair (1929) - L 16 to 20°C

NaC₇H₁₃O₂ [Sodium heptanoate]

Lindenbaum (1971a) - L 25°C

NaC₈H₁₅O₂ [Sodium octanoate]

Desnoyers, DeVisser, Perron and Picker (1976) - C
25°C

Leduc and Desnoyers (1973) - C 25°C

NaC₉H₁₇O₂ [sodium nonanoate]

Lindenbaum (1971a) - L 25°C

NaC₇H₅O₂ [Sodium benzoate]

Desnoyers, Pagé, Perron, Fortier, Leduc and
Platford (1973) - C 25°C

NaC₇H₆O₃ [Sodium o-hydroxybenzoate]

Desnoyers, Pagé, Perron, Fortier, Leduc and
Platford (1973) - C 25°C

NaC₇H₆O₃ [Sodium m-hydroxybenzoate]

Desnoyers, Pagé, Perron, Fortier, Leduc and
Platford (1973) - C 25°C

NaC₇H₆O₃ [Sodium p-hydroxybenzoate]

Desnoyers, Pagé, Perron, Fortier, Leduc and
Platford (1973) - C 25°C

Sodium Carboxymethylcellulose

Mita and Okubo (1974) - L 25°C

Sodium polyacrylate

Cartier and Daoust (1971) - L 25°C

Ise, Mita and Okubo (1973) - L 25°C

Mita and Okubo (1974) - L 25°C

Sodium polymethacrylate

Daoust and Lajoie (1976) - L 25°C

Daoust and Lajoie (1975) - L 25°C

KC₂O₄ [Potassium oxalate]

Doerinckel (1910) - C temperature not given

Perreu (1940b) - C 18°C

Doerinckel (1910) - L temperature not given

Perreu (1940b) - L 18°C

KC₂H₃O₂ [Potassium acetate]

Drucker (1934) - C 18°C

Maignac (1878) - C 20 to 51°C

Urban (1932) - C 10 to 40°C

Thomsen (1883b) - L 18°C

KC₈H₁₅O₂ [Potassium octanoate]

Goddard, Hoeve and Benson (1957) - L 25°C

K₂(C₄H₄O₆) [Potassium tartrate]

Urban (1932) - C 10 to 40°C

Rubidium polymethacrylate

Daoust and Lajoie (1976) - L 25°C

Daoust and Lajoie (1975) - L 25°C

4. Ammonium Salts

A. RNH₃X

CH₃NH₃Cl [Methylammonium chloride]

Rüterjans, Schreiner, Sage and Ackermann (1969)
- C 30 to 130°C

Tamaki, Yoshikawa and Kushida (1975) - C 10 to
45°C

Doehlemann and Lange (1934) - L 25°C

Kratz and Lange (1933) - L 15°C

Streeck (1934) - L 25°C

Whitlow and Felsing (1944) - L 25°C

CH₃NH₃Br [Methylammonium bromide]

Desnoyers, DeVisser, Perron and Picker (1976) - C
25°C

Leduc, Fortier and Desnoyers (1974) - C 25°C

Leduc, Fortier and Desnoyers (1974) - L 25°C

C₂H₅NH₃Cl [Ethylammonium chloride]

Rüterjans, Schreiner, Sage and Ackermann (1969)
- C 30 to 130°C

Tamaki, Yoshikawa and Kushida (1975) - C 10 to
45°C

C₂H₅NH₃Br [Ethylammonium bromide]

Desnoyers, DeVisser, Perron and Picker (1976) - C
25°C

Leduc, Fortier and Desnoyers (1974) - C 25°C

Leduc, Fortier and Desnoyers (1974) - L 25°C

c-C₃H₅NH₃Br [Cyclopropylammonium bromide]

Jolicoeur, Boileau, Bazinet and Picker (1975) - C
25°C

C₃H₇NH₃Cl [Propylammonium chloride]

Tamaki, Yoshikawa and Kushida (1975) - C 10 to
45°C

C₃H₇NH₃Br [Propylammonium bromide]

Desnoyers, DeVisser, Perron and Picker (1976)
- C 25°C

Leduc, Fortier and Desnoyers (1974) - C 25°C

Leduc, Fortier and Desnoyers (1974) - L 25°C

C₄H₉NH₃Cl [Butylammonium chloride]

Tamaki, Yoshikawa and Kushida (1975) - C 10 to
40°C

C₄H₉NH₃Br [Butylammonium bromide]

Bonner and Cerutti (1976) - C 25°C

Desnoyers, DeVisser, Perron and Picker (1976) - C
25°C

Leduc, Fortier and Desnoyers (1974) - C 25°C

Rüterjans, Schreiner, Sage and Ackermann (1969)
- C 30 to 130°C

Leduc, Fortier and Desnoyers (1974) - L 25°C

c-C₅H₉NH₃Br [Cyclopentylammonium bromide]

