

CNH<sub>5</sub>O<sub>3</sub>

NH<sub>4</sub>HCO<sub>3</sub>

N1119



$T_m$

B.D. - 1840 - IV | 1929

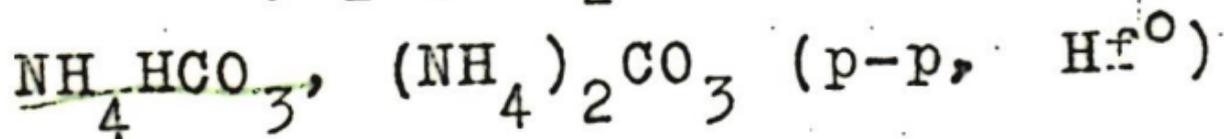
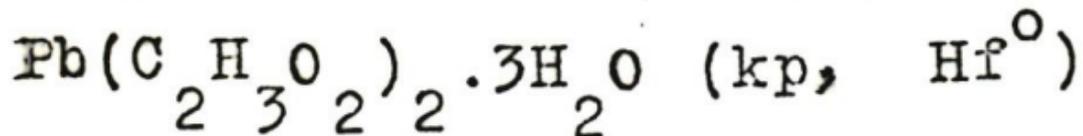
Ferres E.,  
Behrens H.

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

7268

-117

1873



Berthelot

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

M, W



1887

7017 - III

$\text{NH}_4\text{HCO}_3$  (ag. H)

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

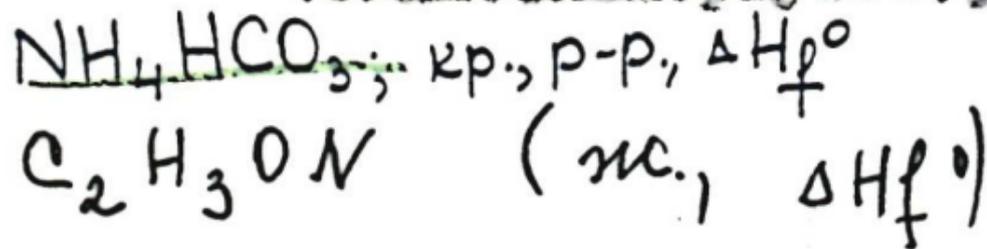
M, W

$\text{CNH}_5\text{O}_3$

7307-10

1899

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



Circ. 500

M B



~~MB~~

7012

- 10

1926

$\text{NH}_4\text{HCO}_3$ , kp, (p)

Bonnier

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

M, W

$\text{CNH}_5\text{O}_3$

$\text{NH}_4\text{HCO}_3$  ( $T_m$ )

1840-IV

1928

Tevens 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." BV(9) | C.A., 1930, 4691 L

7016 - 103

1929



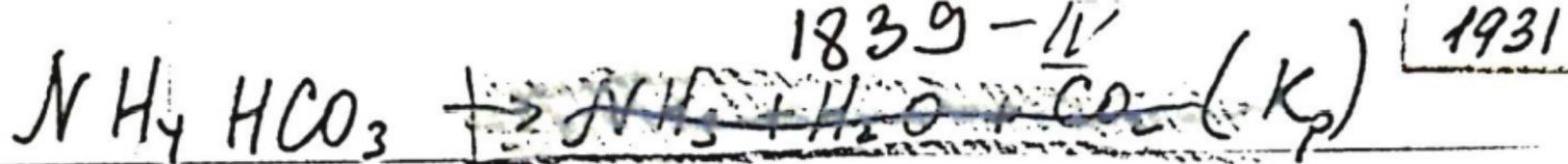
(cr., Hf)

Kelley

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

M, W





Hutchison Wm. K.

J. Chem. Soc. 1931, 410-2

"Equilibrium constants for the decomposition of ammonia bicarbonate."

M

V (91)

2

C.A., 1931, 2629

1841 - 12

1954

NH<sub>4</sub>HCO<sub>3</sub> (p. Tm)

Zernike J.

