

## SUPPLEMENTARY MATERIAL

### Sublimation thermodynamics of nucleobases derived from Fast Scanning Calorimetry

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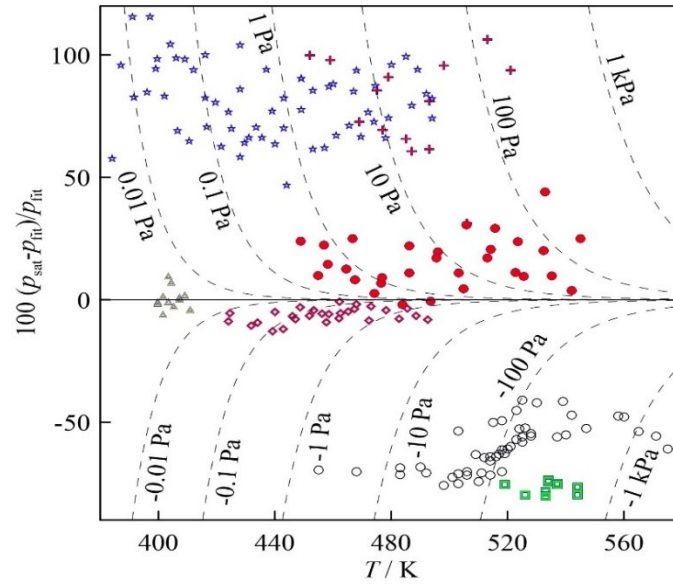
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**Table S1** The results of the temperature dependence of frequency shift rate  $df/dt$  and vapor pressure using the QCM method for guanine and sublimation enthalpies  $\Delta_{cr}^g H_m^o$

Run	$T / K$	$df \cdot d\tau^{-1} /$ Hz·s <sup>-1</sup>	$10^6 \cdot \alpha \gamma \cdot p_{sat} /$ Pa	$10^6 \cdot p_{sat} /$ Pa	$T^{-1} / K^{-1}$	$R \cdot \ln(p_{sat}/p^o)$	$\Delta_{cr}^g H_m^o /$ kJ·mol <sup>-1</sup>
$\ln(p_{sat}/p^o) = -\frac{124887}{RT_0} - \frac{201628}{R} \left( \frac{1}{T} - \frac{1}{T_0} \right) - \frac{6.1}{R} \left( \frac{T_0}{T} - 1 - \ln \left( \frac{T}{T_0} \right) \right), T_0 = 298.15 \text{ K}, \alpha \gamma = 0.040$							
$\Delta_{cr}^g H_m^o(298.15 \text{ K}) = 201.6 \pm 3.8 \text{ kJ} \cdot \text{mol}^{-1}$							
1	513.87	0.5809	322	8050	0.001946	-135.8	200.2
	508.71	0.3625	200	5000	0.001966	-139.8	200.2
	503.55	0.2257	124	3100	0.001986	-143.7	200.2
	498.47	0.1388	76	1900	0.002006	-147.8	200.3
	493.44	0.08639	47	1175	0.002027	-151.8	200.3
	488.38	0.05255	28	700	0.002048	-156.1	200.3
	483.32	0.03169	17	425	0.002069	-160.3	200.4
2	502.98	0.2204	121	3025	0.001988	-143.9	200.2
	497.94	0.1317	72	1800	0.002008	-148.3	200.3
	492.88	0.08007	43	1075	0.002029	-152.5	200.3
	487.85	0.04873	26	650	0.002050	-156.7	200.3
	482.80	0.02940	16	400	0.002071	-160.8	200.4
	477.76	0.01771	9.5	237.5	0.002093	-165.1	200.4
	472.72	0.01049	5.6	140	0.002115	-169.5	200.5

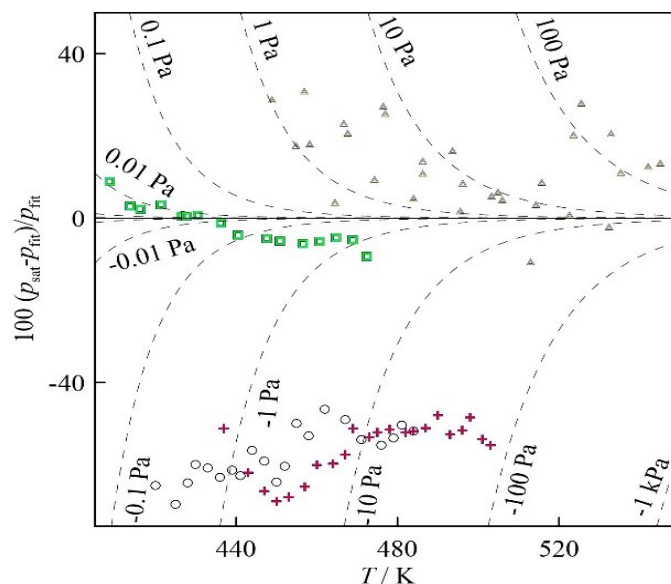
	467.69	0.006118	3.2	80	0.002138	-174.1	200.5
	462.65	0.003419	1.8	45	0.002161	-178.9	200.5
	457.62	0.001909	1	25	0.002185	-183.8	200.6
	513.09	0.5368	297	7425	0.001949	-136.5	200.2
	508.04	0.3377	186	4650	0.001968	-140.4	200.2
	502.99	0.2119	116	2900	0.001988	-144.3	200.2
	497.95	0.1320	72	1800	0.002008	-148.3	200.3
	492.90	0.08166	44	1100	0.002029	-152.4	200.3
3	487.86	0.05011	27	675	0.002050	-156.4	200.3
	482.82	0.03035	16	400	0.002071	-160.8	200.4
	477.79	0.01833	10	250	0.002093	-164.7	200.4
	472.76	0.01082	5.7	142.5	0.002115	-169.3	200.5
	467.73	0.005672	3	75	0.002138	-174.7	200.5
	510.63	0.4387	242	6050	0.001958	-138.2	200.2
	505.55	0.2728	150	3750	0.001978	-142.2	200.2
	500.51	0.1695	93	2325	0.001998	-146.1	200.3
	495.49	0.1048	57	1425	0.002018	-150.2	200.3
	490.43	0.06404	35	875	0.002039	-154.3	200.3
4	485.39	0.03780	20	500	0.002060	-158.9	200.4
	480.36	0.02289	12	300	0.002082	-163.2	200.4
	475.32	0.01409	7.5	187.5	0.002104	-167.1	200.4
	470.29	0.007931	4.2	105	0.002126	-171.9	200.5
	465.26	0.004550	2.4	60	0.002149	-176.5	200.5
	513.07	0.5577	309	7725	0.001949	-136.2	200.2
	508.05	0.3484	192	4800	0.001968	-140.1	200.2
	503.01	0.2167	119	2975	0.001988	-144.1	200.2
	497.96	0.1338	73	1825	0.002008	-148.1	200.3
	492.92	0.08177	44	1100	0.002029	-152.4	200.3
5	487.89	0.04941	27	675	0.002050	-156.4	200.3
	482.86	0.02959	16	400	0.002071	-160.8	200.4
	477.82	0.01745	9.3	232.5	0.002093	-165.3	200.4
	472.79	0.01025	5.4	135	0.002115	-169.8	200.5
	467.76	0.005999	3.2	80	0.002138	-174.1	200.5



**Figure S1** Deviations of the experimental vapor pressures for uracil from those calculated by the fitting equation:

$$\ln \frac{p_{sat}}{p^o} = -\frac{70500}{RT_0} + \frac{130700}{R} \cdot \left( \frac{1}{T_0} - \frac{1}{T} \right) - \frac{19.8}{R} \cdot \left( \frac{T_0}{T} - 1 + \ln \frac{T}{T_0} \right).$$

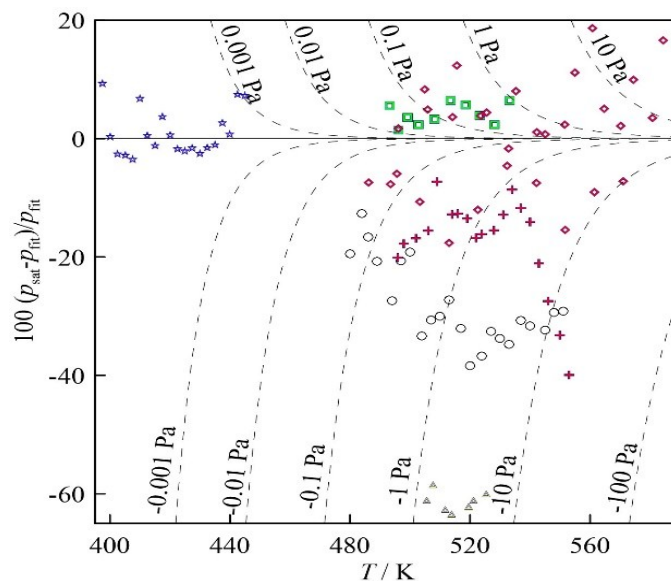
○ – results of torsion effusion by Bardi [1] (statistic weight factor 0.05); + – TGA results by Bardi [1] (statistic weight factor 0.05); □ – transpiration technique by Bardi [1] (statistic weight factor 0.05); △ – Knudsen effusion by Szterner [2] (1); ☆ – results of torsion effusion by Brunetti [3] (statistic weight factor 0.01); ◇ – transpiration technique by Emel’yanenko [4] (statistic weight factor 1); ● – this work with FSC (statistic weight factor 1). Smoothed data are displayed by dotted lines and experimental data are displayed by symbols.