Jolicoeur, Boileau, Bazinet and Picker (1975) - C
25°C

C₅H₁₁NH₃Cl [Pentylammonium chloride]

Tamaki, Yoshikawa and Kushida (1975) - C 10 to
40°C

C₅H₁₁NH₃Br [Pentylammonium bromide]

Desnoyers, DeVisser, Perron and Picker (1976) - C
25°C

Leduc, Fortier and Desnoyers (1974) - C 25°C

Leduc, Fortier and Desnoyers (1974) - L 25°C

c-C₆H₁₁NH₃Br [Cyclohexylammonium bromide]

Jolicoeur, Boileau, Bazinet and Picker (1975) - C
25°C

C₆H₁₃NH₃Cl [Hexylammonium chloride]

Tamaki, Yoshikawa and Kushida (1975) - C 10 to
40°C

C₆H₁₃NH₃Br [Hexylammonium bromide]

Desnoyers, DeVisser, Perron and Picker (1976) - C
25°C

Leduc, Fortier and Desnoyers (1974) - C 25°C

Leduc, Fortier and Desnoyers (1974) - L 25°C

c-C₇H₁₁NH₃Br [Cycloheptylammonium bromide]

Jolicoeur, Boileau, Bazinet and Picker (1975) - C
25°C

C₇H₁₅NH₃Br [Heptylammonium bromide]

Desnoyers, DeVisser, Perron and Picker (1976) - C
25°C

Leduc, Fortier and Desnoyers (1974) - C 25°C

Leduc, Fortier and Desnoyers (1974) - L 25°C

C₈H₁₇NH₃Br [Octylammonium bromide]

Desnoyers, DeVisser, Perron and Picker (1976) - C
25°C

Leduc, Fortier and Desnoyers (1974) - C 25°C

Leduc, Fortier and Desnoyers (1974) - L 25°C

c-C₁₂H₂₃NH₃Br [Cyclododecylammonium bromide]

Jolicoeur, Boileau, Bazinet and Picker (1975) - C
25°C

C₁₂H₂₅NH₃Br [Dodecylammonium bromide]

Jolicoeur, Boileau, Bazinet and Picker (1975) -
- C 25°C

B. R₂NH₂X

(CH₃)₂NH [Dimethylamine]

Patterson and Felsing (1938) - H 25°C

(CH₃)₂NH₂Cl [Dimethylammonium chloride]

Tamaki, Yoshikawa and Kushida (1975) - C 10 to
35°C

Doehlemann and Lange (1934) - L 25°C

Kratz and Lange (1933) - L 15°C

Streeck (1934) - L 25°C

Whitlow and Felsing (1944) - L 25°C

(C₂H₅)₂NH₂Cl [Diethylammonium chloride]

Tamaki, Yoshikawa and Kushida (1975) - C 15 to
35°C

(C₃H₇)₂NH₂Cl [Dipropylammonium chloride]

Tamaki, Yoshikawa and Kushida (1975) - C 10 to
35°C

(C₄H₉)₂NH₂Cl [Dibutylammonium chloride]

Tamaki, Yoshikawa and Kushida (1975) - C 10 to
35°C

C. R₃NHX

(CH₃)₃N [Trimethylamine]

Patterson and Felsing (1938) - H 25°C

(CH₃)₃NHCl [Trimethylammonium chloride]

Tamaki, Yoshikawa and Kushida (1975) - C 10 to
30°C

Doehlemann and Lange (1934) - L 25°C

(CH₃)₃NHCl [Trimethylammonium chloride] (Cont.)

Streeck (1934) - L 25°C

Whitlow and Felsing (1944) - L 25°C

(C₂H₅)₃NHCl (Triethylammonium chloride)

Tamaki, Yoshikawa and Kushida (1975) - C 10 to 35°C

(C₃H₇)₃NHCl [Tripropylammonium chloride]

Tamaki, Yoshikawa and Kushida (1975) - C 10 to 35°C

(C₄H₉)₃NHBr [Tributylammonium bromide]

Jolicoeur and Boileau (1974) - C 25°C

(C₅H₁₁)₃NHCl [Tripentylammonium chloride]

Jolicoeur and Boileau (1974) - C 25°C

D. R₄NX

(CH₃)₄NF [Tetramethylammonium fluoride]

Wood, Anderson, Beck, France, DeVry and Soltzberg (1967) - L 25°C

(CH₃)₄NCl [Tetramethylammonium chloride]

Perron, Desrosiers and Desnoyers (1976) - C 25°C

Doehlemann and Lange (1934) - L 25°C

Kratz and Lange (1933) - L 15°C

Lindenbaum (1966) - L 25°C

Streeck (1934) - L 25°C

(CH₃)₄NBr [Tetramethylammonium bromide]

