

Table B. Heats of transformation,

Substance	tr. pts. °C	L_t kcal/mole	Ref.	m. pt. °C	L_t kcal/mole	Ref.
Ag	—			960.8	2.65 ± 0.1	147
AgCl				455	3.1 ± 0.1	124
AgBr				(430)	2.2 ± 0.4	124
AgI	147	(1.47)	124	558	2.25 ± 0.5	124
Ag ₂ S	176; 586	1.4 ± 0.4 ; —	192	842	2.7 ± 0.5	307
Ag ₂ SO ₄	430	3.75	364	660	(4.3)	364
Ag ₂ Se	133	1.6 ± 0.4	124			
AgCd	211; 443	—; 0.46 ± 0.2	264			
AgCd ₂				[578]	6.05 ± 0.3	264
Al	—			659	2.5 ± 0.03	147
AlF ₃	454	0.15	314			
Al ₂ Cl ₆				<193>	17.0 ± 0.6	124
Al ₂ Br ₆				97	5.4 ± 0.3	124
Al ₂ I ₆				191	8.0 ± 0.6	124
Al ₂ O ₃	(1000)			2030	(26.0)	121
Am						
As ₄						
AsF ₃				—6	2.49 ± 0.03	125
AsF ₅				—80	2.7 ± 0.4	198
AsCl ₃				—16	2.4 ± 0.4	121
AsBr ₃				31	2.8 ± 0.3	198
AsI ₃				142	2.2 ± 0.6	25
As ₄ O ₆	—33	1.35 ± 0.2	380	309	8.8 ± 1.0	198
Au	—			1063	3.05 ± 0.1	147
AuSn				418	6.12 ± 0.2	264
AuPb ₂				[254]	5.7 ± 0.4	124
AuZn				760	5.9 ± 0.3	264
AuCd	267 (o-d)	0.24	264	627	4.3 ± 0.2	264
AuCu	416 (o-d)	0.75 ± 0.1	264	—		
AuCu ₃	395 (o-d)	1.5 ± 0.1	264	—		
B				2030		
BF ₃	—131	0.018	125	—129	1.014	125
BCl ₃				—107		
BBr ₃				—47		
BI ₃				50		
B ₂ O ₃				450	5.3 ± 0.3	198

fusion and evaporation

b. pt. °C	L_0 at b. pt. kcal/mole	sb. pt. °C	L_0 at m. pt. or sb. pt.	L_0 at 25°C kcal/mole	L_0 at 25°C kcal/mole	Ref. and Remarks
2147	61.6 ± 1.5	—	66.3 ± 1.0	65.2 ± 1.5	67.9 ± 1.0	99
1564	42.5 ± 4.0	—	51.2 ± 3.0	50.3 ± 4.0	53.6 ± 4.0	120
1560	45.9 ± 4.0	—	—	55.0 ± 5.0	—	20
1505	34.5 ± 5.0	—	—	44.8 ± 5.0	—	120
dec. dec.	—	—	—	—	—	—
2450	69.5 ± 2.0	—	75.6 ± 2.0	—	76.9 ± 3.0	446
		1280	67.0 ± 3.0	—	74.5 ± 4.0	637
<160>	9.7 ± 0.3	180	26.7 ± 0.8	—	28.8 ± 0.8	120
255	10.9 ± 0.5	—	20.3 ± 0.6	16.7 ± 0.7	21.5 ± 0.8	120
385	15.4 ± 0.5	—	27.9 ± 1.5	23.9 ± 1.5	30.7 ± 1.5	120
2600	57.0 ± 4.0	—	—	62.2 ± 3.5	—	355
		622	27.3 ± 2.5	—	29.0 ± 2.5	23
58	7.1 ± 0.5	—	—	7.3 ± 0.5	—	25
—53	5.0 ± 0.2	—	—	—	—	25
130	7.5 ± 0.4	—	—	8.7 ± 0.5	—	198
221	10.3 ± 1.8	—	14.6 ± 1.7	11.8 ± 1.5	14.6 ± 1.7	25
424	14.2 ± 2.0	—	—	—	—	25
459	14.2 ± 1.0	—	$22.3 \pm 1.0^*$	—	$30.5 \pm 1.5^\dagger$	120 *monocl. † ortho- rhomb.
2950	82.0 ± 2.5	—	88.7 ± 1.5	87.7 ± 2.0	90.5 ± 2.0	120, 58
dec.	—	—	—	—	—	—
—	—	—	—	—	—	—
—	—	—	—	—	—	—
—	—	—	—	—	—	—
—	—	—	—	—	—	—
—101	4.6 ± 0.1	—	134.0 ± 3.0	—	136.5 ± 5.0	99
13	5.7 ± 0.2	—	—	—	—	25
91	7.3 ± 0.5	—	—	8.2 ± 0.5	—	120
210	10.1 ± 0.6	—	—	12.1 ± 0.7	—	120
						6

Table B. Heats of transformation,

Substance	tr. pts. °C	L_1 cal/mole	Ref.	m. pt. °C	L_f kcal/mole	Ref.
Ba	370	0.15 ± 0.08	147	710	1.83 ± 0.1	147
BaF ₂				1290	6.8 ± 1.0	394
BaCl ₂	922	4.1	474	962	4.0 ± 0.1	531
BaBr ₂				854	7.5 ± 0.2	474
BaI ₂				712	6.35 ± 0.1	474
BaO				1925	13.8 ± 2.0	
Ba(OH) ₂				408	3.4 ± 0.2	198
BaSO ₄	1150			1350	9.7 ± 0.8	121
BaCO ₃	806; 968	4.5; 0.7	154	dec.		
BaTiO ₃	5; 120	0.016; 0.047	14	1705		
Be	1254			1286	3.5 ± 0.2	538
BeF ₂				545		
BeCl ₂				410	3.0 ± 1.0	
Be ₂ Cl ₄				410	6.0 ± 2.0	
BeBr ₂				488	(4.5)	25
Be ₂ Br ₄				488	(9.0)	25
BeI ₂				480	(4.5)	25
Be ₂ I ₄				480	(9.0)	25
Bi	—			271.3	2.6 ± 0.05	147
Bi ₂	—			271.3	5.2 ± 0.1	
BiCl ₃				233	5.7 ± 0.2	
BiBr ₃				218	5.2 ± 0.2	
Bi ₂ O ₃	717	(27.9)	487	817	(6.8)	198
Bi ₂ S ₃				>750	(8.9)	121
Bi ₂ Te ₃				587	28.8 ± 0.6	443, 523
Bi ₃ Tl ₂				213	8.7 ± 0.5	264
Br ₂				-7.3	2.52 ± 0.1	23
C				3800	$25 \pm 2^*$	447
C ₂						
CCl ₄	-48	1.1 ± 0.05	125	-23	0.60 ± 0.02	125
CBr ₄	47	1.6 ± 0.05	387	90	0.95 ± 0.05	25
COCl ₂				-128	1.37 ± 0.05	125
CS ₂				-112	1.05 ± 0.1	125
COS				-139	1.13 ± 0.1	125
Ca	464	0.06		843	2.0 ± 0.1	147
CaF ₂	1151	1.14 ± 0.2	125	1418	7.1 ± 0.1	125