**Figure S2** Deviations of the experimental vapor pressures for thymine from those calculated by the fitting equation:

$$\ln \frac{p_{sat}}{p^o} = -\frac{68400}{RT_0} + \frac{129400}{R} \left( \frac{1}{T_0} - \frac{1}{T} \right) - \frac{18.8}{R} \left( \frac{T_0}{T} - 1 + \ln \frac{T}{T_0} \right)$$

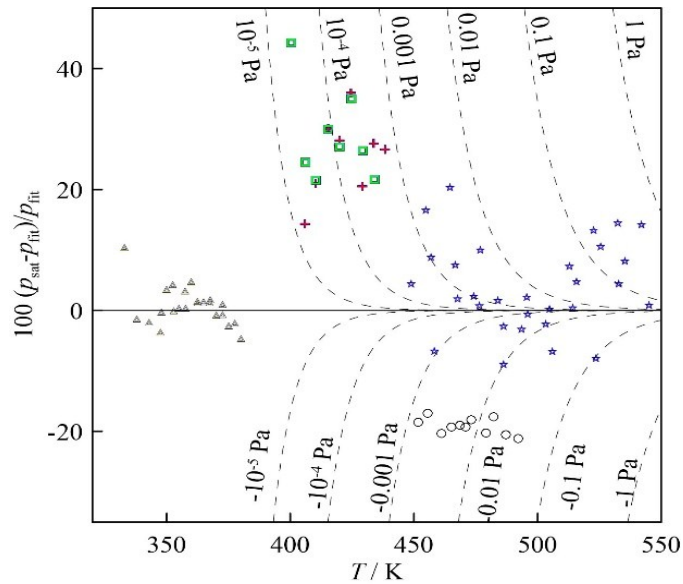
○ – results of torsion effusion by Ferro [5] (statistic weight factor 0.01); + – results of torsion effusion by Ferro [5] (statistic weight factor 0.01); □ – transpiration technique by Emel’yanenko [4] (statistic weight factor 1); △ – this work with FSC (statistic weight factor 0.1). Smoothed data are displayed by dotted lines and experimental data are displayed by symbols.



**Figure S3** Deviations of the experimental vapor pressures for cytosine from those calculated by the fitting equation:

$$\ln \frac{p_{sat}}{p^o} = -\frac{90000}{RT_0} + \frac{155400}{R} \cdot \left( \frac{1}{T_0} - \frac{1}{T} \right) - \frac{12.1}{R} \cdot \left( \frac{T_0}{T} - 1 + \ln \frac{T}{T_0} \right).$$

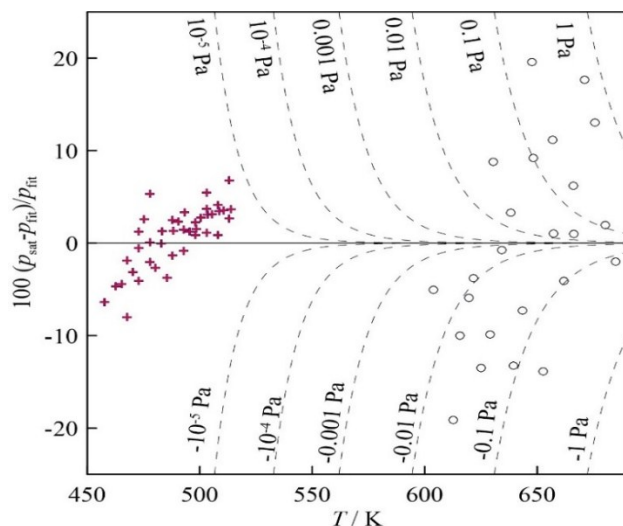
☆ – QCM technique by Emel'yanenko [6] (statistic weight factor 1); ○ – results of torsion effusion by Ferro [5] (statistic weight factor 0.05); + – results of torsion effusion by Ferro [5] (statistic weight factor 0.05); □ – transpiration technique by Emel'yanenko [6] (statistic weight factor 1); △ – Knudsen effusion by Zielenkiewicz [7] (statistic weight factor 0.001); ◇ – this work with FSC (statistic weight factor 1).



**Figure S4** Deviations of the experimental vapor pressures for adenine from those calculated by the fitting equation:

$$\ln \frac{p_{sat}}{p^o} = -\frac{77500}{RT_0} + \frac{142900}{R} \cdot \left( \frac{1}{T_0} - \frac{1}{T} \right) - \frac{12.8}{R} \cdot \left( \frac{T_0}{T} - 1 + \ln \frac{T}{T_0} \right).$$

○ – transpiration technique by Emel'yanenko [6] (statistic weight factor 0.5); □ – Knudsen effusion by Zielenkiewicz [8] (statistic weight factor 0.001); + – Knudsen effusion by Zielenkiewicz [8] (statistic weight factor 0.001); △ – QCM technique by Emel'yanenko [6] (statistic weight factor 1); ☆ – this work with FSC (statistic weight factor 1).



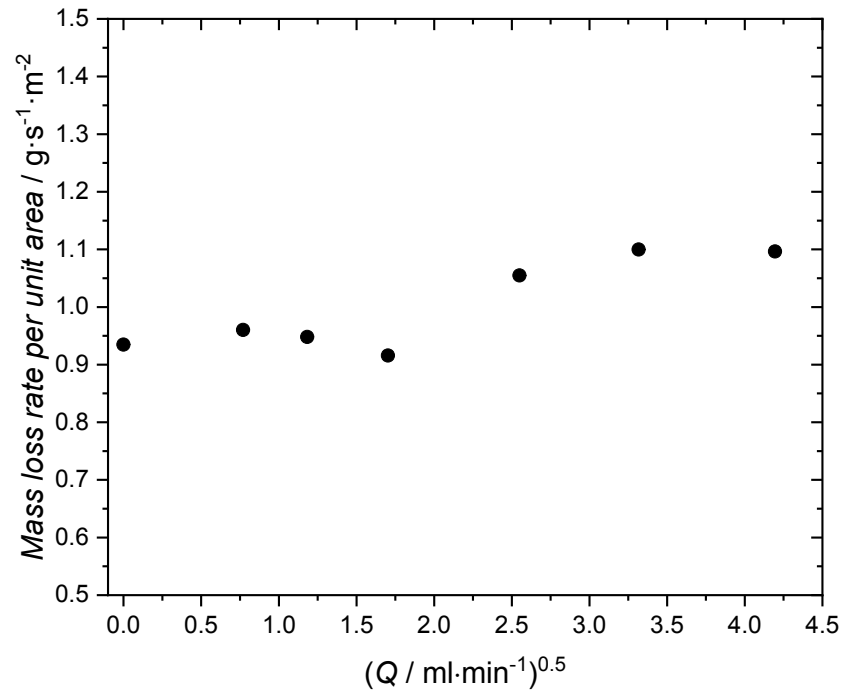
**Figure S5** Deviations of the experimental vapor pressures for guanine from those calculated by the fitting equation:

$$\ln \frac{p_{sat}}{p^o} = -\frac{123700}{RT_0} + \frac{198500}{R} \left( \frac{1}{T_0} - \frac{1}{T} \right) - \frac{6.1}{R} \left( \frac{T_0}{T} - 1 + \ln \frac{T}{T_0} \right)$$

○ – this work with FSC (statistic weight factor 1); + – this work with QCM technique (statistic weight factor 1).

### Sherwood number dependence with the gas flow rate

The constancy of the Sherwood number for our device has been investigated, by the measurement of the mass-loss rate of a sample (cytosine in this at 550 K) dependence with the square root Volumetric flow rate (Q in ml/min). The results are shown in **Figure S6**.



**Figure S6** Cytosine mass loss rate dependence with the square root of the volumetric flow rate.

We can observe from **Figure S6**, that the mass loss per unit of the area measured under different gas flow rate remains nearly constant. Therefore, the Sherwood number used to calculate the vapor pressure using the mass loss rate is essentially independent on the gas flow rate. This supports the constant value of two, chosen for the Sherwood number and discussed in more detail in reference [9]. We have to denote that we are working on really low gas flow rate, and if the gas flow rate is considerably increased we had observed a dependence of the Sherwood number with the gas flow rate and another treatment of the vapor pressure determination has been used accordingly.

### The mass loss data obtained from FSC

Compound: <b>Uracil</b> ; Atmosphere: <b>Sulfure Hexafluoride SF<sub>6</sub></b>									
$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng}\square\text{s}^{-1}}$	$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng}\square\text{s}^{-1}}$	$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng}\square\text{s}^{-1}}$	$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng}\square\text{s}^{-1}}$	$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng}\square\text{s}^{-1}}$
$T = 456.9 \text{ K}$ $\tau_{iso} = 30\text{s}$		$T = 466.7 \text{ K}$ $\tau_{iso} = 15\text{s}$		$T = 476.5 \text{ K}$ $\tau_{iso} = 7\text{s}$		$T = 486.3 \text{ K}$ $\tau_{iso} = 4\text{s}$		$T = 496.1 \text{ K}$ $\tau_{iso} = 3\text{s}$	
15	0.152	7.5	0.367	3.5	0.771	2	1.29	1.5	3.53
45	0.165	22.5	0.378	10.5	0.658	6	1.28	4.5	3.13
75	0.152	37.5	0.378	17.5	0.645	10	1.18	7.5	2.91
105	0.147	52.5	0.322	24.5	0.624	14	1.07	10.5	2.65
135	0.140	67.5	0.310	31.5	0.567	18	1.01	13.5	2.50
165	0.136	82.5	0.305	38.5	0.587	22	0.989	16.5	2.37
195	0.128	97.5	0.262	45.5	0.523	26	0.881	19.5	2.19
225	0.124	112.5	0.247	52.5	0.483	30	0.856	22.5	2.07
255	0.115	127.5	0.232	59.5	0.488	34	0.693	25.5	1.86
285	0.105	142.5	0.195	66.5	0.427	38	0.674	28.5	1.78
315	0.106	157.5	0.172	73.5	0.406	42	0.495	31.5	1.44
345	0.0997	172.5	0.130	80.5	0.417	46	0.432	34.5	1.28
375	0.0868	187.5	0.0987	87.5	0.330	50	0.153	37.5	1.09
405	0.0900	202.5	0.0388	94.5	0.338			40.5	0.749
435	0.0742			101.5	0.272			43.5	0.246
465	0.0749			108.5	0.263				
495	0.0565			115.5	0.220				
525	0.0519			122.5	0.156				
555	0.0459			129.5	0.0771				
585	0.0313			136.5	0.0287				
615	0.0171								