Bonner and Cerutti (1976) - C 25°C

Mastroianni and Criss (1972b) - C 10 to 90°C

Perron, Desrosiers and Desnoyers (1976) - C 25°C

Philip and Desnoyers (1972) - C 25°C (D₂O)

Sarma, Mohanty and Ahluwalia (1969) - C 25 to 35°C

Arnett and Campion (1970) - H 13 to 48°C

Cassel and Wen (1972) - H 25°C

DeVisser and Somsen (1973) - H 5 to 50°C

Fortier, Leduc, Picker and Desnoyers (1973) - L 25°C

Levine and Wood (1973) - L 25°C (D₂O)

Lindenbaum (1966) - L 25°C

(CH₃)₄NI [Tetramethylammonium iodide]

Perron, Desrosiers and Desnoyers (1976) - C 25°C

Sarma, Mohanty and Ahluwalia (1969) - C 25 to 35°C

Lindenbaum (1966) - L 25°C

Tetramethylammonium polyacrylate

Ise, Mita and Okubo (1973) - L 25°C

(C₂H₅)₄NF [Tetraethylammonium fluoride]

Wood, Anderson, Beck, France, DeVry and Soltzberg (1967) - L 25°C

(C₂H₅)₄NCl [Tetraethylammonium chloride]

Perron, Desrosiers and Desnoyers (1976) - C 25°C

Lindenbaum (1966) - L 25°C

(C₂H₅)₄NBr [Tetraethylammonium bromide]

Bonner and Cerutti (1976) - C 25°C

Perron, Desrosiers and Desnoyers (1976) - C 25°C

Philip and Desnoyers (1972) - C 25°C (D₂O)

Sarma, Mohanty and Ahluwalia (1969) - C 25 to 35°C

Shin and Criss (1976) - C 5 to 85°C

Arnett and Campion (1970) - H 10 to 500°C

Cassel and Wen (1972) - H 25°C

Birch and Hall (1972) - L 25°C

Levine and Wood (1973) - L 25°C (D₂O)

Lindenbaum (1966) - L 25°C

(C₂H₆O)₄NBr [Tetraethanolammonium bromide]

Wood and Belkin (1973) - L 25°C

(C₂H₅)₄NI [Tetraethylammonium iodide]

Perron, Desrosiers and Desnoyers (1976) - C 25°C
Sarma, Mohanty and Ahluwalia (1969) - C 25 to 35°C
Lindenbaum (1966) - L 25°C

Tetraethylammonium polyacrylate

Ise, Mita and Okuba (1973) - L 25°C

(C₃H₇)₄NF [Tetrapropylammonium fluoride]

Wood, Anderson, Beck, France DeBry and Soltzberg (1967) - L 25°C

(C₃H₇)₄NCl [Tetrapropylammonium chloride]

Perron, Desrosiers and Desnoyers (1976) - C 25°C
Ensor, Anderson and Conally (1974) - L 40 to 80°C
Lindenbaum (1966) - L 25°C

(C₃H₇)₄NBr [Tetrapropylammonium bromide]

Perron, Desrosiers and Desnoyers (1976) - C 25°C
Philip and Desnoyers (1972) - C 25°C (D₂O)
Sarma, Mohanty and Ahluwalia (1969) - C 25 to 35°C
Shin, Worley and Criss (1976) - C 5 to 85°C
Arnett and Campion (1970) - H 13 to 46°C
Levine and Wood (1973) - L 25°C (D₂O)
Lindenbaum (1966) - L 25°C

(C₃H₇)₄NI [Tetrapropylammonium iodide]

Perron, Desrosiers and Desnoyers (1976) - C 25°C
Sarma, Mohanty and Ahluwalia (1969) - C 25 to 35°C
Lindenbaum (1966) - L 25°C

Tetrapropylammonium polyacrylate

Ise, Mita and Okubo (1973) - L 25°C

(C₄H₉)₄NF [Tetrabutylammonium fluoride]

Lindenbaum (1971b) - L 25°C

(C₄H₉)₄NCl [Tetrabutylammonium chloride]

Perron, Desrosiers and Desnoyers (1976) - C 25°C
Lindenbaum (1966) - L 25°C

(C₄H₉)₄NBr [Tetrabutylammonium bromide]