* at 48 Kbar

fusion and evaporation (contd.)

b. pt. °C	L_e at b. pt. kcal/mole	sb. pt. °C	L_s at m. pt. or sb. pt.	L_e at 25°C kcal/mole	L_s at 25°C kcal/mole	Ref. and Remarks
(1700)		—	(44.3)	(44.4)	(46.0)	159, 120
2215	67.0 ± 5.0	—	83.0 ± 5.0	89.0 ± 6.0		25
(1830)	(50.0)	—				25
			(90.0)			120
(2400)	73.8 ± 7.0	—	78.1 ± 4.0		79.5 ± 5.0	89, (58)
1200	45.3 ± 5.0	—		57.0 ± 6.0		217
(550)	(25.0)	—				25
492	(24.0)	—				25
(530)	(22.0)	—				25
487		—	(27.0)			25
487	(19.0)	—				25
(520)	(18.0)	—				25
1680	42.8 ± 2.0	—	48.9 ± 1.5	46.9 ± 1.5	49.5 ± 1.5	350
1790	36.7 ± 3.0	—	51.0 ± 2.5	47.3 ± 2.5	52.5 ± 2.5	350
441	17.3 ± 1.5	—		23.2 ± 1.5	29.7 ± 2.5	120, 467
461	18.0 ± 1.5	—		24.1 ± 1.5		120
(1890)						
61	7.3 ± 0.1	—		7.6 ± 0.1		362, 120
		(4350)			170.5 ± 3	23, 298, 283
					195 ± 10	283, 281
77	7.28 ± 0.1	—		7.88 ± 0.1	13.2 ± 0.5	25
190	10.6 ± 0.5	—	11.7 ± 0.5	12.2 ± 0.5	13.0 ± 0.3	218, 198
7.5	5.83 ± 0.05	—	—	—	—	125
46	6.5 ± 0.1	—	—	6.65 ± 0.1	—	120
-50	4.43 ± 0.02	—	—	—	—	125
1483	36.0 ± 1.0	—	39.7 ± 0.5	40.1 ± 1.0	42.1 ± 0.5	50, 330, 398
2510	74.6 ± 4.0	—	91.6 ± 3.0	97.0 ± 4.0	105.2 ± 3.0	25, 612, 442

Table B. Heats of transformation,

Substance	tr. pts. °C	L_1 kcal/mole	Ref.	m. pt. °C	L_1 kcal/mole	Ref.
CaCl ₂				772	6.8±0.1	125
CaBr ₂				742	6.9±0.1	531
CaO				2615	(19.0)	
CaSO ₄	1193				(6.7)	121
Ca ₂ P ₂ O ₇	1140	1.6±0.2	55	1353	24.1±0.5	55
CaC ₂	447	1.33±0.2	124	2300		
CaCO ₃	50*	0.045±0.02	126	dec.	—	
CaTiSiO ₅				1400	29.6±1.0	305
CaSiO ₃	1190	(1.3)		1540	(13.4)§	121
Ca ₂ SiO ₄	675; 1420	1.06; 0.78	262	2130		
CaTiO ₃	1260	(0.55)	198			
CaO·2B ₂ O ₃				990	27.1±0.4	124
CaO·B ₂ O ₃				1160	17.7±0.4	124
2CaO·B ₂ O ₃	531	1.1±0.2	124	1310	24.1±0.4	124
3CaO·B ₂ O ₃				1490	35.5±0.6	124
Ca ₂ Fe ₂ O ₅				[1480]	36.1±1.2	348
CaFe ₂ O ₄				[1240]	25.9±1.0	348
Cd	—			321	1.53±0.04	147
CdF ₂	—			1110		
CdCl ₂				568	7.2±0.2	632
CdBr ₂				567	8.0±0.2	632
CdI ₂	—			390	4.95±0.3	632
CdS				dec.		
CdSb				456	7.7±0.3	264
Ce	730	0.7	99	804	1.25±0.3	99
CeCl ₃				802		
CeBr ₃				732		
CeI ₃				760	12.4±0.2	474
Cl ₂				—101	1.53±0.08	125
Co	440; 1120	0.06; 0.07	147	1495	3.9±0.1	
CoCl ₂				740	14.1±3.0	208
Co ₂ Si				1330	16.5±1.5	264
CoSi				1400	16.0±1.0	264
CoSi ₃				1306	34.0±2.5	264
Co ₂ Sn				1165	16.0±1.5	264
Cr	—			1900	5.0±0.6	
CrCl ₂				815	7.7±1.5	198

fusion and evaporation (contd.)

b. pt. °C	L_e at b. pt. kcal/mole	sb. pt. °C	L_e at m. pt. or sb. pt.	L_e at 25°C kcal/mole	L_e at 25°C kcal/mole	Ref. and Remarks
(2000) (1800)		—	70.0±2.0		73.3±2.5	520
					149.5±8.0	22
—						* aragonite-calcite
—						§ 19.8±2.0
—						
—						
—						
—						
—						
765	23.9±0.3	—	26.3±0.4	25.5±0.5	26.75±0.5	120
1750	52.0±4.0	—	63.5±6.0	69.0±6.0		25
961	29.6±0.8	—	38.9±1.0	39.0±2.0	41.2±2.0	347, 120
863	27.0±2.0	—	33.5±2.5	31.2±4.0	36.2±3.0	25
796	25.4±2.0	—	31.1±3.0	29.3±3.0	32.9±3.0	25
dec.					51.0±4.0	92
(3470)						
1731			70.7±1.5		81.6±2.0	618
1562			68.3±1.5		78.2±2.0	618
—34.1	4.88±0.05	—	—	—	—	125
(2900)		—	98.4±3.0		101.5±4.0	52
1025	37.6±2.5	—	54.6±2.5	47.6±4.0	61.7±4.0	208, (120)
2690	81.7±1.5	—	88.8±0.8		94.8±0.7	235, 570, 150
1300	47.0±2.0	—	59.0±1.5	59.9±2.5	63.0±2.5	25