Compound: <b>Uracil</b> ; Atmosphere: <b>Sulfure Hexafluoride SF<sub>6</sub></b>									
$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng}\square\text{s}^{-1}}$	$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng}\square\text{s}^{-1}}$	$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng}\square\text{s}^{-1}}$	$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng}\square\text{s}^{-1}}$	$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng}\square\text{s}^{-1}}$
$T = 505.9 \text{ K}$ $\tau_{iso} = 1\text{s}$		$T = 515.7 \text{ K}$ $\tau_{iso} = 0.6\text{s}$		$T = 525.5 \text{ K}$ $\tau_{iso} = 0.25\text{s}$		$T = 535.3 \text{ K}$ $\tau_{iso} = 0.2\text{s}$		$T = 545.1 \text{ K}$ $\tau_{iso} = 0.1\text{s}$	
0.5	5.21	0.3	10.3	0.125	19.9	0.1	39.5	0.05	77.6
1.5	4.95	0.9	10.6	0.375	20.2	0.3	38.9	0.15	75.0
2.5	4.89	1.5	9.97	0.625	18.6	0.5	37.6	0.25	71.9
3.5	4.40	2.1	10.2	0.875	19.6	0.7	34.1	0.35	66.5
4.5	4.08	2.7	9.13	1.125	17.4	0.9	32.7	0.45	63.9
5.5	4.22	3.3	8.65	1.375	18.0	1.1	31.7	0.55	62.7
6.5	3.59	3.9	8.82	1.625	16.3	1.3	29.0	0.65	59.8
7.5	3.31	4.5	8.28	1.875	16.9	1.5	27.0	0.75	54.9
8.5	2.97	5.1	7.90	2.125	15.6	1.7	24.7	0.85	50.6
9.5	2.70	5.7	7.38	2.375	15.4	1.9	23.9	0.95	48.3
10.5	2.30	6.3	6.77	2.625	14.0	2.1	20.1	1.05	45.8
11.5	2.04	6.9	6.45	2.875	14.0	2.3	17.9	1.15	39.5
12.5	1.56	7.5	6.53	3.125	13.1	2.5	16.3	1.25	34.9
13.5	0.661	8.1	5.65	3.375	15.3	2.7	12.0	1.35	30.1
		8.7	5.32	3.625	12.4	2.9	6.95	1.45	23.3



		9.3	5.05	3.875	11.2	3.1	2.51	1.55	12.5
		9.9	3.79	4.125	10.2			1.65	0.551
		10.5	3.63	4.375	10.8				
		11.1	3.12	4.625	9.42				
		11.7	1.06	4.875	8.52				
		12.3	0.524	5.125	8.16				
				5.375	7.05				
				5.625	6.80				
				5.875	5.05				
				6.125	3.59				
				6.375	2.20				

Compound: <b>Uracil</b> ; Athmosphere: <b>Nitrogen N<sub>2</sub></b>									
$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng}\square\text{s}^{-1}}$	$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng}\square\text{s}^{-1}}$	$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng}\square\text{s}^{-1}}$	$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng}\square\text{s}^{-1}}$	$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng}\square\text{s}^{-1}}$
$T = 454.9 \text{ K}$ $\tau_{iso} = 35\text{s}$		$T = 464.5 \text{ K}$ $\tau_{iso} = 15\text{s}$		$T = 474.2 \text{ K}$ $\tau_{iso} = 6.5\text{s}$		$T = 483.9 \text{ K}$ $\tau_{iso} = 4\text{s}$		$T = 493.6 \text{ K}$ $\tau_{iso} = 2.5\text{s}$	
17.5	0.256	7.5	0.649	3.25	0.885	2	1.42	1.25	3.22
52.5	0.251	22.5	0.576	9.75	0.931	6	1.60	3.75	2.79
87.5	0.250	37.5	0.583	16.25	0.856	10	1.32	6.25	2.99
122.5	0.228	52.5	0.577	22.75	0.846	14	1.23	8.75	2.61
157.5	0.227	67.5	0.527	29.25	0.845	18	1.09	11.25	2.60
192.5	0.208	82.5	0.512	35.75	0.751	22	1.07	13.75	2.27
227.5	0.211	97.5	0.499	42.25	0.712	26	0.871	16.25	1.97
262.5	0.201	112.5	0.438	48.75	0.738	30	0.792	18.75	1.79
297.5	0.192	127.5	0.445	55.25	0.595	34	0.646	21.25	1.58
332.5	0.186	142.5	0.412	61.75	0.602	38	0.341	23.75	1.21
367.5	0.160	157.5	0.364	68.25	0.560	42	-0.0555	26.25	0.853
402.5	0.167	172.5	0.348	74.75	0.490			28.75	0.309
437.5	0.152	187.5	0.340	81.25	0.451				
472.5	0.144	202.5	0.309	87.75	0.404				
507.5	0.127	217.5	0.269	94.25	0.334				
542.5	0.119	232.5	0.214	100.75	0.253				
577.5	0.111	247.5	0.208	107.25	0.0852				
612.5	0.0796	262.5	0.126	113.75	0.00822				
647.5	0.0807	277.5	0.0720						
682.5	0.0505								
717.5	0.0138								

Compound: <b>Uracil</b> ; Athmosphere: <b>Nitrogen N<sub>2</sub></b>									
$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng}\square\text{s}^{-1}}$	$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng}\square\text{s}^{-1}}$	$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng}\square\text{s}^{-1}}$	$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng}\square\text{s}^{-1}}$	$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng}\square\text{s}^{-1}}$
$T = 503.3 \text{ K}$ $\tau_{iso} = 1.5\text{s}$		$T = 513.0 \text{ K}$ $\tau_{iso} = 0.7\text{s}$		$T = 522.7 \text{ K}$ $\tau_{iso} = 0.4\text{s}$		$T = 532.4 \text{ K}$ $\tau_{iso} = 0.2\text{s}$		$T = 542.1 \text{ K}$ $\tau_{iso} = 0.1\text{s}$	
0.75	6.47	0.35	11.0	0.2	20.6	0.1	37.5	0.05	65.2
2.25	6.49	1.05	11.0	0.6	19.2	0.3	37.3	0.15	58.8
3.75	5.95	1.75	9.89	1	17.6	0.5	33.9	0.25	60.7
5.25	5.54	2.45	9.31	1.4	20.1	0.7	32.0	0.35	55.3

6.75	5.01	3.15	8.45	1.8	16.9	0.9	29.9	0.45	52.9
8.25	4.52	3.85	7.62	2.2	16.6	1.1	26.4	0.55	55.5
9.75	4.29	4.55	6.74	2.6	15.6	1.3	24.1	0.65	48.3
11.25	3.55	5.25	5.60	3	13.6	1.5	22.2	0.75	49.0
12.75	3.12	5.95	4.57	3.4	14.0	1.7	18.8	0.85	42.0
14.25	2.07	6.65	2.39	3.8	11.8	1.9	13.9	0.95	41.7
15.75	1.29	7.35	0.404	4.2	9.93	2.1	9.58	1.05	41.0
				4.6	8.83	2.3	1.78	1.15	37.7
				5	6.36			1.25	33.8
				5.4	2.46			1.35	34.2
								1.45	30.6
								1.55	25.2
								1.65	24.5
								1.75	21.7
								1.85	20.8
								1.95	14.6
								2.05	10.1
								2.15	3.47

Compound: Uracil ; Atmosphere: Helium He									
$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng}\square s^{-1}}$	$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng}\square s^{-1}}$	$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng}\square s^{-1}}$	$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng}\square s^{-1}}$	$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng}\square s^{-1}}$
$T = 448.9 \text{ K}$ $\tau_{iso} = 30s$		$T = 458.3 \text{ K}$ $\tau_{iso} = 15s$		$T = 467.6 \text{ K}$ $\tau_{iso} = 6.5s$		$T = 476.9 \text{ K}$ $\tau_{iso} = 4s$		$T = 486.3 \text{ K}$ $\tau_{iso} = 2s$	
15	0.217	7.5	0.505	3.25	0.829	2	1.73	1	3.29
45	0.212	22.5	0.504	9.75	0.849	6	1.66	3	2.91
75	0.179	37.5	0.495	16.25	0.850	10	1.54	5	3.01
105	0.176	52.5	0.444	22.75	0.748	14	1.54	7	2.52
135	0.157	67.5	0.434	29.25	0.742	18	1.40	9	2.53
165	0.151	82.5	0.398	35.75	0.698	22	1.33	11	2.29
195	0.128	97.5	0.401	42.25	0.626	26	1.21	13	2.12
225	0.114	112.5	0.324	48.75	0.619	30	1.13	15	1.92
255	0.0826	127.5	0.347	55.25	0.591	34	1.01	17	1.58
285	0.0557	142.5	0.276	61.75	0.521	38	0.901	19	1.57
		157.5	0.266	68.25	0.459	42	0.703	21	1.10
		172.5	0.231	74.75	0.407	46	0.601	23	0.569
		187.5	0.181	81.25	0.380	50	0.212	25	0.326
		202.5	0.0968	87.75	0.327				
		217.5	0.0411	94.25	0.134				
				100.75	0.0966				

Compound: Uracil ; Atmosphere: Helium He									
$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng}\square s^{-1}}$	$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng}\square s^{-1}}$	$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng}\square s^{-1}}$	$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng}\square s^{-1}}$	$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng}\square s^{-1}}$
$T = 495.6 \text{ K}$ $\tau_{iso} = 1s$		$T = 504.9 \text{ K}$ $\tau_{iso} = 0.5s$		$T = 514.2 \text{ K}$ $\tau_{iso} = 0.25s$		$T = 523.6 \text{ K}$ $\tau_{iso} = 0.2s$		$T = 532.9 \text{ K}$ $\tau_{iso} = 0.1s$	
0.5	5.71	0.25	10.4	0.125	28.6	0.1	40.7	0.05	84.3
1.5	5.36	0.75	9.64	0.375	25.9	0.3	39.1	0.15	73.8

2.5	5.22	1.25	9.32	0.625	23.3	0.5	33.2	0.25	76.6
3.5	4.43	1.75	9.43	0.875	22.7	0.7	32.8	0.35	70.8
4.5	4.59	2.25	8.25	1.125	22.4	0.9	33.1	0.45	67.7
5.5	4.29	2.75	7.78	1.375	21.7	1.1	26.3	0.55	64.6
6.5	3.63	3.25	6.68	1.625	18.0	1.3	24.8	0.65	59.6
7.5	3.15	3.75	6.80	1.875	19.3	1.5	25.3	0.75	57.4
8.5	2.81	4.25	5.70	2.125	18.8	1.7	20.9	0.85	51.8
9.5	1.84	4.75	5.07	2.375	15.9	1.9	18.6	0.95	46.6
10.5	1.59	5.25	4.27	2.625	14.8	2.1	17.2	1.05	44.6
11.5	0.226	5.75	2.10	2.875	15.7	2.3	16.4	1.15	37.5
				3.125	10.8	2.5	14.5	1.25	33.5
				3.375	11.8	2.7	8.90	1.35	27.9
				3.625	10.1			1.45	17.7
				3.875	6.62			1.55	7.81
				4.125	3.37				