Heuvelsland and Somsen (1976) - C 5 to 50°C
Jolicoeur, Philip, Perron, Leduc and Desnoyers (1972) - C 25°C
Mastroianni and Criss (1972b) - C 10 to 90°C
Mohanty, Sarma, Subramanian and Ahluwalia (1971) - C 15 to 35°C
Philip and Desnoyers (1972) - C 25°C (D₂O)
Sarma and Ahluwalia (1971) - C 45 to 75°C
Sarma, Mohanty and Ahluwalia (1969) - C 25 to 35°C
Shin and Criss (1976) - C 5 to 85°C
Arnett and Campion (1970) - H 5 to 60°C
Cassel and Wen (1972) - H 25°C
DeVisser and Somsen (1973) - H 5 to 50°C
Mohanty, Sarma, Subramanian and Ahluwalia (1971) - H 15 to 35°C
Fortier, Leduc, Picker and Desnoyers (1973) - L 25°C
Levine and Wood (1973) - L 25°C (D₂O)
Lindenbaum (1966) - L 25°C
Mayrath and Wood (1978) - L 125°C

(C₄N₉)₄NI [Tetrabutylammonium iodide]

Perron, Desrosiers and Desnoyers (1976) - C 25°C

(C₄H₉)₄N(C₄H₇O₂) [Tetrabutylammonium butyrate]

Desnoyers, DeVisser, Perron and Picker (1976) - C 25°C
Leduc and Desnoyers (1973) - C 25°C
Levine and Lindenbaum (1973) - C 15 to 45°C
Levine and Lindenbaum (1973) - L 15 to 45°C
Lindenbaum (1971b) - L 25°C

(C₄H₉)₄N(C₅H₉O₂) [Tetrabutylammonium valerate]

Lindenbaum (1971b) - L 25°C

$(C_4H_9)_4N(C_7H_{13}O_2)$ [Tetrabutylammonium heptylate]

Lindenbaum (1971b) - L 25°C

$(C_4H_9)_4N(C_8H_{15}O_2)$ [Tetrabutylammonium octanoate]

Desnoyers, DeVisser, Perron and Picker (1976) - C 25°C

Leduc and Desnoyers (1973) - C 25°C

$(C_4H_9)_4N(C_9H_{17}O_2)$ [Tetrabutylammonium pelargonate]

Lindenbaum (1971b) - L 25°C

$(C_4H_9)_4N(C_{10}H_{19}O_2)$ [Tetrabutylammonium caprate]

Lindenbaum (1971b) - L 25°C

Tetrabutylammonium polyacrylate

Ise, Mita and Okubo (1973) - L 25°C

$(C_5H_{11})_4NCl$ [Tetrapentylammonium chloride]

Perron, Desrosiers and Desnoyers (1976) - C 25°C

$(n-C_5H_{11})_4NBr$ [Tetrapentylammonium bromide]

Mohanty and Ahluwalia (1972) - C 30°C

Mohanty, Sunder and Ahluwalia (1972) - C 5 to 85°C

Sturtevant (1975) - C 10 to 80°C

$(C_5H_{11})_4NI$ [Tetrapentylammonium iodide]

Perron, Desrosiers and Desnoyers (1976) - C 25°C

E. R^1R_3NX

$(C_2H_4OH)(CH_3)_3NCl$ [Hydroxyethyltrimethylammonium chloride]

Boyd, Chase and Vaslow (1967) - L 25°C

$(C_2H_4OH)(CH_3)_3NBr$ [Hydroxyethyltrimethylammonium bromide]

Boyd, Chase and Vaslow (1967) - L 25°C

$(C_6H_{13}CH_3)_3NBr$ [Hexyltrimethylammonium bromide]

Birch and Hall (1972) - L 25°C

$(C_7H_7)(CH_3)_3NCl$ [Benzyltrimethylammonium chloride]

Boyd, Chase and Vaslow (1967) - L 25°C

$(C_7H_7)(CH_3)_3NBr$ [Benzyltrimethylammonium bromide]

Boyd, Chase and Vaslow (1967) - L 25°C

$(C_8H_{16})(CH_3)_3NBr$ [Octyltrimethylammonium bromide]

Birch and Hall (1972) - L 25°C

$(C_9H_{19})(CH_3)_3NBr$ [Nonyltrimethylammonium bromide]

Musbally, Perron and Desnoyers (1976) - C 5 to 50°C

$(C_{10}H_{21})(CH_3)_3NBr$ [Decyltrimethylammonium bromide]

Birch and Hall (1972) - L 25°C

$(C_{12}H_{25})(CH_3)_3NBr$ [Dodecyltrimethylammonium bromide]

Birch and Hall (1972) - L 25°C

Espada, Jones and Pilcher (1970) - L 23 to 30°C

Jones and Piercy (1973) - L 23°C

Jones, Pilcher and Espada (1970) - L 23 to 30°C

F. $R'R''R_2NX$

$(HOC_2H_4)(C_6H_5CH_2)(CH_3)_2NF$ [Benzylhydroxyethyl-
dimethylammonium fluoride]