Table B. Heats of transformation,

Substance	tr. pts. °C	L_t kcal/mole	Ref.	m. pt. °C	L_t kcal/mole	Ref.
CrCl ₃				<1150>		
CrI ₂				793		
CrO ₂ Cl ₂				-95		
Cr(CO) ₆						
Cs	—			29.8	0.50±0.01	147
CsF				703	5.2±0.2	
CsCl	460			645	4.9±0.1	540
CsBr				635	5.65±0.2	474
CsI				621	5.7±0.2	474
Cu	—			1083	3.1±0.1	147
CuCl				430	2.45±0.5	25
Cu ₃ Cl ₃				430		
CuBr	380; 465	1.4; 0.7	91	488	(2.3)	25
"Cu ₃ Br ₃ "	380; 465			488		
CuI				588	(2.6)	25
Cu ₂ O				1230	(13.4)	198
Cu ₂ S	103; 350	0.92; 0.20	124	1130	2.6±0.5	190
Cu ₂ Se	110	1.16±0.1	124			
Cu ₂ Cd ₃				563	11.5±0.5	264
Fe	760; 910; 1400	(1.2); 0.22; 0.21	148	1536	3.3±0.2	180
FeCl ₂				677	10.3±0.1	124
Fe ₂ Cl ₆				307	(18.0)	
Fe ₂ Br ₆						
FeI ₂	370	0.14	179	594	(16.5)	
Fe _{0.95} O				1378	7.4±0.2	42, 45
Fe ₃ O ₄				1597	33.0±2.0	198
Fe ₂ O ₃	(680); (780)	0.16; —	42	[1457]		
FeS	138; 325	0.57; 0.12	41	1195	7.73±0.2	41
Fe ₃ C	190	0.18	124	1227	12.3±1.0	124
Fe(CO) ₅				-20	3.15±0.1	559
Fe ₂ SiO ₄	—			1220	22.0±1.0	181
FeTiO ₃	—			1370	21.7±0.5	124
Ga	—			29.8	1.336±0.01	147
GaCl ₃	—			78	(5.2)	25
Ga ₂ Cl ₆	—			78	(10.4)	25
GaBr ₃	—			122	(2.8)	
Ga ₂ Br ₆	—			122	(5.5)	
GaI ₃	—			212	(3.9)	

fusion and evaporation (contd.)

b. pt. °C	L_e at b. pt. kcal/mole	sb. pt. °C	L_e at m. pt. or sb. pt.	L_e at 25°C kcal/mole	L_s at 25°C kcal/mole	Ref. and Remarks
		945	56.8±2.5	—	63.0±2.5	25
			65.6±1.5	—	71.4±2.5	3
117	8.3±0.8	—	—	9.9±0.7	—	120
		151	17.2±2.5	—	—	198
700	15.9±0.5	—	—	18.3±0.5	18.8±0.5	58, 120
1210	37.2±1.5	—	45.9±1.0	43.0±1.5	48.7±1.0	594
1300	38.2±2.0	—	48.6±2.0	47.1±2.5	52.3±2.5	177, 120
1300	36.0±2.5	—	46.2±2.0	44.9±2.0	—	120
1280	35.9±2.0	—	46.0±2.0	44.7±2.0	—	120
2570	73.3±1.5	—	79.1±1.0	79.4±1.5	80.7±1.5	85, 120
1690	39.6					25
1595	8.0					25
1318	(33.4)					25
1730	(8.6)					25
1207	(31.1)					25
dec.						
—						
dec.						
3070	81.3±3.0	—	88.7±2.5	89.4±4.0	95.2±4.0	52, 120
1012	30.0±2.0	—	44.0±2.0	40.2±2.5	47.5±3.0	120, 322
315	14.5±2.0	—	32.7±3.0	21.7±3.0	—	459
					34.5±3.0	296
935	26.7±6.0		47.0±6.0	36.7±6.0	52.7±6.0	421, 621
dec.						
dec.						
—						
dec.						
dec.						
109	7.8±0.5	—	—	9.5±0.3	—	559, 120
dec.						
dec.						
2420	64.6±3.0	—	68.3±2.5	67.0±3.0	68.4±3.0	457
302	15.0±2.0	—	—	—	—	25
201	10.5±1.0	—	—	—	—	25
314	14.0±2.0	—	—	—	—	25
292	12.0±1.5	—	—	—	—	25
349	16.2±1.5	—	—	—	—	25

Table B. Heats of transformation,

Substance	tr. pts. °C	L_f kcal/mole	Ref.	m. pt. °C	L_f kcal/mole	Ref.
Ga ₂ I ₆	—			212	(7.8)	
Ge				940	8.8±0.3	614
GeCl ₄				—49		
GeBr ₄				26	2.9±0.5	
GeI ₄				146		
GeO ₂	1033			1116	10.5±2.0	
GeS				615	5.1±1.5	622
HF	—			—83	0.94±0.01	
H ₂ O				0	1.436±0.003	125
H ₂ O ₂				—0.5	2.92±0.1	64
H ₂ S	—170; —147	0.37; 0.11	125	—85.5	0.586±0.01	125
H ₂ S ₂				—90	1.8±0.3	198
H ₂ Se	—191; —101	0.31; 0.27	198	—66	0.60	198
H ₂ Te				—49	(1.6)	
Hf	1750	(1.65)		2222	(5.75)	
HfCl ₄				<432>		
HfBr ₄				<420>		
Hg	—			—39	0.55±0.005	30, 147
HgCl ₂				278	4.65±0.1	632
HgBr ₂				238	4.3±0.1	713
HgI ₂	130	0.65±0.1	124	250	4.5±0.5	25
HgS	386	1.0	198	dec.		
I ₂				114	3.77±0.08	124
In	—			157	0.78±0.02	147
InCl	120			225		
InCl ₂				(235)		
InCl ₃				<586>		
InBr				290	(3.1)	
InBr ₂				240		
InBr ₃				<436>		
InI				365	(3.6)	
Ir				2454	(6.3)	
IrF ₆	0.4	1.7		44	(1.2)	25

fusion and evaporation (contd.)

