

## 1,2-butadiene/N,N-dimethylformamide - Isothermal VLE-data (xp)

	[1] T K	[2] P Pa	[3] C liquid mol frac
1	293.15	333.3	0.0000
2	293.15	4266	1.200E-2
3	293.15	4133	1.210E-2
4	293.15	8266	2.300E-2
5	293.15	8666	2.320E-2
6	293.15	12399	3.500E-2
7	293.15	12399	3.550E-2
8	293.15	16799	4.600E-2
9	293.15	16799	4.700E-2
10	293.15	20532	5.600E-2
11	293.15	20265	5.840E-2
12	293.15	25065	6.800E-2
13	293.15	24665	6.900E-2
14	293.15	29064	7.800E-2
15	293.15	29731	8.010E-2
16	293.15	36797	9.900E-2
17	293.15	36664	0.1009
18	318.15	1467	0.0000
19	318.15	9866	1.140E-2
20	318.15	9999	1.200E-2
21	318.15	18799	2.190E-2
22	318.15	17999	2.200E-2
23	318.15	26131	3.300E-2
24	318.15	25731	3.340E-2
25	318.15	34131	4.400E-2
26	318.15	33997	4.430E-2
27	318.15	41063	5.400E-2
28	318.15	40930	5.480E-2
29	318.15	49063	6.500E-2
30	318.15	48529	6.530E-2
31	318.15	57062	7.580E-2
32	318.15	56129	7.600E-2
33	318.15	69994	9.590E-2
34	318.15	70261	9.600E-2
35	333.15	3200	0.0000
36	333.15	15732	1.090E-2
37	333.15	15732	1.100E-2
38	333.15	28131	2.120E-2
39	333.15	27198	2.200E-2
40	333.15	38530	3.200E-2
41	333.15	37864	3.220E-2
42	333.15	49196	4.260E-2
43	333.15	49463	4.300E-2
44	333.15	59462	5.260E-2
45	333.15	59195	5.300E-2
46	333.15	69328	6.300E-2
47	333.15	69994	6.400E-2
48	333.15	80393	7.330E-2
49	333.15	79594	7.400E-2
50	333.15	98525	9.290E-2
51	333.15	98792	9.400E-2
52	353.15	7999	0.0000
53	353.15	27331	1.040E-2
54	353.15	27464	1.100E-2
55	353.15	44663	2.000E-2
56	353.15	45996	2.020E-2
57	353.15	60395	3.060E-2
58	353.15	61728	3.100E-2
59	353.15	76794	4.040E-2
60	353.15	77460	4.100E-2
61	353.15	93059	4.970E-2
62	353.15	91726	5.000E-2
63	353.15	1.0626E5	6.000E-2
64	353.15	1.0706E5	6.100E-2
65	353.15	1.2132E5	6.980E-2
66	353.15	1.2092E5	7.000E-2
67	353.15	1.4865E5	8.900E-2
68	353.15	1.4879E5	9.000E-2
69	373.15	17999	0.0000
70	373.15	44663	9.800E-3
71	373.15	45196	1.000E-2
72	373.15	68928	1.900E-2
73	373.15	71194	1.910E-2
74	373.15	92792	2.900E-2
75	373.15	90926	2.900E-2
76	373.15	1.1439E5	3.830E-2
77	373.15	1.1439E5	3.900E-2
78	373.15	1.5572E5	5.700E-2
79	373.15	1.5559E5	5.800E-2
80	373.15	1.7532E5	6.640E-2