Boyd, Chase and Vaslow (1967) - L 25°C

$(HOC_2H_4)(C_6H_5CH_2)(CH_3)_2NBr$ [Benzylhydroxyethyl-
dimethylammonium bromide]

Boyd, Chase and Vaslow (1967) - L 25°C

$(HOC_2H_4)(C_6H_5CH_2)(CH_3)_2NI$ [Benzylhydroxyethyl-
dimethylammonium iodide]

Boyd, Chase and Vaslow (1967) - L 25°C

5. Azoniaspiroalkanes

$(CH)_4N(CH_2)_4Br$ [5-azoniaspiro [4.4] nonane bromide]

Wen, LoSurdo, Jolicoeur and Boileau (1976) - C 25°C

Wilson and Wen (1975) - H 25°C

LoSurdo, Wen, Jolicoeur and Fortier (1977) - L
25°C

$(CH_2)_5N(CH_2)_5Cl$ [6-azoniaspiro [5.5]-undecane
chloride]

Wilson and Wen (1975) - H 25°C

LoSurdo, Wen, Jolicoeur and Fortier (1977) - L
25°C

$(CH_2)_5N(CH_2)_5Br$ [6-azoniaspiro [5.5]-undecane
bromide]

Wen, LoSurdo, Jolicoeur and Boileau (1976) - C
25°C

Wilson and Wen (1975) - H 25°C

LoSurdo, Wen, Jolicoeur and Fortier (1977) - L
25°C

$(CH_2)_5N(CH_2)_5I$ [6-azoniaspiro [5.5]-undecane
iodide]

Wilson and Wen (1975) - H 25°C

LoSurdo, Wen, Jolicoeur and Fortier (1977) - L
25°C

$(CH_2)_6N(CH_2)_6Cl$ [7-azoniaspiro [6.6]-tridicane
chloride]

LoSurdo, Wen, Jolicoeur and Fortier (1977) - L
25°C

$(CH_2)_6N(CH_2)_6Br$ [7-azoniaspiro [6.6]-tridicane
bromide]

Wen, LoSurdo, Jolicoeur and Boileau (1976) - C
25°C

Wilson and Wen (1975) - H 25°C

LoSurdo, Wen, Jolicoeur and Fortier (1977) - L
25°C

$(CH_2)_6N(CH_2)_6I$ [7-azoniaspiro [6.6]-tridicane
iodide]

LoSurdo, Wen, Jolicoeur and Fortier (1977) - L
25°C

6. Bolaforms

<u>Propane-1,3-bis(trimethylammonium) dichloride</u>	<u>Pentane-1,5-bis(trimethylammonium) diacetate</u>
Agharkar and Lindenbaum (1975) - L 25°C	Agharkar and Lindenbaum (1975) - L 25°C
<u>Propane-1,3-bis(trimethylammonium) dibromide</u>	<u>Pentane-1,5-bis(trimethylammonium) dibutyrate</u>
Agharkar and Lindenbaum (1975) - L 25°C	Agharkar and Lindenbaum (1975) - L 25°C
<u>Propane-1,3-bis(trimethylammonium) diacetate</u>	<u>Hexane-1,6-bis(trimethylammonium) dichloride</u>
Agharkar and Lindenbaum (1975) - L 25°C	Agharkar and Lindenbaum (1975) - L 25°C
<u>Propane-1,3-bis(trimethylammonium) dibutyrate</u>	<u>Hexane-1,6-bis(trimethylammonium) dibromide</u>
Agharkar and Lindenbaum (1975) - L 25°C	Agharkar and Lindenbaum (1975) - L 25°C
<u>Butane-1,4-bis(trimethylammonium) dichloride</u>	<u>Hexane-1,6-bis(trimethylammonium) diacetate</u>
Agharkar and Lindenbaum (1975) - L 25°C	Agharkar and Lindenbaum (1975) - L 25°C
<u>Butane-1,4-bis(trimethylammonium) dibromide</u>	<u>Hexane-1,6-bis(trimethylammonium) dibutyrate</u>
Agharkar and Lindenbaum (1975) - L 25°C	Agharkar and Lindenbaum (1975) - L 25°C
<u>Butane-1,4-bis(trimethylammonium) diacetate</u>	<u>Hexane-1,6-bis(triethylammonium) dibromide</u>
Agharkar and Lindenbaum (1975) - L 25°C	Burns and Verrall (1973) - C 18 to 33°C (D ₂ O)
<u>Butane-1,4-bis(trimethylammonium) dibutyrate</u>	<u>Heptane-1,7-bis(trimethylammonium) dichloride</u>
Agharkar and Lindenbaum (1975) - L 25°C	Agharkar and Lindenbaum (1975) - L 25°C
<u>Butane-1,4-bis(triethylammonium) dibromide</u>	<u>Heptane-1,7-bis(trimethylammonium) dibromide</u>
Burns and Verrall (1973) - C 18 to 33°C (D ₂ O) Verrall and Dickson (1976) - C 18 to 33°C	Agharkar and Lindenbaum (1975) - L 25°C
<u>Pentane-1,5-bis(trimethylammonium) dichloride</u>	<u>Heptane-1,7-bis(trimethylammonium) diacetate</u>
Agharkar and Lindenbaum (1975) - L 25°C	Agharkar and Lindenbaum (1975) - L 25°C
<u>Pentane-1,5-bis(trimethylammonium) dibromide</u>	<u>Heptane-1,7-bis(trimethylammonium) dibutyrate</u>
Agharkar and Lindenbaum (1975) - L 25°C	Agharkar and Lindenbaum (1975) - L 25°C

