CNH_5O_3

NH_4HCO_3 №1119

NH_4HCO_3

Tm

BD - 1840 - IV | 1929

Ferres E.,
Behrens H.

Z. phys. Chem., Abt. A
Haber - Band, 1929,
695 - 716

7268 — 11

1873

$Pb(C_2H_3O_2)_2.3H_2O$ (kp, Hf^o)

NH_4HCO_3, $(NH_4)_2CO_3$ (p-p, Hf^o)

Berthelot
4 .Ann.chim.phys., 29, 433 (1873)

M, W

CNH_5O_3

1887

7017 – IV

NH_4HCO_3 (ag. H)

Berthelot M., Andre
1. Amer. Chim. phys., 1887, 11, 332-41

M, W

CNH_5O_3

7307 – 10

1899

Berthelot and Andre
4. Ann. chim. phys. 17, 433 (1899)

NH_4HCO_3; кр., р-р., ΔH_f°

C_2H_3ON (кс., ΔH_f°)

CNH_5O_3

Circ. 500

M 1B

7012 — 11

1926

NH_4HCO_3, kp, (p)

Bonnier
1.Ann.chim.5, 37 (1926)

M, W

CNH_5O_3

1928

NH_4HCO_3 ($T_м$) 1840-II

Terres E., Behrens H.

Z. physik. Chem., Abt. A, Haber Bd 139, 695-716 (1928)

"The physical-chemical principles of urea synthesis from ammonia, carbon dioxide and water." Б | C. A., 1930, 4691 2

7016 — 10

1929

NH_4HCO_3 (cr., Hf)

Kelley

4. J. Amer. Chem. Soc., 51, 1400
1929

M,W

CNH_5O_3

1839 - II'

1931

$NH_4HCO_3 \rightleftharpoons NH_3 + H_2O + CO_2$ (K_p)

Hutchison Wm. K.

J. Chem. Soc. 1931, 410-2

"Equilibrium constants for the decomposition of ammonia bicarbonate."

2

M V(9) C.A., 1931, 2629

1841 – IV

1954

NH$_4$HCO$_3$ (p, T_m)

Zernike J.

Rec. trav. chim., 1954, 73, 95. 101

Three-phase curve of ammonium bicarbonate

Б

C.A., 1954, 7412 d

8295-IV

NH_4HCO_3 (ΔH_f; ΔH_s) 1955

CNH_5O_3

Luft N.W.

Industr.Chemist., 1955, 31, N 369, 502-504 ( )

Sublimation pressuras and latent heats of ammonium salts.

NH_4SCN; NH_4CONH_2; $(NH_4)_2CO_3$; NH_4OCN; NH_4CN;

2

PX., 1956, N 23, 75524

БМ

IV-1838 I958

H_3O^+, $COONH_4OH$, $COONH_4OH_2^+$ (KP)

$COONH_4NH_2$, $COONH_4NH_3^+$ (Kp)

Abu E.M.S., Abdel Halim, Nussein Sadek
Z.phys.Chem.(BRD), I958, I4, N 3-4, I56-I63 ( )

The effect of mannitol or urea on dulute aqueous HCl solutions.

PX, I958, N I7, 56850

CNH_5O_3

9535 - 12

1961

NH_4HCO_3; $NH_4CO_2NH_2$ (P)

Barański A.
Chem. Stosowana, 1961, 5, 443-5

The dissociation vapor pressure ..

Be

CNOBHS

1963

NH_4HCO_3

Thermogravimetric investigation of decomposition of ammonium bicarbonate. Walter Wanek and Jaroslav Nyvlt (Res. Inst. Inorg. Chemistry, Usti n.L., Czech.). *Chem. Prumysl* 13(3), 123–6(1963). Decompn. of NH_4HCO_3 was studied at 20 to 170° and under isothermal conditions at 20° for 25 hrs., at 40° for 25 hrs., and at 60° for 5 hrs. Rate of decompn. was directly proportional to time and to surface of crystals, and increased with increasing temp. and moisture. Activation energy at 70 to 120° was 10.6 kcal./mol. If the reaction is considered to be an evapn., this value should be 2/3 of the heat of evapn., that is 10.2 kcal./mol. Vapor pressure of the salt contg. 0.5–5.0% moisture at 20° was 7.5 times that of the dry substance; 2.5 times owing to water, 5 times owing to the substance proper. Production of large crystals to improve storage properties in agricultural applications is suggested.

B. G. Mandelik

N1119

CNH_5O_3

C.A. 1963. 59. 5

4765c

50304.9042 Ex-Ch/XHB-z,Ch-z,TC	$(NH_4)_2SO_3$,48536 NH_4HCO_3	(vp,ΔH) 1974 40336

Czarnocki J., Habor J., Pawlikowska-Czubak J., Pomianowski A. Studies on kinetics and mechanism of the reaction of sulphur dioxide and nitrogen oxides with gaseous ammonia. II. Thermodynamic equilibria in the system SO_2, NH_3, H_2O и CO_2; Z. anorg. allg. Chem.

287 290 1974, 410, 213-18 ВИНИТИ

NH_4HCO_3 XIII – 5668 1980

House J. E. *

Inorg. and Nucl. Chem. Lett., 1980, 16, N 4, 185-7

ΔH_{tr}

$Cu(NH_4)_2CO_3$ i I