n-

t-.

NOTES

Alcohol	Acid, g.	Alc., g.	Time, hrs.	% ester	B. p. 756 mm. °C.	°C. ^B	р., Мт.	Sp. gr. 20°/20°	Chlori Calcd.	ine, % Found
			Es	ters of a	Acetic Acid					
n-Butyl	24 0	300	3	9 0	124 - 126					
			Esters o	f Mono	chloroacetic	Acid				
n-Butyl	47	50	1.5	97		94	38			
<i>n</i> -Amyl	100	120	3	88	196	105	35	1.0514	21.59	21.81
s-Amyl	47	50	3	89	185	93	27	1.0475	21.59	21.65
Diethyl methyl	94	100	4	85	184	93	30	1.0469	21.59	21.62
t-Amyl	94	100	2	65	168	88	43	1.0627	21.59	21.61
			Esters	of Dich	loroacetic A	cid				
n-Butyl	64	50	3	98		102	37			
n-Amyl	65	60	1.5	94	207	124	48	1.1455	35.63	35.52
s-Amyl	65	60	4	93	198	98	20	1.1210	35.63	35.29
Diethyl methyl	65	60	7	95	197^{a}	105	4 0	1.1225	35.63	35.35
t-Amyl	65	60	2	75	180°	93	30	1.1230	35. 6 3	35.72
			Ésters	of Tricl	hloroacetic A	lcid				
n-Butyl	82	50	3	98		111	40			
n-Amyl	61	38	3	91	218	118	30	1.2475	45.59	45.90
s-Amyl	81	60	2.5	95	206	108	30	1.2084	45.59	45.55
Diethyl methyl	163	100	5	80	2 01*	105	25	1.2081	45.59	45.71
t-Amyl	81	60	1.5	84	191 *	105	30	1.2505	45.59	45.73

" These tend to decompose partly into olefin and acid.

new; some old esters are given for comparisons of yields.

CHEMISTRY LABORATORY

UNIVERSITY OF WASHINGTON SEATTLE, WASHINGTON RECEIVED MARCH 7, 1938

The Relative Partial Molal Heat Content of Sodium Bromide in Aqueous Solutions at 25°

By A. L. ROBINSON

Harned and Crawford¹ have measured recently the electromotive forces of the cells

 $Ag-AgBr/NaBr(m)/Na_{x}Hg(m < 0.1)/NaBr(0.1)/AgBr-Ag$ at temperatures from 0 to 40° and from these have calculated values for the relative partial molal heat contents of sodium bromide. Their \overline{L}_2 values at 25° may be compared with values determined from calorimetric measurements extending to $0.00016 \ m^2$

792	\overline{L}_2 , e. m. f.	\overline{L}_{2} , cal.
0.1	101	76
.2	79	56
.5	55	- 32
1.0	-211	-208
1.5	-421	-384
2.0	-587	-540
2.5	-719	-656
3.0	-819	-753
3.5	-857	-834
4.0		- 899

(1) H. S. Harned and C. C. Crawford, THIS JOURNAL, 59, 1903 (1937).

(2) H. Hammerschmid and A. L. Robinson, ibid., 54, 3120 (1932).

The agreement is fair although the differences are somewhat larger than the usual estimates of precision of the two methods.

DEPARTMENT OF CHEMISTRY **RECEIVED APRIL 6, 1938** UNIVERSITY OF PITTSBURGH PTITSBURGH, PENNA.

A Sensitive Manostat for Low Gas Pressures. A Correction

By Theodore Soller, Seymore Goldwasser and Ralph A. Beebe

We are indebted to Professor Earl B. Working for calling our attention to the fact that the diagram of the photoelectric relay circuit given in our paper: "A Sensitive Manostat for Low Pressures and its Application to the Adsorption of Hydrogen and Deuterium on Copper,"¹ should contain a grid leak, that is, a high resistance of the order of 10⁸ ohms, between the grid and the cathode of the 6C6 tube. With infinite resistance in the grid circuit, this tube would block.

We have found that under ordinary conditions of humidity, the leakage resistance of the condenser and the sockets is sufficient to prevent blocking, so it has not been necessary for us to introduce a separate resistor. But under conditions of extremely good insulation it would be necessary to introduce a separate high resistance of this order of magnitude.

(1) THIS JOURNAL, 58, 1703 (1936).