	b. pt. °C	L_e at b. pt. kcal/mole	sb. pt. °C	L_e at m. pt. or sb. pt.	L_e at 25°C kcal/mole	L_e at 25°C kcal/mole	Ref. and Remarks
	462	19.7±2.5	—				25
	2870	78.3±3.0	—	90.0±2.5	84.8±3.0	91.7±3.5	215, 300
	84	7.1±0.7	—	—	8.1±0.7	—	120
	189	8.6±0.7	—	14.4±1.2	11.5±0.8	14.4±1.2	120
	dec.	—	—	—	—	20.1±2.0	108
	760	34.7±3.0		40.5±2.5	38.4±4.0	43.5±3.0	411, 622, 469, 521
	19.5	*	—				* 89.5 cal/g
	100	9.82±0.03	—	—	10.51±0.01	—	125
	158	10.3±0.8	—	—	12.2±0.8	—	120
	—60.4	4.46±0.05	—	—	—	—	125, 198
	71		—	—	8.54±0.8	—	31
	—41	4.6±0.3	—	—	—	—	198
	—2	5.65±0.4	—	—	—	—	120
	4450	136.4±6.0	—	142.2±3.0		146.0±4.0	585
			316	23.8±1.0		27.0±1.5	584
			322	(24.0)		(26.0)	25
	357	14.13±0.1	—		14.65±0.1		30, 46
	304	14.1±0.4	—	18.6±0.5	16.8±0.5	19.9±0.5	120, 177
	319	14.1±0.5	—	19.8±0.2	17.0±0.5	20.5±0.5	120, 177
	354	14.3±0.5	—	19.8±0.4	17.9±0.7	21.8(α)	120
	183	9.96±0.2	—	14.45±0.1	11.57±0.3	14.9±0.1	23, 24, 124
	2062	55.4±2.0	—	57.9±2.0		58.1±2.0	7
	608	20.4±1.5	—		23.4±1.5		194
	(485)	(42.1)*	—				194, * disprop.?
			498	37.8±2.0			194
	660	22.7±1.5	—	27.4±1.0	25.3±1.5	28.4±1.5	346
	631	19.7±1.5	—		24.0±2.0		194
			371	25.9±2.0			194
	770	23.1±2.0	—	28.3±1.5	26.1±2.0	29.6±1.5	346
	4390	146.3±3.0	—	156.4±2.0		160.0±2.0	511, 585, 589
	53	7.4±1.0	—			9.0±1.0	449

Table B. Heats of transformation,

Substance	tr. pts. °C	L_1 kcal/mole	Ref.	m. pt. °C	L_1 kcal/mole	Ref.
K	—			63.5	0.571 ± 0.005	147
KF				857	6.75 ± 0.3	124
KCl				772	6.35 ± 0.1	474
KBr				740	6.1 ± 0.1	474
KI				685	5.75 ± 0.1	474
KOH	249	1.5 ± 0.4	198	400	1.8 ± 0.3	198
K ₂ SO ₄	583	2.14 ± 0.2	124	1069	8.8 ± 0.2	364
La	868	0.68		920	2.03 ± 0.3	
LaCl ₃				855	13.0 ± 0.2	474
LaBr ₃				783	13.0 ± 1.0	474
LaI ₃				761		
Li	—			180.5	0.70 ± 0.03	147, 290
LiF	—			848	6.4 ± 0.15	288
LiCl	—			610	4.75 ± 0.1	474
LiBr	—			550	4.22 ± 0.2	474
LiI	—			469	3.5 ± 0.1	474
LiOH				473	5.0 ± 0.1	326
Li ₂ SO ₄	575	6.8	364	859	(3.05)	364
Mg	—			650	2.1 ± 0.1	147
MgF ₂	—			1263	13.9 ± 0.2	124
MgCl ₂	—			714	10.3 ± 0.3	124
MgBr ₂	—			710	(8.3)	121
MgSO ₄				1130	(3.5)	121
Mg ₃ N ₂	550; 788	0.11; 0.22	124	dec.		
Mg ₃ Sb ₂	930			1230	36.5 ± 4.0	
Mg ₃ Bi ₂	700			823	25.5 ± 2.5	
Mg ₂ Si				1100	20.5 ± 2.5	
Mg ₂ Sn				778	11.5 ± 1.0	145
Mg ₂ Pb				550	9.4 ± 0.5	264
MgZn ₂				590	10.2 ± 1.0	264
Mn	720; 1100; 1136	0.48; 0.55; 0.43	147	1244	(3.2)	147
MnCl ₂				650	9.0 ± 0.2	124
MnO				1785	13.0 ± 1.5	
Mn ₃ O ₄	1172	5.0 ± 0.3	124	1560		
MnS				1530	(6.3)	41
Mn ₃ C	1040	3.6 ± 0.3	124			
Mo	—			2620	6.6 ± 0.7	
MoF ₅				67		

fusion and evaporation (contd.)

	b. pt. °C	L_e at b. pt. kcal/mole	sb. pt. °C	L_s at m. pt. or sb. pt.	L_e at 25°C kcal/mole	L_s at 25°C kcal/mole	Ref. and Remarks
	779	18.9 ± 0.5	—		21.0 ± 0.7	21.5 ± 0.7	120
	1510	44.6 ± 2.0	—		51.4 ± 2.0	57.8 ± 1.5	594, 177
	1407	39.0 ± 0.5	—	54.4 ± 1.5	49.7 ± 0.5	54.1 ± 0.8	276, 177, 120
	1383	37.2 ± 0.7	—	48.7 ± 0.6	46.6 ± 1.0	51.2 ± 0.8	276, 120
	1330	34.7 ± 1.5	—	46.5 ± 1.5	43.5 ± 2.0	49.2 ± 2.0	276, 120
	1330	30.9 ± 1.5	—		43.9 ± 1.5		120
	3420	96.1 ± 2.0	—	99.7 ± 1.5		101.0 ± 1.5	339, 464, 454
	1812			71.3 ± 1.5		82.9 ± 2.0	618
	1586			71.1 ± 1.5		81.8 ± 2.0	618
	1472			69.7 ± 1.5		80.0 ± 2.0	618
	1329	35.3 ± 2.0	—	38.3 ± 2.0	37.9 ± 2.5	38.6 ± 2.5	290, 167
	1681	51.0 ± 2.0	—	63.5 ± 3.0	64.2 ± 3.0	66.5 ± 2.5	120
	1382	36.0 ± 1.5	—	47.0 ± 2.0	46.8 ± 1.8	51.0 ± 2.5	120, 177
	1310	35.4 ± 1.5	—	45.6 ± 2.0	44.4 ± 1.8		120
	1170	40.8 ± 3.0	—	50.3 ± 3.5	48.8 ± 3.0		120
	1105	30.5 ± 1.5	—	34.0 ± 1.5	33.6 ± 2.0	35.0 ± 2.0	58, 120, 253
	2332	65.3 ± 1.5	—	87.5 ± 1.5	83.8 ± 1.5	93.0 ± 1.5	497
	1418	32.7 ± 2.0	—	50.0 ± 2.0	46.6 ± 2.5		120
	1230	(35.0)					25
	2060	52.7 ± 2.0	—	62.3 ± 1.0		67.1 ± 1.5	99
	1231	35.6 ± 2.0	—		46.0 ± 3.5		322, (120)
	4650	141.0 ± 5.0	—	151.8 ± 3.0		158.7 ± 3.0	99
	214	12.4 ± 0.5					449