**Compound: Thymine ; Atmosphere: Sulfure Hexafluoride SF<sub>6</sub>**

$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng}\square s^{-1}}$	$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng}\square s^{-1}}$	$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng}\square s^{-1}}$	$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng}\square s^{-1}}$	$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng}\square s^{-1}}$
$T = 456.9 \text{ K}$ $\tau_{iso} = 7s$		$T = 466.7 \text{ K}$ $\tau_{iso} = 5s$		$T = 476.5 \text{ K}$ $\tau_{iso} = 3s$		$T = 486.3 \text{ K}$ $\tau_{iso} = 1s$		$T = 496.1 \text{ K}$ $\tau_{iso} = 0.8s$	
3.5	0.330	2.5	0.898	1.5	2.06	0.5	3.59	0.4	8.61
10.5	0.369	7.5	0.921	4.5	2.02	1.5	3.33	1.2	8.00
17.5	0.339	12.5	0.895	7.5	1.98	2.5	3.38	2	7.97
24.5	0.357	17.5	0.872	10.5	1.78	3.5	3.16	2.8	7.51
31.5	0.312	22.5	0.791	13.5	1.72	4.5	2.86	3.6	6.99
38.5	0.345	27.5	0.811	16.5	1.52	5.5	2.85	4.4	6.70
45.5	0.311	32.5	0.713	19.5	1.48	6.5	3.09	5.2	6.24
52.5	0.291	37.5	0.645	22.5	1.36	7.5	2.51	6	5.99
59.5	0.267	42.5	0.677	25.5	1.23	8.5	2.25	6.8	5.60
66.5	0.281	47.5	0.620	28.5	1.15	9.5	2.30	7.6	4.75
73.5	0.266	52.5	0.554	31.5	1.04	10.5	2.17	8.4	4.70
80.5	0.232	57.5	0.507	34.5	0.940	11.5	1.75	9.2	4.13
87.5	0.204	62.5	0.483	37.5	0.762	12.5	1.88	10	3.66
94.5	0.194	67.5	0.384	40.5	0.562	13.5	1.43	10.8	3.03
101.5	0.169	72.5	0.428	43.5	0.333	14.5	1.37	11.6	2.83
108.5	0.172	77.5	0.328			15.5	1.02	12.4	1.89
115.5	0.145	82.5	0.315			16.5	0.913		
122.5	0.128	87.5	0.268			17.5	0.302		
129.5	0.0430	92.5	0.118						
		97.5	0.0833						

**Compound: Thymine ; Atmosphere: Sulfure Hexafluoride SF<sub>6</sub>**

$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng}\square s^{-1}}$	$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng}\square s^{-1}}$	$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng}\square s^{-1}}$	$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng}\square s^{-1}}$	$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng}\square s^{-1}}$
$T = 505.9 \text{ K}$ $\tau_{iso} = 0.4s$		$T = 515.7 \text{ K}$ $\tau_{iso} = 0.25s$		$T = 525.5 \text{ K}$ $\tau_{iso} = 0.1s$		$T = 535.3 \text{ K}$ $\tau_{iso} = 0.02s$		$T = 545.1 \text{ K}$ $\tau_{iso} = 0.02s$	
0.2	13.2	0.125	29.2	0.05	53.1	0.01	182	0.01	244

0.6	13.7	0.375	28.4	0.15	50.1	0.03	165	0.03	237
1	12.1	0.625	26.3	0.25	48.4	0.05	170	0.05	217
1.4	12.2	0.875	24.5	0.35	44.7	0.07	162	0.07	209
1.8	11.1	1.125	23.0	0.45	43.3	0.09	154	0.09	189
2.2	10.4	1.375	22.6	0.55	39.8	0.11	154	0.11	183
2.6	9.95	1.625	19.7	0.65	37.1	0.13	140	0.13	156
3	9.42	1.875	17.8	0.75	34.0	0.15	139	0.15	149
3.4	7.93	2.125	16.6	0.85	34.3	0.17	143	0.17	126
3.8	8.32	2.375	15.7	0.95	31.7	0.19	118	0.19	111
4.2	6.41	2.625	12.8	1.05	26.7	0.21	147	0.21	94.1
4.6	5.93	2.875	9.51	1.15	25.4	0.23	117	0.23	58.4
5	5.55	3.125	5.96	1.25	21.9	0.25	102	0.25	6.88
5.4	3.93	3.375	1.77	1.35	19.7	0.27	115		
5.8	1.74			1.45	16.3	0.29	118		
				1.55	10.1	0.31	105		
				1.65	1.03	0.33	97.6		
						0.35	90.5		
						0.37	81.6		
						0.39	78.0		
						0.41	67.8		
						0.43	65.6		
						0.45	35.7		
						0.47	53.4		
						0.49	5.79		

Compound: **Thymine** ; Atmosphere: **Nitrogen N<sub>2</sub>**

$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng} \square \text{s}^{-1}}$	$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng} \square \text{s}^{-1}}$	$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng} \square \text{s}^{-1}}$	$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng} \square \text{s}^{-1}}$	$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng} \square \text{s}^{-1}}$
$T = 454.9 \text{ K}$ $\tau_{iso} = 7\text{s}$		$T = 464.5 \text{ K}$ $\tau_{iso} = 5\text{s}$		$T = 474.2 \text{ K}$ $\tau_{iso} = 2\text{s}$		$T = 483.9 \text{ K}$ $\tau_{iso} = 1\text{s}$		$T = 493.6 \text{ K}$ $\tau_{iso} = 0.8\text{s}$	
3.5	0.415	2.5	1.20	1	2.07	0.5	3.87	0.4	7.94
10.5	0.431	7.5	1.15	3	1.97	1.5	4.01	1.2	7.71
17.5	0.428	12.5	1.11	5	1.83	2.5	3.88	2	6.70
24.5	0.404	17.5	1.07	7	1.80	3.5	3.76	2.8	6.86
31.5	0.358	22.5	1.07	9	1.58	4.5	3.65	3.6	6.07
38.5	0.373	27.5	0.943	11	1.59	5.5	3.51	4.4	5.60
45.5	0.350	32.5	0.965	13	1.52	6.5	3.37	5.2	5.30
52.5	0.299	37.5	0.887	15	1.32	7.5	3.08	6	4.67
59.5	0.323	42.5	0.798	17	1.30	8.5	3.17	6.8	4.17
66.5	0.299	47.5	0.749	19	1.12	9.5	2.84	7.6	3.37
73.5	0.265	52.5	0.702	21	0.962	10.5	2.60	8.4	2.47
80.5	0.230	57.5	0.650	23	0.770	11.5	2.47	9.2	0.504
87.5	0.209	62.5	0.601	25	0.504	12.5	2.29		
94.5	0.190	67.5	0.577	27	0.107	13.5	2.46		
101.5	0.135	72.5	0.406			14.5	2.01		
108.5	0.109	77.5	0.478			15.5	1.98		
115.5	0.0377	82.5	0.437			16.5	1.71		
		87.5	0.335			17.5	1.43		
		92.5	0.213			18.5	1.28		
		97.5	0.0750			19.5	1.12		
						20.5	0.549		
						21.5	0.151		

Compound: **Thymine** ; Atmosphere: **Nitrogen N<sub>2</sub>**

$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng}\square\text{s}^{-1}}$	$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng}\square\text{s}^{-1}}$	$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng}\square\text{s}^{-1}}$	$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng}\square\text{s}^{-1}}$	$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng}\square\text{s}^{-1}}$
$T = 503.3 \text{ K}$ $\tau_{iso} = 0.3\text{s}$		$T = 513.0 \text{ K}$ $\tau_{iso} = 0.1\text{s}$		$T = 522.7 \text{ K}$ $\tau_{iso} = 0.05\text{s}$		$T = 532.4 \text{ K}$ $\tau_{iso} = 0.05\text{s}$		$T = 542.1 \text{ K}$ $\tau_{iso} = 0.02\text{s}$	
0.15	16.1	0.05	31.2	0.025	67.6	0.025	120	0.01	293
0.45	14.4	0.15	27.2	0.075	68.4	0.075	109	0.03	294
0.75	13.5	0.25	27.7	0.125	60.5	0.125	112	0.05	270
1.05	12.4	0.35	25.0	0.175	58.8	0.175	100	0.07	269
1.35	12.3	0.45	26.0	0.225	57.4	0.225	96.2	0.09	249
1.65	11.2	0.55	25.9	0.275	58.5	0.275	103	0.11	233
1.95	11.0	0.65	22.1	0.325	58.3	0.325	88.4	0.13	231
2.25	9.72	0.75	22.6	0.375	49.1	0.375	83.2	0.15	221
2.55	8.37	0.85	23.4	0.425	48.4	0.425	77.6	0.17	215
2.85	8.67	0.95	21.5	0.475	54.2	0.475	70.2	0.19	200
3.15	8.62	1.05	20.4	0.525	44.8	0.525	71.1	0.21	184
3.45	6.77	1.15	18.7	0.575	41.6	0.575	61.9	0.23	187
3.75	6.95	1.25	16.0	0.625	42.8	0.625	51.4	0.25	174
4.05	6.78	1.35	16.2	0.675	36.6	0.675	46.9	0.27	157
4.35	5.51	1.45	16.0	0.725	38.0	0.725	39.4	0.29	149
4.65	5.57	1.55	15.0	0.775	32.6	0.775	27.9	0.31	146
4.95	5.01	1.65	13.1	0.825	29.0	0.825	8.25	0.33	127
5.25	1.81	1.75	11.4	0.875	24.0			0.35	108
5.55	0.434	1.85	8.49	0.925	24.8			0.37	92.0
5.85	0.209	1.95	6.50	0.975	13.5			0.39	79.0
		2.05	2.15	1.025	7.27			0.41	55.2
								0.43	25.5

