Flexural Creep Data per ASTM D2990-01

Start Date	04/06/2008	Initials:	DEB
Sample ID	Fiberglass	Date:	3-Jun-08
Stress (S) (psi)	15390	Project Number:	0804-00254

Input data into pink cells only. Calculations will be automatically performed by Excel.
IMPORTANT: Cells are all unlocked below row 22 so they may be deleted as necessary.

Dimensions		1	2	3	4	5
Mid-Span	WIDTH (b) (in)	0.599	0.598	0.609	0.609	0.595
	THICK (d) (in)	0.106	0.122	0.116	0.127	0.125
	LOAD (P) (lb.) - actual	18.12	23.97	22.14	26.45	25.13
	SPAN (L) (in)	3.81	3.81	3.81	3.81	3.81
	LOAD (P) (lb.) - calculated	18.12429	23.96863	22.06763	26.45131	25.03568

DATE/TIME	Elapsed Time (hours)	DIAL GAGE READINGS (inches)				
		1	2	3	4	5
7/23/08 11:30 AM	0.00	0.869	0.889	0.917	0.929	0.953
7/23/08 11:31 AM	0.02	0.716	0.731	0.781	0.771	0.803
7/23/08 11:32 AM	0.03	0.714	0.726	0.781	0.771	0.802
7/23/08 11:36 AM	0.10	0.711	0.724	0.78	0.769	0.801
7/23/08 11:42 AM	0.20	0.709	0.723	0.779	0.768	0.8
7/23/08 12:00 PM	0.50	0.709	0.722	0.778	0.767	0.798
7/23/08 12:30 PM	1.00	0.709	0.721	0.777	0.766	0.797
7/23/08 1:00 PM	1.50	0.709	0.719	0.776	0.765	0.797
7/23/08 2:00 PM	2.50	0.708	0.719	0.776	0.765	0.796
7/23/08 3:00 PM	3.50	0.707	0.719	0.775	0.764	0.795
7/24/08 6:30 AM	19.00	0.705	0.717	0.773	0.762	0.793
7/28/08 7:20 AM	115.83	0.701	0.712	0.769	0.757	0.788
7/31/08 8:10 AM	188.67	0.7	0.711	0.767	0.756	0.786
8/6/08 6:00 AM	330.50	0.698	0.709	0.766	0.754	0.785
8/13/08 11:00 AM	503.50	0.697	0.708	0.764	0.753	0.783
8/18/08 6:30 AM	619.00	0.696	0.707	0.764	0.752	0.782
8/21/08 11:10 AM	695.67	0.696	0.707	0.764	0.752	0.782
8/28/08 2:00 PM	866.50	0.695	0.706	0.763	0.751	0.781
9/4/08 6:10 AM	1026.67	0.694	0.705	0.763	0.75	0.78

Modulus Data

Elapsed Time Hours	1	2	3	4	5	Average
0.00						
0.02	2295288	1931725	2367895	1855475	1993284	2088733
0.03	2265672	1872469	2367895	1855475	1980083	2068319
0.10	2222653	1849773	2350611	1832281	1967056	2044475
0.20	2194870	1838629	2333577	1820901	1954200	2028435
0.50	2194870	1827620	2316789	1809661	1928984	2015585
1.00	2194870	1816741	2300241	1798558	1916619	2005406
1.50	2194870	1795368	2283927	1787592	1916619	1995675
2.50	2181237	1795368	2283927	1787592	1904411	1990507
3.50	2167772	1795368	2267843	1776758	1892358	1980020
19.00	2141336	1774491	2236345	1755479	1868704	1955271
115.83	2090352	1724364	2175903	1704448	1812076	1901429
188.67	2077983	1714677	2146891	1694596	1790375	1884904
330.50	2053679	1695625	2132673	1675229	1779718	1867385
503.50	2041739	1686257	2104795	1665710	1758780	1851456
619.00	2029937	1676992	2104795	1656300	1748495	1843304
695.67	2029937	1676992	2104795	1656300	1748495	1843304
866.50	2018271	1667828	2091128	1646995	1738329	1832510
1026.67	2006738	1658764	2091128	1637793	1728281	1824541
0.00	404119	343321	351182	315571	313738	345586
0.00	404119	343321	351182	315571	313738	345586
0.00	404119	343321	351182	315571	313738	345586
0.00	404119	343321	351182	315571	313738	345586
0.00	404119	343321	351182	315571	313738	345586
0.00	404119	343321	351182	315571	313738	345586
0.00	404119	343321	351182	315571	313738	345586
0.00	404119	343321	351182	315571	313738	345586
0.00	404119	343321	351182	315571	313738	345586