Table B. Heats of transformation,

Substance	tr. pts. °C	L_t kcal/mole	Ref.	m. pt. °C	L_t kcal/mole	Ref.
MoF ₆	—9	1.96		17.5	1.0±0.1	449, 445
MoOF ₄				97	1.0±0.1	449
MoCl ₅				194	(8.0)	25
MoO ₃				795	12.55±0.4	40
N ₂	—237.5	0.0547	125	—210	0.172	125
NH ₃	—			—78	1.352±0.01	125
Na	—			97.8	0.63±0.01	147
NaF	—			992	8.0±0.1	314
NaCl	—			801	6.7±0.1	474
NaBr	—			750	6.25±0.1	474
NaI	—			660	5.65±0.1	474
NaOH	293	1.52±0.08	289	320	1.52±0.08	289
Na ₂ S	—			950	(1.6)	198
Na ₂ SO ₄	185; 241	0.7; 2.0	364	890	5.75±0.1	285, 397
Na ₃ Bi				775	16.6±1.5	
Na ₂ CO ₃	320; 480	0.25	397	850	7.0±0.3	533
Na ₂ SiO ₃				1088	12.5±0.3	124
Na ₂ Si ₂ O ₅	680	1.7±0.5		874	8.5±0.4	121
Na ₂ TiO ₃	287	0.4±0.1	124	1030	16.8±0.4	124
Na ₂ Ti ₂ O ₅				985	26.2±0.5	124
Na ₂ Ti ₃ O ₇				1128	37.1±0.5	124
Na ₅ Pb ₂				400	12.0±0.6	264
NaPb				368	3.9±0.3	264
Na ₂ AlF ₆	572	2.16	314	1130	27.6±0.3	314
NaHg ₂				350	6.3±0.4	264
Na ₂ MoO ₄	440	(14.6)	198	687	(3.6)	121
Na ₂ WO ₄	588	(8.4)	198	695	(5.7)	121
NbF ₅				78	2.9±0.1	445
NbCl ₅				205	6.9±1.0	
NbOCl ₃				267		
NbBr ₅				1460	(30.0)	
Nb ₂ O ₅	800; 1150					
NdCl ₃				760	12.0±0.2	474
NdBr ₃				684	10.8±0.2	474
NdI ₃				785	9.7±0.2	474
Ni	c. 358	0.14±0.02	147	1455	4.1±0.08	147
NiF ₂				1450		
NiCl ₂				<1030>	18.5±0.4	41

fusion and evaporation (contd.)

b. pt. °C	L_e at b. pt. kcal/mole	sb. pt. °C	L_e at m. pt. or sb. pt.	L_s at 25°C kcal/mole	L_s at 25°C kcal/mole	Ref. and Remarks
34	6.65±0.3	—		6.85±0.2	7.8±0.2	449, 432
186	12.1±0.5	—				449
268	15.0±3.5	—	23.5±3.0			33
1100	46.0±2.5	—	61.0±2.5	54.6±2.5	67.2±2.5	419, 340
—196	1.333±0.01	—	—	—	—	125
—33.5	5.58±0.02	—	—	—	—	125
882	23.7±0.4	—	26.2±0.5	25.7±0.6	26.35±0.6	312, 58
1710	51.8±2.0	—	63.3±2.0	60.2±2.5	67.2±2.0	177, 594
1465	40.7±0.2	—	52.5±0.5	50.5±0.7	56.1±0.8	276, 177, 120
1393	38.0±1.0	—	49.2±1.5	45.5±2.0	53.5±1.5	168, 177, 120
1304	38.1±1.0	—	48.6±1.5	47.1±1.5	51.6±1.5	120
1390	(34.5)	—	(36.5)			120
233	12.5±3.0	—	22.4±2.5	14.3±3.0	23.0±3.0	111, (120)
250	13.1±0.8	—	20.0±1.0			206, 2
361	18.7±1.0	335	24.4±1.0		26.1±1.5	602
dec.		—				2
1674			68.9±1.5		79.2±2.0	618
1495			67.4±1.5		76.6±2.0	618
1437			65.4±1.5		75.95±2.0	618
2920	89.6±4.0	—	99.7±3.0		102.6±3.0	107, 120
(1740)			56.7±2.0		65.3±2.0	478
—	—	970	53.8±2.0	—	59.1±2.0	322, 120

Table B. Heats of transformation,

Substance	tr. pts. °C	L_t kcal/mole	Ref.	m. pt. °C	L_t kcal/mole	Ref.
NiBr ₂	550			963	13.0 ± 2.5	121
Ni ₃ S ₂				790	(5.8)	
Ni(CO) ₄				-25	3.3 ± 0.01	
Ni ₂ Si				1318	12.0 ± 0.6	
NiSi	c. 582	0.85 ± 0.1	17	992	10.6 ± 0.6	264
Ni ₃ Sn ₂				1264	27.6 ± 0.8	
NiO·Fe ₂ O ₃						
NpF ₆				54.4	4.2 ± 0.2	
O ₂	-250; -229	0.0224; 0.178	125	-219	0.106	125
Os	-0.4 white yellow	1.97	449	70		
OsF ₅				33.4	1.76	
OsF ₆				42	(2.3)	
OsO ₄				56	(4.1)	
P ₄	white black violet			44	0.60 ± 0.02	124
PCl ₃	o'rhom. hexagonal			-91	1.08 ± 0.2	
PCl ₅				160		
PBr ₃				-40		
PI ₃				61		
P ₄ O ₆				24	(3.4)	
P ₄ O ₁₀				570	(11.5)	
H ₃ PO ₄				<420>		
POCl ₃				33	3.2 ± 0.4	
				2	3.2 ± 0.6	
Pb	c. 250			327	1.15 ± 0.03	288, 147
PbF ₂				824	(1.9)	
PbCl ₂				498	5.8 ± 0.3	
PbBr ₂				370	(4.5)	
PbI ₂	—			412	6.0 ± 0.6	124
PbO				886	6.6 ± 0.2	
PbSO ₄				1090	(9.6)	
PbTiO ₃						
	866	(4.1)	198			
	c. 490	1.15 ± 0.1	226			
Pd	—			1552	4.2 ± 0.5	
PdCl ₂				680	(11.5)	

fusion and evaporation (contd.)