Compound: **Thymine** ; Atmosphere: **Helium He**

$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng}\square\text{s}^{-1}}$	$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng}\square\text{s}^{-1}}$	$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng}\square\text{s}^{-1}}$	$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng}\square\text{s}^{-1}}$	$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng}\square\text{s}^{-1}}$
$T = 448.9 \text{ K}$ $\tau_{iso} = 7\text{s}$		$T = 458.3 \text{ K}$ $\tau_{iso} = 4\text{s}$		$T = 467.6 \text{ K}$ $\tau_{iso} = 2\text{s}$		$T = 476.9 \text{ K}$ $\tau_{iso} = 1\text{s}$		$T = 486.3 \text{ K}$ $\tau_{iso} = 0.6\text{s}$	
3.5	0.477	2	1.02	1	2.10	0.5	4.59	0.3	7.88
10.5	0.522	6	0.999	3	2.32	1.5	4.32	0.9	7.64
17.5	0.468	10	0.969	5	2.00	2.5	4.41	1.5	7.15
24.5	0.502	14	0.968	7	2.03	3.5	3.93	2.1	6.87
31.5	0.446	18	0.844	9	1.88	4.5	3.82	2.7	6.44
38.5	0.445	22	0.826	11	1.84	5.5	3.65	3.3	5.91
45.5	0.424	26	0.835	13	1.70	6.5	3.21	3.9	5.98
52.5	0.387	30	0.734	15	1.56	7.5	3.04	4.5	4.61
59.5	0.389	34	0.695	17	1.48	8.5	2.68	5.1	4.93
66.5	0.361	38	0.657	19	1.45	9.5	2.52	5.7	3.80
73.5	0.347	42	0.504	21	1.11	10.5	2.29	6.3	3.17
80.5	0.316	46	0.556	23	1.22	11.5	2.02	6.9	3.27
87.5	0.277	50	0.503	25	0.887	12.5	1.76	7.5	1.36
94.5	0.331	54	0.422	27	0.818	13.5	1.04	8.1	0.295

101.5	0.236	58	0.292	29	0.674	14.5	0.659		
108.5	0.226	62	0.230	31	0.377	15.5	0.176		
115.5	0.174	66	0.115						
122.5	0.137								
129.5	0.0538								

Compound: <b>Thymine</b> ; Atmosphere: <b>Helium He</b>									
$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng}\square\text{s}^{-1}}$	$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng}\square\text{s}^{-1}}$	$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng}\square\text{s}^{-1}}$	$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng}\square\text{s}^{-1}}$	$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng}\square\text{s}^{-1}}$
$T = 495.6 \text{ K}$ $\tau_{iso} = 0.3\text{s}$		$T = 504.9 \text{ K}$ $\tau_{iso} = 0.2\text{s}$		$T = 514.2 \text{ K}$ $\tau_{iso} = 0.1\text{s}$		$T = 523.6 \text{ K}$ $\tau_{iso} = 0.02\text{s}$		$T = 532.9 \text{ K}$ $\tau_{iso} = 0.02\text{s}$	
0.15	12.3	0.1	31.6	0.05	45.5	0.01	110	0.01	253
0.45	13.4	0.3	29.7	0.15	50.1	0.03	131	0.03	246
0.75	12.1	0.5	29.1	0.25	43.1	0.05	117	0.05	245
1.05	11.0	0.7	26.9	0.35	43.7	0.07	118	0.07	222
1.35	11.2	0.9	25.8	0.45	40.7	0.09	110	0.09	221
1.65	9.88	1.1	22.8	0.55	34.5	0.11	107	0.11	199
1.95	9.73	1.3	21.8	0.65	33.2	0.13	93.5	0.13	194
2.25	8.40	1.5	20.2	0.75	28.5	0.15	91.5	0.15	177
2.55	9.10	1.7	17.3	0.85	24.8	0.17	91.9	0.17	177
2.85	6.22	1.9	15.9	0.95	19.9	0.19	82.3	0.19	149
3.15	6.16	2.1	13.3	1.05	13.2	0.21	72.4	0.21	147
3.45	5.84	2.3	12.6	1.15	1.88	0.23	76.3	0.23	134
3.75	4.79	2.5	10.9			0.25	68.8	0.25	119
4.05	2.65	2.7	5.33			0.27	58.3	0.27	98.8
4.35	0.0928					0.29	55.1	0.29	71.2
						0.31	43.1	0.31	46.2
						0.33	41.9	0.33	3.88
						0.35	32.7		
						0.37	11.8		

Compound: <b>Cytosine</b> ; Atmosphere: <b>Sulfure Hexafluoride SF<sub>6</sub></b>									
$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng}\square\text{s}^{-1}}$	$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng}\square\text{s}^{-1}}$	$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng}\square\text{s}^{-1}}$	$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng}\square\text{s}^{-1}}$	$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng}\square\text{s}^{-1}}$
$T = 496.1 \text{ K}$ $\tau_{iso} = 70\text{s}$		$T = 505.9 \text{ K}$ $\tau_{iso} = 40\text{s}$		$T = 515.7 \text{ K}$ $\tau_{iso} = 18\text{s}$		$T = 525.5 \text{ K}$ $\tau_{iso} = 8\text{s}$		$T = 535.3 \text{ K}$ $\tau_{iso} = 5\text{s}$	
35	0.0667	20	0.183	9	0.360	4	0.498	2.5	1.45
105	0.0648	60	0.159	27	0.298	12	0.441	7.5	1.25
175	0.0588	100	0.159	45	0.261	20	0.388	12.5	1.18
245	0.0581	140	0.146	63	0.241	28	0.353	17.5	1.17
315	0.0521	180	0.145	81	0.228	36	0.360	22.5	1.08
385	0.0503	220	0.133	99	0.198	44	0.314	27.5	1.01
455	0.0474	260	0.129	117	0.191	52	0.286	32.5	0.983
525	0.0439	300	0.118	135	0.165	60	0.278	37.5	0.907
595	0.0408	340	0.109	153	0.153	68	0.219	42.5	0.875
665	0.0405	380	0.102	171	0.138	76	0.216	47.5	0.813
735	0.0349	420	0.0943	189	0.113	84	0.148	52.5	0.742
805	0.0293	460	0.0823	207	0.0963	92	0.130	57.5	0.669

875	0.0312	500	0.0721	225	0.0860	100	0.0437	62.5	0.575
945	0.0251	540	0.0659	243	0.0500			67.5	0.578
1015	0.0254	580	0.0513					72.5	0.483
1085	0.0153	620	0.0426					77.5	0.356
1155	0.0135	660	0.0190					82.5	0.246
1225	0.00695							87.5	0.151

**Compound: Cytosine ; Atmosphere: Sulfure Hexafluoride SF<sub>6</sub>**

$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng}\square\text{s}^{-1}}$	$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng}\square\text{s}^{-1}}$	$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng}\square\text{s}^{-1}}$	$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng}\square\text{s}^{-1}}$	$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng}\square\text{s}^{-1}}$
$T = 545.1 \text{ K}$ $\tau_{iso} = 2.8\text{s}$		$T = 554.9 \text{ K}$ $\tau_{iso} = 1.8\text{s}$		$T = 564.7 \text{ K}$ $\tau_{iso} = 1\text{s}$		$T = 574.5 \text{ K}$ $\tau_{iso} = 0.6\text{s}$		$T = 584.3 \text{ K}$ $\tau_{iso} = 0.5\text{s}$	
1.9	2.55	0.9	4.38	0.5	8.41	0.3	13.3	0.25	21.7
5.7	2.32	2.7	4.18	1.5	7.45	0.9	11.8	0.75	21.0
9.5	2.23	4.5	3.76	2.5	7.25	1.5	11.5	1.25	19.2
13.3	2.10	6.3	3.66	3.5	6.69	2.1	10.8	1.75	18.2
17.1	1.91	8.1	3.20	4.5	6.58	2.7	10.4	2.25	16.7
20.9	1.87	9.9	3.03	5.5	5.96	3.3	9.60	2.75	15.1
24.7	1.68	11.7	2.80	6.5	5.79	3.9	8.70	3.25	13.0
28.5	1.56	13.5	2.50	7.5	5.13	4.5	8.52	3.75	12.1
32.3	1.37	15.3	2.34	8.5	4.81	5.1	7.68	4.25	9.25
36.1	1.24	17.1	2.10	9.5	4.56	5.7	6.73	4.75	6.27
39.9	0.982	18.9	1.80	10.5	4.00	6.3	6.28	5.25	0.817
43.7	0.742	20.7	1.52	11.5	3.62	6.9	5.46		
47.5	0.385	22.5	1.11	12.5	2.96	7.5	4.82		
51.3	0.116	24.3	0.842	13.5	2.69	8.1	3.69		
55.1	0.0232	26.1	0.294	14.5	1.89	8.7	2.63		
				15.5	1.51	9.3	0.589		
				16.5	0.421				

**Compound: Cytosine ; Atmosphere: Nitrogen N<sub>2</sub>**

$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng}\square\text{s}^{-1}}$	$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng}\square\text{s}^{-1}}$	$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng}\square\text{s}^{-1}}$	$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng}\square\text{s}^{-1}}$	$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng}\square\text{s}^{-1}}$
$T = 493.6 \text{ K}$ $\tau_{iso} = 35\text{s}$		$T = 503.3 \text{ K}$ $\tau_{iso} = 32\text{s}$		$T = 513.0 \text{ K}$ $\tau_{iso} = 20\text{s}$		$T = 522.7 \text{ K}$ $\tau_{iso} = 8\text{s}$		$T = 532.4 \text{ K}$ $\tau_{iso} = 4\text{s}$	
27.5	0.0863	16	0.182	10	0.309	4	0.698	2	1.68
82.5	0.0742	48	0.167	30	0.263	12	0.659	6	1.48
137.5	0.0732	80	0.155	50	0.257	20	0.566	10	1.45
192.5	0.0659	112	0.152	70	0.233	28	0.567	14	1.36
247.5	0.0626	144	0.136	90	0.225	36	0.514	18	1.32
302.5	0.0577	176	0.126	110	0.196	44	0.499	22	1.23
357.5	0.0584	208	0.120	130	0.178	52	0.443	26	1.17
412.5	0.0536	240	0.109	150	0.141	60	0.413	30	1.09
467.5	0.0439	272	0.0914	170	0.133	68	0.354	34	0.936
522.5	0.0423	304	0.0836	190	0.0870	76	0.349	38	0.865
577.5	0.0327	336	0.0654	210	0.0194	84	0.289	42	0.786
632.5	0.0287	368	0.0603			92	0.221	46	0.626
687.5	0.0169	400	0.0268			100	0.181	50	0.438