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

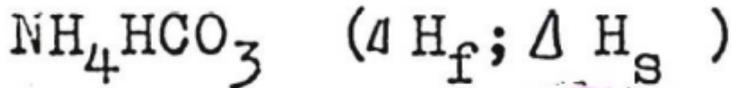
Three-phase curve of ammonium  
bicarbonate

Б

9

C.A., 1954, 7412 d

8295-17



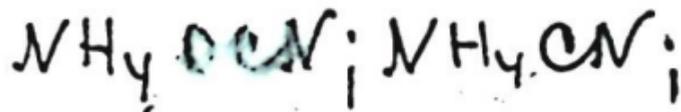
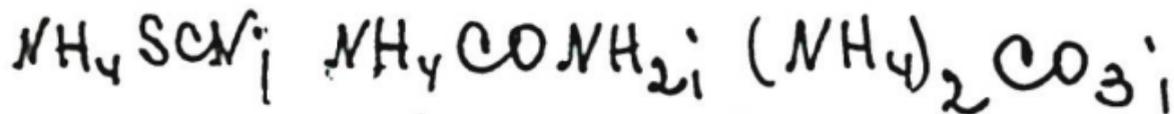
1955



Luft N.W.

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

Sublimation pressuras and latent  
heats of ammonium salts.

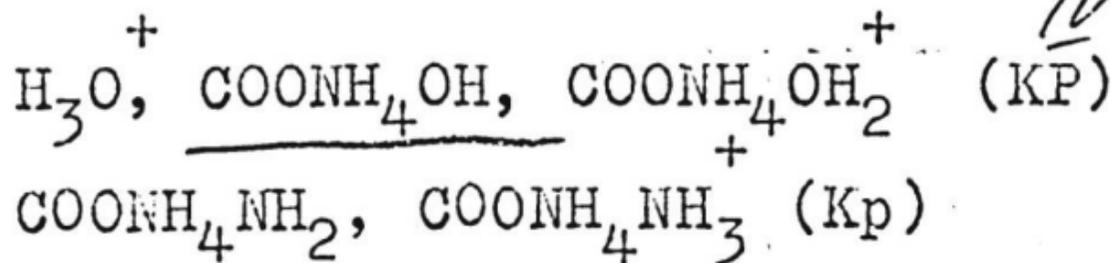


PX., 1956, N 23,  
75524

2  
number

БМ

g



W-1838

I958

Abu E.M.S., Abdel Halim, Nussein Sadek  
Z.phys.Chem.(BRD), 1958, I4, N 3-4, I56-  
I63 ( )

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

PX, 1958, N I7, 56850

$CNH_5O_3$

u

9535 - 12

1961

$\text{NH}_4\text{HCO}_3$ ;  $\text{NH}_4\text{CO}_2\text{NH}_2$  (P):

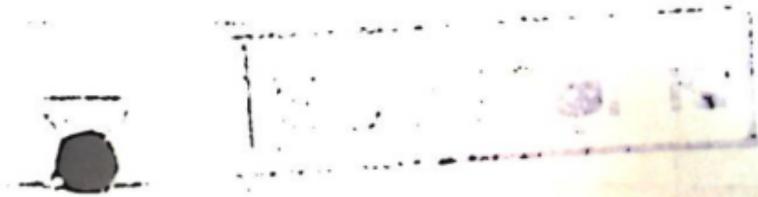
Barański A.

Chem. Stosowana, 1961, 5, 443-5

The dissociation vapor pressure ..

Be

CW O<sub>2</sub>HS



1963

 $\text{NH}_4\text{HCO}_3$ 

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  $\text{NH}_4\text{HCO}_3$  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

 $\text{C}_2\text{N}_2\text{H}_5\text{O}_3$ 

C.A. 1963.59.5

4765c

$(\text{NH}_4)_2\text{SO}_3$  (vr. sk)  
1974

50304.9042

Ex-Ch/XHB-z, Ch-z, TC

48536

$\text{NH}_4\text{HCO}_3$

4036

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  $\text{SO}_2$ ,  $\text{NH}_3$ ,  $\text{H}_2\text{O}$  u  $\text{CO}_2$ ; Z. anorg. allg. Chem.

287 290

1974, 470, 213-18

0208

ВИНИТИ

$\text{NH}_4\text{HCO}_3$

XIII-5668)

1980

House J. E. \*

Inorg. and Nucl. Chem.

Lett., 1980, 16, n4, 185-7

$\Delta\text{H}_f$

$\text{Cu}(\text{NH}_4)_2\text{CO}_3$  i-  
●