	[1] T K	[2] P Pa	[3] C liquid mol frac
81	373.15	1.7492E5	6.700E-2
82	373.15	2.1452E5	8.500E-2
83	373.15	2.1465E5	8.600E-2
84	393.15	37330	0.0000
85	393.15	71861	9.000E-3
86	393.15	69594	9.300E-3
87	393.15	1.0266E5	1.800E-2
88	393.15	1.0546E5	1.810E-2
89	393.15	1.3452E5	2.700E-2
90	393.15	1.3306E5	2.740E-2
91	393.15	1.6319E5	3.600E-2
92	393.15	1.6345E5	3.610E-2
93	393.15	2.1878E5	5.400E-2
94	393.15	2.1958E5	5.400E-2
95	393.15	2.4398E5	6.300E-2
96	393.15	2.4491E5	6.300E-2
97	393.15	2.9824E5	8.100E-2
98	393.15	2.9838E5	8.100E-2
99	409.15	63995	0.0000
100	409.15	1.3906E5	1.700E-2
101	409.15	1.4039E5	1.730E-2
102	409.15	1.7719E5	2.600E-2
103	409.15	1.7479E5	2.610E-2
104	409.15	2.1225E5	3.430E-2
105	409.15	2.1145E5	3.500E-2
106	409.15	2.8211E5	5.160E-2
107	409.15	2.7998E5	5.200E-2
108	409.15	3.1051E5	6.020E-2
109	409.15	3.1237E5	6.100E-2
110	409.15	3.7944E5	7.780E-2
111	409.15	3.7917E5	7.800E-2
112	423.15	1.0133E5	0.0000
113	423.15	1.7719E5	1.660E-2
114	423.15	1.7759E5	1.800E-2
115	423.15	2.1812E5	2.490E-2
116	423.15	2.2038E5	2.600E-2
117	423.15	2.6225E5	3.280E-2
118	423.15	2.6011E5	3.500E-2
119	423.15	3.4584E5	4.950E-2
120	423.15	3.4264E5	5.100E-2
121	423.15	3.7757E5	5.780E-2
122	423.15	3.8157E5	5.900E-2
123	423.15	4.6143E5	7.500E-2
124	423.15	4.6063E5	7.600E-2

[1] temperature, K, saturated  
[2] pressure, Pa, saturated  
[3] liquid, mol fraction, 1,2-butadiene

3.1-VLE-24843.DB [70225]

**1,2-butadiene/N,N-dimethylformamide - Isothermal VLE-data (xp)**

	[1] T K	[2] P Pa	[3] C liquid mol frac
1	293.15	3933	1.E-2
2	293.15	7933	2.E-2
3	293.15	11066	3.E-2
4	293.15	14666	4.E-2
5	293.15	17999	5.E-2
6	293.15	22598	6.E-2
7	293.15	25198	7.E-2
8	293.15	27864	8.E-2
9	293.15	30931	9.E-2
10	293.15	33931	0.1
11	293.15	62595	0.2
12	318.15	9466	1.E-2
13	318.15	17799	2.E-2
14	318.15	24731	3.E-2
15	318.15	32797	4.E-2
16	318.15	39797	5.E-2
17	318.15	47996	6.E-2
18	318.15	53729	7.E-2
19	318.15	59862	8.E-2
20	318.15	66661	9.E-2
21	318.15	72127	0.1
22	318.15	1.3192E5	0.2
23	333.15	14532	1.E-2
24	333.15	27264	2.E-2
25	333.15	37064	3.E-2
26	333.15	48463	4.E-2
27	333.15	59462	5.E-2
28	333.15	72127	6.E-2
29	333.15	78860	7.E-2
30	333.15	87726	8.E-2
31	333.15	96459	9.E-2
32	333.15	1.0239E5	0.1
33	333.15	1.9638E5	0.2

[1] temperature, K, saturated  
 [2] pressure, Pa, saturated  
 [3] liquid, mol fraction, 1,2-butadiene

3.1-VLE-29227.DB [70999]

**Compounds:**

*name* **N,N-dimethylformamide**  
*formula* C<sub>3</sub>H<sub>7</sub>NO  
*casnr* 68-12-2  
*synonym* DMF; DMFA; N,N-dimethylmethanamide; dimethylformamide;

*name* **1,2-butadiene**  
*formula* C<sub>4</sub>H<sub>6</sub>  
*casnr* 590-19-2  
*synonym* 1,2-butadiylene; methylallene;

**Literature:****3.1-VLE-24843.DB**

Stoeck,S., "Determination of the vapor-liquid equilibria in the binary systems of N,N-dimethylformamide with buta-1,2-diene, buta-1,3-diene, but-1-yne, and but-1-en-3-yne", FIZ Report, 11301, 1977

**3.1-VLE-29227.DB**

Doering,K.E.;Stoeck,S., "VLE in binary systems of dimethylformamide with 1,3-butadiene, 1,2-butadiene, trans-2-butene, and cis-2-butene at 20, 45 and 60 C and at pressures up to 2 atm", FIZ Report, 12051, 1969