742.5	0.00371	432	0.00976			108	0.0715	54	0.186
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Compound: **Cytosine** ; Atmosphere: **Nitrogen N<sub>2</sub>**

$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng}\square\text{s}^{-1}}$	$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng}\square\text{s}^{-1}}$	$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng}\square\text{s}^{-1}}$	$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng}\square\text{s}^{-1}}$	$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng}\square\text{s}^{-1}}$
$T = 542.1 \text{ K}$ $\tau_{iso} = 2.5\text{s}$		$T = 551.8 \text{ K}$ $\tau_{iso} = 1.5\text{s}$		$T = 561.4 \text{ K}$ $\tau_{iso} = 0.8\text{s}$		$T = 571.1 \text{ K}$ $\tau_{iso} = 0.6\text{s}$		$T = 580.8 \text{ K}$ $\tau_{iso} = 0.2\text{s}$	
1.25	2.53	0.75	5.27	0.4	10.1	0.3	17.3	0.1	27.9
3.75	2.12	2.25	4.78	1.2	9.73	0.9	15.7	0.3	28.3
6.25	1.89	3.75	5.11	2	9.65	1.5	20.1	0.5	25.9
8.75	1.77	5.25	4.45	2.8	9.04	2.1	15.9	0.7	24.6
11.25	1.47	6.75	4.45	3.6	8.23	2.7	13.7	0.9	23.6
13.75	1.51	8.25	3.81	4.4	8.10	3.3	16.3	1.1	20.8
16.25	1.21	9.75	3.77	5.2	7.21	3.9	13.6	1.3	20.2
18.75	0.897	11.25	3.52	6	6.37	4.5	12.1	1.5	17.9
21.25	0.662	12.75	2.92	6.8	5.95	5.1	12.2	1.7	16.7
23.75	0.139	14.25	2.75	7.6	5.58	5.7	10.6	1.9	15.7
		15.75	2.33	8.4	4.44	6.3	8.82	2.1	12.7
		17.25	1.93	9.2	3.82	6.9	8.39	2.3	12.8
		18.75	0.948	10	2.69	7.5	6.18	2.5	10.9
		20.25	0.265	10.8	1.07	8.1	5.27	2.7	8.59
						8.7	2.18	2.9	7.09

Compound: **Cytosine** ; Atmosphere: **Helium He**

$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng}\square\text{s}^{-1}}$	$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng}\square\text{s}^{-1}}$	$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng}\square\text{s}^{-1}}$	$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng}\square\text{s}^{-1}}$	$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng}\square\text{s}^{-1}}$
$T = 486.3 \text{ K}$ $\tau_{iso} = 65\text{s}$		$T = 495.6 \text{ K}$ $\tau_{iso} = 45\text{s}$		$T = 504.9 \text{ K}$ $\tau_{iso} = 25\text{s}$		$T = 514.2 \text{ K}$ $\tau_{iso} = 12\text{s}$		$T = 523.6 \text{ K}$ $\tau_{iso} = 5\text{s}$	
32.5	0.0988	22.5	0.156	12.5	0.479	6	0.850	2.5	1.68
97.5	0.0936	67.5	0.140	37.5	0.425	18	0.748	7.5	1.52
162.5	0.0904	112.5	0.124	62.5	0.403	30	0.702	12.5	1.44
227.5	0.0803	157.5	0.117	87.5	0.416	42	0.674	17.5	1.38
292.5	0.0781	202.5	0.109	112.5	0.372	54	0.632	22.5	1.26
357.5	0.0710	247.5	0.0887	137.5	0.358	66	0.545	27.5	1.27
422.5	0.0693	292.5	0.0812	162.5	0.313	78	0.503	32.5	1.19
487.5	0.0597	337.5	0.0585	187.5	0.293	90	0.459	37.5	1.05
552.5	0.0596	382.5	0.0354	212.5	0.246	102	0.383	42.5	1.02
617.5	0.0513			237.5	0.230	114	0.291	47.5	0.895
682.5	0.0461			262.5	0.180	126	0.207	52.5	0.823
747.5	0.0398			287.5	0.144	138	0.0321	57.5	0.714
812.5	0.0312			312.5	0.0827			62.5	0.644
877.5	0.0242							67.5	0.491
942.5	0.0147							72.5	0.231



Compound: **Cytosine** ; Atmosphere: **Helium He**

$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng}\square\text{s}^{-1}}$	$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng}\square\text{s}^{-1}}$	$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng}\square\text{s}^{-1}}$	$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng}\square\text{s}^{-1}}$	$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng}\square\text{s}^{-1}}$
$T = 532.9 \text{ K}$ $\tau_{iso} = 2\text{s}$		$T = 542.2 \text{ K}$ $\tau_{iso} = 1.5\text{s}$		$T = 551.6 \text{ K}$ $\tau_{iso} = 0.8\text{s}$		$T = 560.9 \text{ K}$ $\tau_{iso} = 0.5\text{s}$		$T = 570.2 \text{ K}$ $\tau_{iso} = 0.4\text{s}$	
1	2.27	0.75	4.95	0.4	9.95	0.25	21.1	0.2	32.4
3	2.11	2.25	4.98	1.2	9.43	0.75	19.2	0.6	28.6
5	1.99	3.75	4.68	2	8.56	1.25	18.3	1	27.8
7	1.73	5.25	4.31	2.8	8.43	1.75	16.6	1.4	25.2
9	1.59	6.75	3.55	3.6	8.15	2.25	14.3	1.8	23.1
11	1.37	8.25	3.62	4.4	7.33	2.75	13.5	2.2	20.7
13	1.23	9.75	3.04	5.2	7.33	3.25	10.6	2.6	19.8
15	0.967	11.25	2.92	6	6.76	3.75	8.51	3	17.1
17	0.814	12.75	2.45	6.8	6.20	4.25	6.39	3.4	15.0
19	0.462	14.25	2.03	7.6	5.97	4.75	2.01	3.8	12.0
21	0.160	15.75	1.73	8.4	5.49			4.2	8.93
		17.25	1.23	9.2	4.73			4.6	3.59
		18.75	0.427	10	4.53				
				10.8	4.03				
				11.6	3.54				
				12.4	2.91				
				13.2	2.48				
				14	1.45				
				14.8	0.192				

Compound: **Adenine** ; Atmosphere: **Sulfure Hexafluoride SF<sub>6</sub>**

$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng}\square\text{s}^{-1}}$	$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng}\square\text{s}^{-1}}$	$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng}\square\text{s}^{-1}}$	$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng}\square\text{s}^{-1}}$	$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng}\square\text{s}^{-1}}$
$T = 456.9 \text{ K}$ $\tau_{iso} = 60\text{s}$		$T = 466.7 \text{ K}$ $\tau_{iso} = 30\text{s}$		$T = 476.5 \text{ K}$ $\tau_{iso} = 20\text{s}$		$T = 486.3 \text{ K}$ $\tau_{iso} = 5\text{s}$		$T = 496.1 \text{ K}$ $\tau_{iso} = 2.5\text{s}$	
30	0.0704	15	0.137	10	0.325	2.5	0.581	1.25	1.26
90	0.0664	45	0.132	30	0.316	7.5	0.559	3.75	1.22
150	0.0677	75	0.122	50	0.296	12.5	0.540	6.25	1.18
210	0.0637	105	0.123	70	0.273	17.5	0.533	8.75	1.03
270	0.0575	135	0.111	90	0.265	22.5	0.465	11.25	1.05
330	0.0550	165	0.105	110	0.247	27.5	0.467	13.75	0.992
390	0.0488	195	0.0997	130	0.246	32.5	0.427	16.25	0.934
450	0.0503	225	0.0906	150	0.206	37.5	0.415	18.75	0.893
510	0.0463	255	0.0855	170	0.206	42.5	0.379	21.25	0.870
570	0.0392	285	0.0797	190	0.181	47.5	0.340	23.75	0.755
630	0.0326	315	0.0716	210	0.174	52.5	0.299	26.25	0.634
690	0.0330	345	0.0621	230	0.160	57.5	0.288	28.75	0.593
750	0.0250	375	0.0570	250	0.140	62.5	0.231	31.25	0.520
810	0.0229	405	0.0441	270	0.136	67.5	0.150	33.75	0.402
870	0.0179	435	0.0311	290	0.129	72.5	0.0612	36.25	0.294
930	0.0109			310	0.126				
990	8.52E-04			330	0.110				

				350	0.101				
				370	0.0980				
				390	0.0834				
				410	0.0611				
				430	0.0149				

Compound: **Adenine** ; Atmosphere: **Sulfure Hexafluoride SF<sub>6</sub>**

$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng}\square\text{s}^{-1}}$	$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng}\square\text{s}^{-1}}$	$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng}\square\text{s}^{-1}}$	$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng}\square\text{s}^{-1}}$	$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng}\square\text{s}^{-1}}$
$T = 505.9 \text{ K}$ $\tau_{iso} = 2.5\text{s}$		$T = 515.7 \text{ K}$ $\tau_{iso} = 1\text{s}$		$T = 525.5 \text{ K}$ $\tau_{iso} = 0.5\text{s}$		$T = 535.3 \text{ K}$ $\tau_{iso} = 0.2\text{s}$		$T = 545.1 \text{ K}$ $\tau_{iso} = 0.3\text{s}$	
1.25	2.73	0.5	4.55	0.25	8.97	0.1	15.0	0.15	30.4
3.75	2.70	1.5	4.54	0.75	8.50	0.3	14.8	0.45	29.5
6.25	2.50	2.5	4.28	1.25	8.35	0.5	13.8	0.75	27.2
8.75	2.45	3.5	4.14	1.75	7.86	0.7	13.6	1.05	24.2
11.25	2.30	4.5	3.82	2.25	7.48	0.9	12.7	1.35	22.3
13.75	2.15	5.5	3.53	2.75	6.95	1.1	13.6	1.65	18.1
16.25	2.07	6.5	3.22	3.25	6.42	1.3	10.1	1.95	14.7
18.75	1.86	7.5	2.99	3.75	6.11	1.5	10.5	2.25	9.89
21.25	1.84	8.5	2.77	4.25	5.76	1.7	9.24	2.55	1.75
23.75	1.68	9.5	2.19	4.75	5.24	1.9	8.01		
26.25	1.51	10.5	2.00	5.25	5.06	2.1	6.96		
28.75	1.46	11.5	1.27	5.75	4.11	2.3	4.39		
31.25	1.31	12.5	0.664	6.25	4.04	2.5	2.14		
33.75	1.24				3.22				
36.25	1.08				2.47				
	0.914				1.96				
	0.695				0.348				
	0.300								