Octane-1,8-bis(trimethylammonium) dichloride

Agharkar and Lindenbaum (1975) - L 25°C

Octane-1,8-bis(trimethylammonium) dibromide

Agharkar and Lindenbaum (1975) - L 25°C

Octane-1,8-bis(trimethylammonium) diacetate

Agharkar and Lindenbaum (1975) - L 25°C

Octane-1,8-bis(trimethylammonium) dibutyrate

Agharkar and Lindenbaum (1975) - L 25°C

Octane-1,8-bis(tri-n-butylammonium) difluoride

Lindenbaum (1969) - L 25°C

Octane-1,8-bis(tri-n-butylammonium) dichloride

Lindenbaum (1969) - L 25°C

Octane-1,8-bis(tri-n-butylammonium) dibromide

Lindenbaum (1969) - L 25°C

Nonane-1,9-bis(trimethylammonium) dichloride

Agharkar and Lindenbaum (1975) - L 25°C

Nonane-1,9-bis(trimethylammonium) dibromide

Agharkar and Lindenbaum (1975) - L 25°C

Nonane-1,9-bis(trimethylammonium) diacetate

Agharkar and Lindenbaum (1975) - L 25°C

Nonane-1,9-bis(trimethylammonium) dibutyrate

Agharkar and Lindenbaum (1975) - L 25°C

Decane-1,10-bis(trimethylammonium) dichloride

Agharkar and Lindenbaum (1975) - L 25°C

Decane-1,10-bis(trimethylammonium) dibromide

Agharkar and Lindenbaum (1975) - L 25°C

Decane-1,10-bis(trimethylammonium) diacetate

Agharkar and Lindenbaum (1975) - L 25°C

Decane-1,10-bis(trimethylammonium) dibutyrate

Agharkar and Lindenbaum (1975) - L 25°C

Decane-1,10-bis(triethylammonium) dibromide

Burns and Verral (1973) - C 18 to 33°C (D₂O).
Verral and Dickson (1976) - C 18 to 33°C

1,10-diazobicyclo[8.8.8]hexacosane dibromide

Jolicoeur and Boileau (1974) - C 25°C

1,12 diazobicyclo[10.10.10]eicosane dichloride

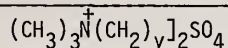
Jolicoeur and Boileau (1974) - C 25°C

7. Surfactants (organic sulfates and sulfonates)

C₆H₁₀SO₃ [p-Ethylbenzenesulfonic acid]

Boyd, Baslow, Schwarz and Chase (1967) - L 25°C

Alkyl trimethylammonium alkyl sulfates [CH₂]_x



Corkill, Goodman, Harrold and Tate (1966) - H 25°C

Polystyrenesulfonic acid

Dolar and Skerjanc (1974) - L 25°C

Skerjanc, Dolar and Leskovsek (1967) - L 25°C

Zinc-polystyrenesulfonate

Skerjanc, Dolar and Leskovsek (1967b) - L 25°C

C₆H₉SO₃Li [Lithium-p-Ethylbenzenesulfonate]

Boyd, Vaslow, Schwarz and Chase (1967) - L 25°C

Lithium-polystyrenesulfonates

Skerjanc, Dolar and Leskovsek (1970) - L 25°C

CH₃SO₄Na [Sodium methyl sulfate]

Tamaki, Isomura and Ohara (1972) - C 10 to 45°C

Birch and Hall (1972) - L 25°C

C₂H₅SO₄Na [Sodium ethyl sulfate]

Tamaki, Isomura and Ohara (1972) - C 10 to 45°C

C₃H₇SO₄Na [Sodium propyl sulfate]

Tamaki, Isomura and Ohara (1972) - C 10 to 45°C

C₄H₉SO₄Na [Sodium butyl sulfate]