	b. pt. °C	L_e at b. pt. kcal/mole	sb. pt. °C	L_s at m. pt. or sb. pt.	L_e at 25°C kcal/mole	L_s at 25°C kcal/mole	Ref. and Remarks
			919	53.7 ± 1.5	—	58.9 ± 1.5	207
	42	7.0 ± 0.2	—		7.0 ± 0.3		120
	—		—				
	—		—				
	—		—				
	55	7.2 ± 0.2		11.45 ± 0.2	7.35 ± 0.2	11.6 ± 0.2	567
	-183	1.63 ± 0.01	—	—	—	—	125
5030						189.0 ± 3.0	451
226		15.7 ± 3.0					449
47.5		6.72					449
130		9.45 ± 0.7	—	11.8 ± 0.7			120
130		9.45 ± 0.7	—	13.5 ± 0.7			120
280		12.4 ± 0.7	—	13.9 ± 0.5	13.4 ± 0.5	14.05 ± 0.5	44, 120
			453	33.1 ± 3.0			120
			413	25.6 ± 3.0			120
75		7.3 ± 0.3	—		7.7 ± 0.3		120, 25
166*				14.0 ± 2.5			25, * dec.
174		9.5 ± 0.4	—				25
(230)		10.5 ± 0.7	—				25
175		10.4 ± 2.0	—				120
600		(26.0)	—	(37.8)			120
			360	(17.6)			198
105		8.4 ± 0.5	—	11.6 ± 0.8	8.4 ± 0.5		120
1740		42.5 ± 0.5	—	46.4 ± 0.6	45.8 ± 0.7	46.9 ± 0.7	77, 58, 120
1293		38.3 ± 3.0	—		51.0 ± 5.0		120
952		30.3 ± 1.2	—	42.0 ± 1.2	42.6 ± 1.2	45.0 ± 1.5	347, 120
914		27.7 ± 2.0	—	39.3 ± 2.0	39.6 ± 2.0	41.3 ± 2.0	120
872		24.6 ± 1.0	—	38.6 ± 1.0	40.3 ± 1.5	41.2 ± 1.5	120
2940. (1200)		86.4 ± 2.5		87.8 ± 0.7 34.1 ± 2.0		90.1 ± 0.7	473, 511, 423 582

Table B. Heats of transformation,

Substance	tr. pts. °C	L_t kcal/mole	Ref.	m. pt. °C	L_t kcal/mole	Ref.
Po	100			246		
Pr	789			935	2.7 ± 0.5	121
PrCl ₃				786	12.1 ± 0.2	474
PrBr ₃				693	11.3 ± 0.2	474
PrI ₃				736	12.7 ± 0.2	474
Pt	—			1769	4.7 ± 0.5	
Pu	122, 205, 318, 451, 476	0.80, 0.15, 0.13, 0.02, 0.44	595	640	0.67 ± 0.03	595
PuF ₃				1170	7.9 ± 1.0	185
PuF ₆				52	4.2 ± 0.5	595
PuCl ₃				760	15.2 ± 1.5	185
PuBr ₃				681	14.0 ± 1.5	185
Rb	—			39	0.525 ± 0.01	147
RbF	—			775	6.3 ± 1.0	25
RbCl	—			715	(4.4)	25
RbBr	—			680	(3.7)	25
RbI	—			640	(3.0)	25
Re				3180	8.0 ± 1.0	410
ReF ₆	—3	2.1		19	1.0 ± 0.1	
ReF ₇				48	1.8 ± 0.2	566
ReOF ₄				108	3.25	449
ReOF ₅	30	1.34		41	1.2	449
ReO ₂ F ₃				90		
Re ₂ O ₇				296	(15.3)	120
Rh				1960		
S	95.5	0.096	124	119	0.40 ± 0.03	198
S ₂					0.60	
S ₄					1.2	
S ₆					1.8	
S ₈					2.4	
S ₂ F ₁₀				—53		
S ₂ Cl ₂				—76		
SOCl ₂				—104		
SO ₂ Cl ₂				—46		
SO ₂				—75.5	1.77 ± 0.03	125

fusion and evaporation (contd.)

b. pt. °C	L_e at b. pt. kcal/mole	sb. pt. °C	L_e at m. pt. or sb. pt.	L_e at 25°C kcal/mole	L_e at 25°C kcal/mole	Ref. and Remarks
965	24.1 ± 2.0	—		26.0 ± 2.0		351
(3020)						
1709			69.75 ± 1.5		80.4 ± 2.0	618
1522			67.9 ± 1.5		77.25 ± 2.0	618
1422			65.8 ± 1.5		75.7 ± 2.0	618
4170	112.1 ± 6.0	—	125.8 ± 4.0	126.6 ± 5.0	130.2 ± 5.0	58, 473, 511
(3230)	82.1 ± 8.0	—	81.0 ± 7.0		84.1 ± 8.0	99
(2120)	(76.6)	—	96.6 ± 2.5	103.4 ± 4.0	108.5 ± 4.0	185
62	7.2 ± 0.8	—				595
1790	44.4 ± 2.5	—	72.8 ± 2.5	67.0 ± 3.0	80.4 ± 3.5	185
1475	46.2 ± 3.0	—	69.9 ± 2.5	64.9 ± 3.0	76.7 ± 3.5	185
673	18.1 ± 1.0	—	20.9 ± 1.0	20.4 ± 1.0	20.9 ± 1.0	658
1390	42.5 ± 1.5	—	52.1 ± 1.5	49.5 ± 1.5	55.7 ± 1.5	594
1381	39.6 ± 2.0	—	(48.6)	49.1 ± 2.0		177, 120, 168
1352	37.0 ± 1.0	—	(44.7)	45.0 ± 2.0		168, 120
1304	36.0 ± 1.0	—	(43.0)	44.9 ± 2.0		120
(5650)			178.0 ± 2.5		186.1 ± 2.0	410, 99
33.7	6.8 ± 0.2	—		6.9 ± 0.3	7.85 ± 0.2	566, 449
74	8.55 ± 0.2	—	9.15 ± 0.2	7.0 ± 0.2	9.2 ± 0.2	566
172	14.6 ± 0.5	—	17.8 ± 0.5			449
73	7.7 ± 0.4	—	8.95 ± 0.5			449
185	15.7 ± 0.5	—				449
362	18.0 ± 3.5	—	33.4 ± 3.5			120
3760		—	129.4 ± 2.0		132.8 ± 2.5	511, 473
444.6*						* S _x
625	25.4 ± 1.0	—	30.7 ± 1.0	30.5 ± 1.0	31.05 ± 1.0	21, 122
625	22.9 ± 3.0	—	31.5 ± 3.0	30.7 ± 3.0	31.75 ± 3.0	21
527	15.8 ± 2.5	—	26.9 ± 2.5	25.95 ± 2.5	27.45 ± 2.5	21
490	15.1 ± 2.5	—	29.1 ± 2.5	27.95 ± 2.5	30.0 ± 2.5	21
29	7.0 ± 0.2	—	—	7.0 ± 0.2	—	25
138	8.7 ± 0.1	—				25
76	7.4 ± 0.3	—		7.7 ± 0.3		120
69	7.5 ± 0.2	—		7.8 ± 0.2		120
—10	5.96 ± 0.05	—	—	—	—	125