Compound: **Adenine** ; Atmosphere: **Nitrogen N<sub>2</sub>**

$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng}\square\text{s}^{-1}}$	$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng}\square\text{s}^{-1}}$	$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng}\square\text{s}^{-1}}$	$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng}\square\text{s}^{-1}}$	$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng}\square\text{s}^{-1}}$
$T = 454.9 \text{ K}$ $\tau_{iso} = 45\text{s}$		$T = 464.5 \text{ K}$ $\tau_{iso} = 15\text{s}$		$T = 474.2 \text{ K}$ $\tau_{iso} = 10\text{s}$		$T = 483.9 \text{ K}$ $\tau_{iso} = 5\text{s}$		$T = 493.6 \text{ K}$ $\tau_{iso} = 2\text{s}$	
22.5	0.0661	7.5	0.297	5	0.398	2.5	0.586	1	1.07
67.5	0.0614	22.5	0.265	15	0.355	7.5	0.564	3	1.01
112.5	0.0582	37.5	0.239	25	0.341	12.5	0.548	5	0.978
157.5	0.0579	52.5	0.236	35	0.344	17.5	0.569	7	1.01
202.5	0.0570	67.5	0.213	45	0.331	22.5	0.517	9	0.987
247.5	0.0474	82.5	0.200	55	0.302	27.5	0.489	11	0.887
292.5	0.0530	97.5	0.177	65	0.302	32.5	0.492	13	0.877
337.5	0.0454	112.5	0.171	75	0.276	37.5	0.452	15	0.846
382.5	0.0435	127.5	0.131	85	0.262	42.5	0.469	17	0.841
427.5	0.0394	142.5	0.103	95	0.266	47.5	0.439	19	0.813
472.5	0.0394	157.5	0.0939	105	0.257	52.5	0.373	21	0.721
517.5	0.0355	172.5	0.0626	115	0.232	57.5	0.440	23	0.807
562.5	0.0323			125	0.215	62.5	0.339	25	0.683

607.5	0.0274			135	0.209	67.5	0.363	27	0.704
652.5	0.0247			145	0.186	72.5	0.320	29	0.638
697.5	0.0185			155	0.180	77.5	0.313	31	0.676
742.5	0.0126			165	0.161	82.5	0.285	33	0.622
				175	0.138	87.5	0.236	35	0.557
				185	0.119	92.5	0.243	37	0.510
				195	0.0675	97.5	0.169	39	0.511
				205	0.00894	102.5	0.146	41	0.490
						107.5	0.0548	43	0.375
								45	0.338
								47	0.389
								49	0.169
								51	0.0667

Compound: <b>Adenine</b> ; Atmosphere: <b>Nitrogen N<sub>2</sub></b>									
$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng} \square s^{-1}}$	$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng} \square s^{-1}}$	$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng} \square s^{-1}}$	$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng} \square s^{-1}}$	$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng} \square s^{-1}}$
$T = 503.3 \text{ K}$ $\tau_{iso} = 0.9s$		$T = 513.0 \text{ K}$ $\tau_{iso} = 0.4s$		$T = 522.7 \text{ K}$ $\tau_{iso} = 0.2s$		$T = 532.4 \text{ K}$ $\tau_{iso} = 0.15s$		$T = 542.1 \text{ K}$ $\tau_{iso} = 0.1s$	
0.45	2.00	0.2	4.41	0.1	9.88	0.075	13.5	0.05	24.2
1.35	1.97	0.6	4.37	0.3	9.51	0.225	13.1	0.15	28.8
2.25	1.96	1	4.29	0.5	8.55	0.375	11.7	0.25	24.9
3.15	1.72	1.4	4.16	0.7	7.85	0.525	11.4	0.35	24.2
4.05	1.65	1.8	3.83	0.9	8.96	0.675	11.1	0.45	24.1
4.95	1.74	2.2	3.64	1.1	7.93	0.825	9.83	0.55	21.9
5.85	1.52	2.6	3.85	1.3	8.53	0.975	10.2	0.65	20.6
6.75	1.50	3	3.87	1.5	7.71	1.125	8.82	0.75	19.6
7.65	1.47	3.4	3.50	1.7	7.54	1.275	8.12	0.85	20.5
8.55	1.40	3.8	3.27	1.9	7.48	1.425	7.92	0.95	16.8
9.45	1.45	4.2	3.19	2.1	7.31	1.575	5.80	1.05	16.8
10.35	1.11	4.6	2.93	2.3	7.06	1.725	6.48	1.15	16.5
11.25	1.31	5	2.86	2.5	6.83	1.875	3.65	1.25	12.3
12.15	1.19	5.4	2.77	2.7	7.27	2.025	1.85	1.35	13.9
13.05	0.963	5.8	2.58	2.9	5.52			1.45	9.20
13.95	1.01	6.2	2.18	3.1	6.84			1.55	9.52
14.85	0.697	6.6	2.44	3.3	5.90			1.65	6.76
15.75	0.720	7	2.25	3.5	5.59			1.75	2.06
16.65	0.875	7.4	1.85	3.7	5.71				
17.55	0.622	7.8	1.74	3.9	5.53				
18.45	0.444	8.2	1.22	4.1	4.82				
19.35	0.351	8.6	1.21	4.3	4.87				
20.25	0.0797	9	0.816	4.5	5.01				
		9.4	0.0339	4.7	4.03				
				4.9	3.97				
				5.1	3.49				
				5.3	3.09				
				5.5	3.42				
				5.7	2.88				
				5.9	1.29				
				6.1	1.97				
				6.3	0.561				
				6.5	0.600				

Compound: Adenine ; Atmosphere: Helium He									
$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng} \square \text{s}^{-1}}$	$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng} \square \text{s}^{-1}}$	$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng} \square \text{s}^{-1}}$	$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng} \square \text{s}^{-1}}$	$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng} \square \text{s}^{-1}}$
$T = 448.9 \text{ K}$ $\tau_{iso} = 50\text{s}$		$T = 458.3 \text{ K}$ $\tau_{iso} = 15\text{s}$		$T = 467.6 \text{ K}$ $\tau_{iso} = 10\text{s}$		$T = 476.9 \text{ K}$ $\tau_{iso} = 5\text{s}$		$T = 486.3 \text{ K}$ $\tau_{iso} = 2.5\text{s}$	
25	0.0675	7.5	0.164	5	0.316	2.5	0.560	1.25	0.918
75	0.0652	22.5	0.150	15	0.302	7.5	0.557	3.75	0.906
125	0.0562	37.5	0.147	25	0.292	12.5	0.515	6.25	0.936
175	0.0512	52.5	0.139	35	0.259	17.5	0.483	8.75	0.870
225	0.0440	67.5	0.128	45	0.257	22.5	0.459	11.25	0.860
275	0.0397	82.5	0.120	55	0.235	27.5	0.459	13.75	0.844
325	0.0325	97.5	0.107	65	0.201	32.5	0.370	16.25	0.747
375	0.0269	112.5	0.0912	75	0.174	37.5	0.382	18.75	0.769
425	0.0256	127.5	0.0750	85	0.161	42.5	0.349	21.25	0.694
475	0.0181	142.5	0.0603	95	0.137	47.5	0.298	23.75	0.653
525	0.0155	157.5	0.0289	105	0.104	52.5	0.266	26.25	0.642
575	0.0124				0.0651	57.5	0.183	28.75	0.585
625	0.00762					62.5	0.109	31.25	0.522
						67.5	0.0423	33.75	0.435
						72.5	0.0279	36.25	0.395
								38.75	0.437
								41.25	0.349
								43.75	0.232
								46.25	0.185

Compound: Adenine ; Atmosphere: Helium He									
$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng} \square \text{s}^{-1}}$	$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng} \square \text{s}^{-1}}$	$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng} \square \text{s}^{-1}}$	$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng} \square \text{s}^{-1}}$	$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng} \square \text{s}^{-1}}$
$T = 495.6 \text{ K}$ $\tau_{iso} = 0.9\text{s}$		$T = 504.9 \text{ K}$ $\tau_{iso} = 1\text{s}$		$T = 514.2 \text{ K}$ $\tau_{iso} = 0.4\text{s}$		$T = 523.6 \text{ K}$ $\tau_{iso} = 0.25\text{s}$		$T = 532.9 \text{ K}$ $\tau_{iso} = 0.15\text{s}$	
0.45	1.93	0.5	3.51	0.2	7.77	0.125	16.0	0.075	29.4
1.35	1.92	1.5	3.47	0.6	7.71	0.375	15.8	0.225	28.2
2.25	1.78	2.5	3.47	1	6.95	0.625	15.1	0.375	25.2
3.15	1.90	3.5	3.11	1.4	6.62	0.875	14.9	0.525	24.5
4.05	1.74	4.5	3.13	1.8	6.87	1.125	13.6	0.675	22.8
4.95	1.47	5.5	2.60	2.2	6.15	1.375	14.2	0.825	21.7
5.85	1.65	6.5	2.51	2.6	5.97	1.625	12.5	0.975	18.5
6.75	1.53	7.5	2.23	3	5.52	1.875	12.5	1.125	21.0
7.65	1.39	8.5	2.12	3.4	5.15	2.125	11.2	1.275	16.9
8.55	1.36	9.5	1.59	3.8	4.71	2.375	11.2	1.425	14.6
9.45	1.53	10.5	1.96	4.2	4.58	2.625	10.7	1.575	13.1
10.35	1.14	11.5	1.74	4.6	4.20	2.875	9.69	1.725	10.8
11.25	1.29	12.5	1.33	5	3.83	3.125	8.83	1.875	7.92
12.15	1.10	13.5	0.719	5.4	3.44	3.375	8.23	2.025	3.64
13.05	1.11			5.8	3.19	3.625	7.07		

13.95	1.05			6.2	2.56	3.875	6.78		
14.85	0.957			6.6	2.36	4.125	5.50		
15.75	0.917			7	2.04	4.375	4.59		
16.65	0.829					4.625	3.23		
17.55	0.753					4.875	0.324		
18.45	0.488								
19.35	0.393								