Tamaki, Isomura and Ohara (1972) - C 10 to 45°C

C₅H₁₁SO₄Na [Sodium pentyl sulfate]

Tamaki, Isomura and Ohara (1972) - C 10 to 45°C

C₆H₁₃SO₄Na [Sodium hexyl sulfate]

Tamaki, Isomura and Ohara (1972) - C 10 to 45°C

Birch and Hall (1972) - L 25°C

C₈H₁₇SO₄Na [Sodium octyl sulfate]

Hutchinson, Manchester and Winslow (1954) - H 25°C

Birch and Hall (1972) - L 25°C

Goddard, Hoeve and Benson (1957) - L 25°C

C₁₀H₂₁SO₄Na [Sodium decyl sulfate]

Hutchinson, Manchester and Winslow (1954) - H 25°C

Birch and Hall (1972) - L 25°C

Goddard, Hoeve and Benson (1957) - L 25°C

Hutchinson and Winslow (1956) - L 25°C

C₁₂H₂₅SO₄Na [Sodium dodecyl sulfate]

Goddard and Brown (1956) - H 25°C

Berg (1977) - L 25°C

Birch and Hall (1972) - L 25°C

Pilcher, Jones, Espada and Skinner (1969) - L 25°C

C₆H₉SO₃Na [Sodium p-ethylbenzenesulfonate]

Boyd, Vaslow, Schwarz and Chase (1967) - L 25°C

Sodium-polystyrenesulfonic acid

Boyd and Wilson (1976) - L 25°C

Mita, Okubo and Ise (1976) - L 25°C

Skerjanc, Dolar and Leskovsek (1967) - L 25°C

C₆H₉SO₃K [Potassium p-ethylbenzenesulfonate]

Boyd, Vaslow, Schwarz and Chase (1967) - L 25°C

Potassium-polystyrenesulfonates

Skerjanc, Dolar and Leskovsek (1970) - L 25°C

C₆H₉SO₃Cs [Cesium p-ethylbenzenesulfonate]

Boyd, Vaslow, Schwarz and Chase (1967) - L 25°C

Cesium-polystyrenesulfonate

Skerjanc, Dolar and Leskovsek (1970) - L 25°C

8. Miscellaneous

Seawater

- Bromley, Desaussure, Clipp and Wright (1967) - C
2 to 80°C
- Bromley, Diamond, Salami and Wilkins (1970) - C
80 to 200°C
- Cox and Smith (1959) - C 0 to 30°C
- Duer, Leung, Oglesby and Millero (1976) - C 25°C
- Faletti, Herrick and Adams (1969) - C 5 to 85°C
- Mashovets, Matveeva, Puchkov and Fedorov (1973)
- C 25 to 350°C
- Duer, Leung, Oglesby and Millero (1976) - L 25°C
- Lindsay and Liu (1968) - V 106 to 200°C
- Mashovets, Matveeva, Puchkov and Fedorov (1973)
- V 25 to 340°C

CH₄N₂O [Urea]

- Bennewitz and Kratz (1936) - C 20°C
- Desrosiers, Perron, Mathieson, Conway and
Desnoyers (1974) - C 25°C
- Philip, Perron and Desnoyers (1974) - C 25°C
(D₂O)
- White (1936) - C 25°C
- Logwinienko, Taniewska-Osinska and Pluta (1972)
- H 5 to 25°C
- Hamilton and Stokes (1972) - L 5 to 45°C
- Perman and Lovett (1926) - L 40 to 80°C
- Perman and Lovett (1926) - V 40 to 80°C

CH₄N₂S [Thiourea]

- Lange and Miederer (1957a) - L 15 to 25°C

n-Dodecylpyridinium iodide

- Jones, Agg and Pilcher (1971) - L 25 to 40°C

1,1'-Dimethyl-4,4'-Dipyridinium Dichloride

- Perron and Desnoyers (1972) - C 25°C
- Perron and Desnoyers (1972) - L 25°C

Polyvinyl-n-butylpyridinium bromide

- Schulze (1954) - L 25°C

N-Butylpyridinium bromide

- Schulze (1954) - L 25°C

C₆H₆ONa [Sodium phenol]

- Hopkins, Duer and Millero (1976) - C 25°C

C₇H₅NONa [Sodium-m-Cyanophenol]

- Hopkins, Duer and Millero (1976) - C 25°C

C₇H₅NONa [Sodium-p-Cyanophenol]

- Hopkins, Duer and Millero (1976) - C 25°C

C₆H₅NO₃Na [Sodium-m-Nitrophenol]

- Hopkins, Duer and Millero (1976) - C 25°C

C₆H₅NO₃Na [Sodium-p-Nitrophenol]

- Hopkins, Duer and Millero (1976) - C 25°C

(C₆H₅)₄PCl [Tetrahexylphosphonium chloride]