Table B. Heats of transformation,

Substance	tr. pts. °C	L_t kcal/mole	Ref.	m. pt. °C	L_t kcal/mole	Ref.
SO ₃	α β γ			17 32.5 <62>	0.5 2.5 6.1	
Sb ₂	—			630.5	9.5±0.2	147
Sb ₄	—			630.5	19.0±0.4	147
SbCl ₃				73	3.1±0.3	121
SbCl ₅				3	2.4±0.3	25
SbBr ₃				97	3.5±0.3	25
SbI ₃				170	4.2±0.6	
Sb ₄ O ₆	570	(3.4)	120	656	(26.0)	120
Sb ₄ S ₆				546	30.0±1.6*	
Sc	1334	0.5		1538	(4.0)	
ScCl ₃				960		
ScBr ₃				<960>		
ScI ₃				<945>		
Se ₆	150			220	9.0±1.0	147
SeF ₄				—35	2.0±0.3	25
SeF ₆						
Si	—			1410	12.1±0.4	391
SiH ₄	—210	0.147	125	—185	0.16±0.01	125
SiF ₄				—90		
SiCl ₄				—70	1.85±0.1	125
SiBr ₄				5		
SiI ₄				122		
Quartz	575	(0.15)	198			
Cristob.	250	0.31±0.05	170		3.6±0.5	*
Sm	917	0.74	624	1072	2.13±0.1	624
Sm ₂ O ₃	922	0.25	587			
Sn	13	0.50±0.03	147	232	1.69±0.03	147
SnCl ₂				247	(3.05)	121
SnCl ₄				—34	2.2±0.3	125
SnBr ₂				232	(1.72)	121
SnBr ₄				30	2.85±0.5	218
SnI ₂				320	(3.0)	
SnI ₄				145	4.6±0.2	25

fusion and evaporation (contd.)

b. pt. °C	L_e at b. pt. kcal/mole	sb. pt. °C	L_s at m. pt. or sb. pt.	L_e at 25°C kcal/mole	L_s at 25°C kcal/mole	Ref. and Remarks
43			11.76			198
43			12.96			198
		52	15.9			198
1675	39.4±0.8	—	56.0±0.8	49.3±1.0	—	321, 23
		—	46.6±1.0	33.6±1.2	50.8±2.0	321, 23
220	10.4±0.3	—	15.5±0.3	13.1±0.4	15.8±0.4	120
dec.		—		11.7±2.5		120
280	(14.1)	—		15.1±2.5		239
400	16.4±2.0	—	20.6±3.0			239
1425		—	(44.0)			120
—		—	(51.2)			252, (92)
						* 298°K
(2870)			86.3±3.0		89.9±4.5	554, 623, 339
967			65.0±3.0			25
		929	63.0±3.0			25
		909	61.0±3.0			25
695	(21.5)	—				28, 205
102		—46	6.4±0.5	11.3±1.0	—	183
—						25
3280	91.6±2.5		105.8±2.0	95.3±2.5	107.8±2.5	502, 468
—112	2.96±0.05	—				125
—97	4.5±0.3	—95	6.15±0.3			25
58	6.8±0.4	—		7.2±0.4		119, 25
153	9.05±0.2	—				25
301	12.0±0.6	—		14.75±0.7		6
dec.						
dec.						* F.D. Richardson
1800	39.4±4.0		45.9±1.5		49.6±1.5	405, 517
2623	70.8±2.0	—	71.9±1.5		72.2±1.5	215, 282
652	19.5±2.0			25.8±3.0		25
115	8.1±0.4	—		9.3±0.3		112, 86
639	23.3±2.0	—		30.0±3.0		25
207	9.8±0.8	—		12.2±1.2		112, 218
715	23.8±2.0	—		34.0±3.0		25

Table B. Heats of transformation,

Substance	tr. pts. °C	L_t kcal/mole	Ref.	m. pt. °C	L_t kcal/mole	Ref.
SnO ₂	410, 540	(0.45), (0.30)	198			
Sr	235; 540			770	(2.1)	
SrF ₂				1400	4.3±0.6	25
SrCl ₂	730	(1.5)	531	873	3.8±0.2	474, 531
SrBr ₂	645	(2.9)		657	2.5±0.3	474
SrI ₂				538	4.7±0.2	474
SrO				2460	16.7±2.0	
SrCO ₃	924	(4.7)	154			
Ta	—			2980	5.9±0.7	
TaCl ₄						
TaCl ₅	?			220	8.8±0.6	
TaBr ₅				269	10.9±0.5	
TaI ₅				496	(1.1)	2
Tc ₂ O ₇				119	11.5±1.7	
Te ₂	—			450	8.36±0.3	147
Te ₂ F ₁₀	—			—34		
TeF ₄				130	6.35±1.0	110
TeF ₆	—74	0.5	198	—38	2.1±0.4	198
TeCl ₂				175		
TeCl ₄				224	4.5±0.1	124
TeO ₂				733	6.95±0.2	
Th	1325	0.7		1750		
ThCl ₄				765	(22.5)	25
ThBr ₄				680	9.5±0.8	25
ThI ₄				566	8.0±1.0	25
Ti	882	0.80±0.07	408	1667	4.5±0.5	214
TiF ₄						
TiCl ₃				(730)	(5.0)	293
TiCl ₄	—			—25	2.24±0.1	125
TiBr ₄				38	3.1±0.2	197
TiI ₂						
TiI ₄				150	4.2±0.8	
TiO	991	0.82±0.2	124	2020	14.0±2.0	
Ti ₂ O ₃	200	0.22±0.05	124	2130		
Ti ₃ O ₅	177	2.24±0.2	124			
TiO ₂				1840	15.5±2.5	

fusion and evaporation (contd.)