Compound: **Guanine** ; Atmosphere: **Sulfure Hexafluoride SF<sub>6</sub>**

$t / s$	$\frac{\Delta m}{\tau_{iso} / ng \square s^{-1}}$	$t / s$	$\frac{\Delta m}{\tau_{iso} / ng \square s^{-1}}$	$t / s$	$\frac{\Delta m}{\tau_{iso} / ng \square s^{-1}}$	$t / s$	$\frac{\Delta m}{\tau_{iso} / ng \square s^{-1}}$
$T = 619.7 K$ $\tau_{iso} = 0.5s$		$T = 629.0 K$ $\tau_{iso} = 0.2s$		$T = 638.3 K$ $\tau_{iso} = 0.15s$		$T = 647.6 K$ $\tau_{iso} = 0.08s$	
0.25	4.36	0.1	5.87	0.075	18.2	0.04	36.2
0.75	3.68	0.3	4.77	0.225	12.7	0.12	22.2
1.25	3.18	0.5	3.42	0.375	8.53	0.2	15.7
1.75	2.78	0.7	2.94	0.525	6.73	0.28	14.1
2.25	2.59	0.9	3.09	0.675	3.93	0.36	9.79
2.75	2.32	1.1	1.95	0.825	4.30	0.44	6.65
3.25	2.41	1.3	1.18	0.975	1.74	0.52	6.63
3.75	1.58	1.5	1.36	1.125	2.43	0.6	3.28
4.25	1.47	1.7	0.266	1.275	1.49	0.68	1.92
4.75	1.50	1.9	0.185	1.425	1.25	0.78	1.67
5.25	1.07			1.575	0.315	0.84	0.887
5.75	1.19						
6.25	0.840						
6.75	0.756						
7.25	0.667						
7.75	0.354						
8.25	0.528						
8.75	0.452						

Compound: **Guanine** ; Atmosphere: **Sulfure Hexafluoride SF<sub>6</sub>**

$t / s$	$\frac{\Delta m}{\tau_{iso} / ng \square s^{-1}}$	$t / s$	$\frac{\Delta m}{\tau_{iso} / ng \square s^{-1}}$	$t / s$	$\frac{\Delta m}{\tau_{iso} / ng \square s^{-1}}$	$t / s$	$\frac{\Delta m}{\tau_{iso} / ng \square s^{-1}}$
$T = 657.0 K$ $\tau_{iso} = 0.04s$		$T = 666.3 K$ $\tau_{iso} = 0.02s$		$T = 675.6 K$ $\tau_{iso} = 0.015s$		$T = 685.0 K$ $\tau_{iso} = 0.015s$	
0.02	57.0	0.01	79.0	0.0075	147	0.0075	222
0.06	41.5	0.03	52.6	0.0225	91.0	0.0225	161
0.1	31.5	0.05	40.5	0.0375	71.9	0.0375	108
0.14	23.8	0.07	35.1	0.0525	47.0	0.0525	81.3
0.18	22.0	0.09	26.7	0.0675	34.8	0.0675	68.3
0.22	15.5	0.11	20.6	0.0825	28.8	0.0825	43.8
0.26	15.7	0.13	17.3	0.0975	16.4	0.0975	38.0
0.3	10.8	0.15	10.9	0.1125	22.2	0.1125	34.1
0.34	9.81	0.17	8.11	0.1275	16.8	0.1275	13.6
0.38	8.81	0.19	10.7	0.1425	7.66	0.1425	7.46
0.42	3.62					0.1575	13.5
0.46	1.50					0.1725	5.90

Compound: **Guanine** ; Atmosphere: **Nitrogen N<sub>2</sub>**

$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng}\square\text{s}^{-1}}$	$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng}\square\text{s}^{-1}}$	$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng}\square\text{s}^{-1}}$	$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng}\square\text{s}^{-1}}$
$T = 615.8 \text{ K}$ $\tau_{iso} = 1.5\text{s}$		$T = 625.0 \text{ K}$ $\tau_{iso} = 0.6\text{s}$		$T = 634.2 \text{ K}$ $\tau_{iso} = 0.45\text{s}$		$T = 643.5 \text{ K}$ $\tau_{iso} = 0.3\text{s}$	
0.75	0.819	0.3	1.10	0.225	3.43	0.15	5.62
2.25	0.711	0.9	0.820	0.675	2.56	0.45	4.41
3.75	0.608	1.5	0.634	1.125	1.70	0.75	3.27
5.25	0.450	2.1	0.626	1.575	1.24	1.05	2.60
6.75	0.536	2.7	0.481	2.025	0.910	1.35	2.35
8.25	0.521	3.3	0.428	2.475	0.586	1.65	1.73
9.75	0.429	3.9	0.457	2.925	0.522	1.95	1.12
11.25	0.250	4.5	0.279	3.375	0.499	2.25	0.761
12.75	0.315	5.1	0.292	3.825	0.393	2.55	1.36
14.25	0.315	5.7	0.185	4.275	0.285	2.85	0.791
15.75	0.292	6.3	0.00892				
17.25	0.0979						
18.75	0.289						
20.25	0.129						
21.75	0.281						
23.25	0.112						
24.75	0.130						
26.25	0.118						
27.75	0.176						
29.25	0.151						
30.75	0.0953						
32.25	0.151						
33.75	0.0997						
35.25	0.101						
36.75	0.0241						
38.25	0.145						
39.75	0.0268						

Compound: **Guanine** ; Atmosphere: **Nitrogen N<sub>2</sub>**

$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng}\square\text{s}^{-1}}$	$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng}\square\text{s}^{-1}}$	$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng}\square\text{s}^{-1}}$	$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng}\square\text{s}^{-1}}$
$T = 652.7 \text{ K}$ $\tau_{iso} = 0.15\text{s}$		$T = 661.9 \text{ K}$ $\tau_{iso} = 0.05\text{s}$		$T = 671.1 \text{ K}$ $\tau_{iso} = 0.045\text{s}$		$T = 680.4 \text{ K}$ $\tau_{iso} = 0.045\text{s}$	
0.075	9.21	0.025	9.36	0.0225	34.1	0.0225	65.4
0.225	7.57	0.075	7.29	0.0675	27.0	0.0675	47.8
0.375	5.74	0.125	5.07	0.1125	17.6	0.1125	36.3
0.525	5.10	0.175	5.43	0.1575	13.1	0.1575	29.9
0.675	3.98	0.225	3.77	0.2025	10.8	0.2025	19.9
0.825	2.42	0.275	3.35	0.2475	6.13	0.2475	22.1
0.975	2.14	0.325	3.22	0.2925	8.31	0.2925	16.8
1.125	2.71	0.375	1.59	0.3375	6.30	0.3375	12.8
1.275	1.89	0.425	2.33	0.3825	2.87	0.3825	12.0
1.425	0.878	0.475	1.25			0.4275	8.97
1.575	0.415	0.525	1.38			0.4725	7.32
1.725	1.53					0.5175	7.16
1.875	0.924						

Compound: **Guanine** ; Atmosphere: **Helium He**

$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng}\square\text{s}^{-1}}$	$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng}\square\text{s}^{-1}}$	$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng}\square\text{s}^{-1}}$	$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng}\square\text{s}^{-1}}$
$T = 603.9 \text{ K}$ $\tau_{iso} = 2.8\text{s}$		$T = 612.8 \text{ K}$ $\tau_{iso} = 1.2\text{s}$		$T = 621.6 \text{ K}$ $\tau_{iso} = 1.2\text{s}$		$T = 630.5 \text{ K}$ $\tau_{iso} = 1.5\text{s}$	
1.4	1.24	0.6	2.40	0.6	3.07	0.75	4.76
4.2	1.05	1.8	1.80	1.8	2.51	2.25	3.45
7	0.908	3	1.25	3	2.12	3.75	2.60
9.8	0.793	4.2	0.960	4.2	1.65	5.25	1.81
12.6	0.741	5.4	0.554	5.4	1.25	6.75	1.59
15.4	0.662	6.6	0.511	6.6	1.17	8.25	1.19
18.2	0.688	7.8	0.183	7.8	0.645	9.75	1.11
21	0.453	9	0.167	9	0.810	11.25	0.703
23.8	0.419	10.2	0.0561	10.2	0.573	12.75	0.702
26.6	0.428	11.4	0.0192	11.4	0.467	14.25	0.279
29.4	0.305			12.6	0.215	15.75	0.113
32.2	0.341			13.8	0.243		
35	0.242						
37.8	0.223						
40.6	0.177						
43.4	0.220						
46.2	0.136						
49	0.206						
51.8	0.144						
54.6	0.178						
57.4	0.0685						
60.2	0.165						
63	0.0804						
65.8	0.129						
68.6	0.0410						
71.4	0.0865						
74.2	0.0574						
77	0.0311						
79.8	0.0290						

Compound: **Guanine** ; Atmosphere: **Helium He**

$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng}\square\text{s}^{-1}}$	$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng}\square\text{s}^{-1}}$	$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng}\square\text{s}^{-1}}$	$t / s$	$\frac{\Delta m}{\tau_{iso} / \text{ng}\square\text{s}^{-1}}$
$T = 639.4 \text{ K}$ $\tau_{iso} = 0.3\text{s}$		$T = 648.3 \text{ K}$ $\tau_{iso} = 0.65\text{s}$		$T = 657.2 \text{ K}$ $\tau_{iso} = 0.35\text{s}$		$T = 666.0 \text{ K}$ $\tau_{iso} = 0.2\text{s}$	
0.15	6.21	0.325	11.0	0.175	17.6	0.1	26.0
0.45	5.16	0.975	8.92	0.525	11.9	0.3	21.4
0.75	4.40	1.625	6.75	0.875	7.94	0.5	17.0
1.05	3.57	2.275	4.93	1.225	5.74	0.7	13.0
1.35	3.38	2.925	3.80	1.575	4.06	0.9	11.4
1.65	2.97	3.575	3.47	1.925	2.51	1.1	7.79
1.95	2.24	4.225	2.63	2.275	1.72	1.3	6.27
2.25	1.83	4.875	2.17	2.625	1.58	1.5	6.04
2.55	1.42	5.525	1.36	2.975	0.560	1.7	3.73
2.85	1.29	6.175	0.663			1.9	2.28
3.15	0.833	6.825	0.0168			2.1	1.60

3.45	0.843						
3.75	0.452						
4.05	0.469						
4.35	0.595						

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