- Desnoyers, DeVisser, Perron and Picker (1976) - C
25°C
- Jolicoeur, Philip, Perron, Leduc and Desnoyers
(1972) - C 25°C
- Mohanty and Ahluwalia (1972) - C 30°C
- Sunder, Chawla and Ahluwalia (1974) - C 25 to 30°C

(C₆H₅)₄AsCl [Tetrahexylarsonium chloride]

- Desnoyers, DeVisser, Perron and Picker (1976) -
25°C
- Jolicoeur, Philip, Perron, Leduc and Desnoyers
(1972) 25°C
- Sunder, Chawla and Ahluwalia (1974) - 15 to 75°C

(C₆H₅)₄PBr [Tetrahexyl phosphonium bromide]

- Jolicoeur and Philip (1975) - C 10 to 45°C

(C₆H₅)₄PBr [Tetrahexylphosphonium bromide] (cont.)

Sunder, Chawla and Ahluwalia (1974) - C 15 to 75°C

(C₄H₉)₄PBr [Tetrabutylphosphonium bromide]

Jolicoeur and Philip (1975) - C 10 to 45°C

Mohanty and Ahluwalia (1972) - C 30°C

Sunder, Chawla and Ahluwalia (1974) - C 5 to 75°C

(C₆H₅)₄BNa [Sodium tetraphenyl boride]

Desnoyers, DeVisser, Perron and Picker (1976) - C
25°C

Jolicoeur, Philip, Perron, Leduc and Desnoyers
(1972) - C 25°C

Jolicoeur and Philip (1975) - C 10 to 45°C

Mohanty, Sarma, Subramanian and Ahluwalia (1971)
- C 15 to 35°C

Subramanian and Ahluwalia (1968) - C 0 to 90°C

Wu and Friedman (1966b) - H 25°C

Hexamethylenetetramine

Quadrifoglio, Crescenzi, Cesaro and Delben (1971)
- L 25°C

Dimethyl-n-alkyl amine oxides (CH₃)₂(CH₂)_nN⁺-O⁻,
n = 8, 9, 10, 12

Benjamin (1964) - H 25°C

Numerical Treatments and Reviews

Abel (1946)

Ahluwalia and Cobble (1964b)

Bahe (1972)

Bjerrum (1927)

Bonino and Vaglio (1928)

Bump and Sibbett (1955)

Cabani, Conti, Matteoli and Tani (1976)

Chapas (1933)

Criss and Cobble (1964)

Eigen and Wicke (1954)

Fortier and Desnoyers (1976)

Gatty (1934)

Ginzburg (1959)

Gucker (1949)

Gucker and Rubin (1935)

Holsboer (1902)

Kapustinsky, Drakin and Yakushevskii (1953)

Lange (1959)

Lange and Meixner (1929a)

Lange and Meixner (1929b)

Lange and Monheim (1930c)

Lange and Robinson (1931)

Latysheva (1973)

Mikulín, Novoselov and Mishchenko (1970)

Novikov and Vasil'ev (1975)

Olofsson and Hepler (1975)

Parker (1965)

Pitzer (1937)

Pitzer, Peterson and Silvester (1978)

Pitzer and Silvester (1978)

Robinson and Frank (1934)

Silvester and Pitzer (1977)

Silvester and Pitzer (1978)

Stakhanova, Karapet'yants, Vasil'ev and Epikhin
(1964)

Woolley and Hepler (1977)

Young and Groenier (1936)

Young and Seligmann (1938)

Zdanovski (1972)

Zwicky (1926)

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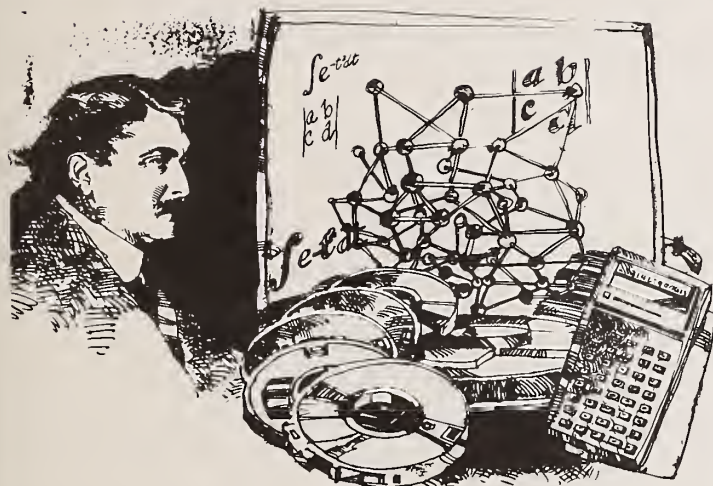
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