	b. pt. °C	L_e at b. pt. kcal/mole	sb. pt. °C	L_e at m. pt. or sb. pt.	L_e at 25°C kcal/mole	L_e at 25°C kcal/mole	Ref. and Remarks
	1350	36.9±3.0	—	40.6±3.0	40.4±3.0		398, 120
	2480	71.5±5.0	—	86.5±5.0	96.0±6.0	(100.0)	25
						124.8±4.0	169
			—	187.8±2.5		186.9±1.5	99
						32.5±2.0	601
	234	12.0±0.8	—	20.9±1.0		22.3±1.5	601
	347	14.9±0.7	—	25.8±1.0		29.25±1.0	2, 273
	545	17.9±1.5	—	19.5±1.5		25.2±2.0	2
	312	14.0±1.5	—	30.2±1.5	21.2±1.0	31.7±2.0	
	998	25.0±2.0	—	38.0±2.0	33.3±2.0	40.3±2.5	28, 563, 294
	54		—		9.45±1.0		56
			—39	14.5±1.0			110
	322	15.3±1.5	—	6.5±0.4			198
	392	16.8±1.5	—	24.3±1.5	23.4±1.5	27.5±1.6	25
				56.8±3.0		61.7±3.5	120
							250
	(4850)			133.4±2.5		137.6±2.0	466
	922	36.5±4.0	—				25
	857	34.5±4.0	—	44.5±4.0			25
	837	31.5±3.0	—				25
	3285	101.7±2.5	—	108.2±1.0		112.1±1.0	15, 52, 450
				21.5±0.5		22.9±0.5	369
	(750)	(33.0)	283	(38.0)		(41.6)	
	137	8.65±0.5	—		9.92±0.6		211
	233	10.5±0.4	—	16.1±0.6	13.1±0.6	16.2±0.6	369, 218, 197
			1170	53.2±6.0		56.3±6.0	84
	377	13.4±1.0	—	20.5±1.5	17.6±1.5	21.6±1.5	15

Table B. Heats of transformation,

Substance	tr. pts. °C	L_t kcal/mole	Ref.	m. pt. °C	L_t kcal/mole	Ref.
Tl	234	0.09 ± 0.01	147	304	1.03 ± 0.03	147
TlF				327	3.3 ± 0.2	463
TlCl				429	3.8 ± 0.3	463
TlBr				460	3.9 ± 0.2	463
TlI	165			440	3.5 ± 0.2	25
Tl ₂ SO ₄	430	~ 0		632	5.5 ± 0.5	364
U	668, 775	$0.70; 1.15$	124	1130	3.0 ± 0.7	
UF ₄				1036	10.2	399
UF ₆				<64>	4.59 ± 0.05	160, 179
UCl ₄				590	10.7	399
UBr ₄				519	13.2	399
V	1550?			1915		
VF ₅				19.5		
VCl ₄				-26		
VOCl ₃				-79		
VO ₂	72	1.03 ± 0.2	124	[1360]	13.6 ± 0.3	124
V ₂ O ₅				670	15.6 ± 0.4	124
W	—			(3380)	(8.4)	23
WF ₆	-8.2	1.4	198	1	0.42 ± 0.1	449
WCl ₅				240	(4.2)	
WCl ₄	230	1.73		281	1.54	236
WCl ₆	227	(2.2)		280	(4.8)	
WOF ₄				105	2.26	449
WOCl ₄				204		
WO ₃	c. 720			1473		
Y	1485	1.2	437	1530	2.75 ± 0.1	437
Y ₂ O ₃	1057	0.31	587			
Zn				419.5	1.74 ± 0.03	147
ZnF ₂				872		
ZnCl ₂				318	2.45 ± 0.2	463
ZnBr ₂				402	3.74 ± 0.2	463
ZnI ₂				446		
ZnS	1020	(3.2)				
Zn ₃ Sb ₂	405, 455			565	(22.0)	264
Zr	852	0.9 ± 0.1	132	1857	4.6 ± 0.7	

fusion and evaporation (contd.)

	b. pt. °C	L_c at b. pt. kcal/mole	sb. pt. °C	L_u at m. pt. or sb. pt.	L_u at 25°C kcal/mole	L_u at 25°C kcal/mole	Ref. and Remarks
	1460	39.7 ± 0.8	—	42.4 ± 0.6	41.9 ± 0.8	43.2 ± 0.8	120, 58
	(700)	(27.7)	—	32.7 ± 1.0		34.0 ± 1.5	344
	816	24.75 ± 1.0	—	30.7 ± 1.0	28.9 ± 1.2	32.4 ± 1.0	344, 120
	825	24.7 ± 1.2	—	31.0 ± 1.0	29.5 ± 1.2	32.7 ± 1.2	344, 120
	845	24.8 ± 1.5	—	30.3 ± 1.2	29.7 ± 1.5		344, 120
	3930	99.7 ± 4.0	—		109.4 ± 3.0	115.2 ± 3.0	99
	1457	53.0 ± 4.0					399
	<51>		57	11.5 ± 0.1	7.25 ± 0.2	11.85 ± 0.1	160, 166, 179
	789	33.8 ± 3.0					399
	777	28.5 ± 3.0					399
	(3350)		—	119.9 ± 6.0		121.9 ± 7.0	51
	48	11.1 ± 1.0	—		11.1 ± 1.0		35
	160	7.9 ± 0.4	—		9.5 ± 0.3		229
	127	8.0 ± 0.6	—		9.2 ± 0.6		63, 142
	dec.			(76.4)	(70.8)		187
	(5500)	197.0 ± 5.0	—	205.0 ± 3.0		203.0 ± 3.0	99
	17	6.35 ± 0.5	—	—	6.15 ± 0.4		120, 449
	298	12.6 ± 3.0	—	16.8 ± 2.5			221
	338	13.9 ± 2.0	—	18.7 ± 3.0			221, 130
	186	14.25	—	16.5			449
	220	11.5 ± 2.0	—				141, 221
				(109.0)		(122.0)	250
	3300	87.8 ± 3.0	—	97.4 ± 2.0		101.5 ± 2.0	339
	907	27.3 ± 0.4	—	30.25 ± 0.4	29.5 ± 0.7	30.9 ± 0.7	251, 120
	1500	44.0 ± 3.0	—		59.0 ± 5.0		25
	732	28.5 ± 3.0	—	37.1 ± 1.5	35.6 ± 2.0	38.0 ± 1.5	177, 120
	650	(23.5)	—	29.8 ± 1.5		31.3 ± 1.5	177
	(730)		—	27.3 ± 1.5		28.6 ± 2.0	177
						69.0 ± 5.0	92, 252
	4400			143.4 ± 2.0		146.2 ± 2.5	230

Table B. Heats of transformation,

Substance	tr. pts. °C	L_t kcal/mole	Ref.	m. pt. °C	L_t kcal/mole	Ref.
ZrF ₄ ZrCl ₄ ZrBr ₄ ZrI ₄ ZrO ₂	1200	1.42±0.1	132	<437> <450> <499> 2700	9.0±2.5	584

fusion and evaporation (contd.)

b. pt. °C	L_o at b. pt. kcal/mole	sb. pt. °C	L_s at m. pt. or sb. pt.	L_o at 25°C kcal/mole	L_s at 25°C kcal/mole	Ref. and Remarks
[279]		908 334 357 431	55.5±3.5 24.7±1.0 25.8±2.5 29.0±2.5		64.3±4.0 27.9±1.5 29.3±2.5 33.3±2.5	324, 62 584 120 120