Log
Strain Data

Elapsed Time	Log						
Hours	Hours	1	2	3	4	5	Average
0.00							
0.02	-1.7782	-0.1737	-0.0987	-0.1857	-0.0812	-0.1107	-0.1300
0.03	-1.4771	-0.1681	-0.0852	-0.1857	-0.0812	-0.1078	-0.1256
0.10	-1.0000	-0.1597	-0.0799	-0.1825	-0.0758	-0.1049	-0.1206
0.20	-0.6990	-0.1543	-0.0772	-0.1794	-0.0731	-0.1021	-0.1172
0.50	-0.3010	-0.1543	-0.0746	-0.1762	-0.0704	-0.0965	-0.1144
1.00	0.0000	-0.1543	-0.0720	-0.1731	-0.0677	-0.0937	-0.1122
1.50	0.1761	-0.1543	-0.0669	-0.1700	-0.0651	-0.0937	-0.1100
2.50	0.3979	-0.1516	-0.0669	-0.1700	-0.0651	-0.0909	-0.1089
3.50	0.5441	-0.1489	-0.0669	-0.1670	-0.0624	-0.0881	-0.1067
19.00	1.2788	-0.1435	-0.0618	-0.1609	-0.0572	-0.0827	-0.1012
115.83	2.0638	-0.1331	-0.0494	-0.1490	-0.0444	-0.0693	-0.0890
188.67	2.2757	-0.1305	-0.0469	-0.1431	-0.0418	-0.0641	-0.0853
330.50	2.5192	-0.1254	-0.0421	-0.1403	-0.0369	-0.0615	-0.0812
503.50	2.7020	-0.1229	-0.0397	-0.1345	-0.0344	-0.0563	-0.0776
619.00	2.7917	-0.1203	-0.0373	-0.1345	-0.0319	-0.0538	-0.0756
695.67	2.8424	-0.1203	-0.0373	-0.1345	-0.0319	-0.0538	-0.0756
866.50	2.9378	-0.1178	-0.0349	-0.1317	-0.0295	-0.0513	-0.0730
1026.67	3.0114	-0.1154	-0.0325	-0.1317	-0.0270	-0.0487	-0.0711
0.00	#NUM!	0.5806	0.6516	0.6431	0.6881	0.6923	0.6511
0.00	#NUM!	0.5806	0.6516	0.6431	0.6881	0.6923	0.6511
0.00	#NUM!	0.5806	0.6516	0.6431	0.6881	0.6923	0.6511
0.00	#NUM!	0.5806	0.6516	0.6431	0.6881	0.6923	0.6511
0.00	#NUM!	0.5806	0.6516	0.6431	0.6881	0.6923	0.6511
0.00	#NUM!	0.5806	0.6516	0.6431	0.6881	0.6923	0.6511
0.00	#NUM!	0.5806	0.6516	0.6431	0.6881	0.6923	0.6511
0.00	#NUM!	0.5806	0.6516	0.6431	0.6881	0.6923	0.6511
0.00	#NUM!	0.5806	0.6516	0.6431	0.6881	0.6923	0.6511

Log
Modulus Data

Elapsed Time	Log						
Hours	Hours	1	2	3	4	5	Average
0.00							
0.02	-1.7782	6.3608	6.2859	6.3744	6.2685	6.2996	6.3178
0.03	-1.4771	6.3552	6.2724	6.3744	6.2685	6.2967	6.3134
0.10	-1.0000	6.3469	6.2671	6.3712	6.2630	6.2938	6.3084
0.20	-0.6990	6.3414	6.2645	6.3680	6.2603	6.2910	6.3050
0.50	-0.3010	6.3414	6.2619	6.3649	6.2576	6.2853	6.3022
1.00	0.0000	6.3414	6.2593	6.3618	6.2549	6.2825	6.3000
1.50	0.1761	6.3414	6.2542	6.3587	6.2523	6.2825	6.2978
2.50	0.3979	6.3387	6.2542	6.3587	6.2523	6.2798	6.2967
3.50	0.5441	6.3360	6.2542	6.3556	6.2496	6.2770	6.2945
19.00	1.2788	6.3307	6.2491	6.3495	6.2444	6.2715	6.2890
115.83	2.0638	6.3202	6.2366	6.3376	6.2316	6.2582	6.2768
188.67	2.2757	6.3176	6.2342	6.3318	6.2291	6.2529	6.2731
330.50	2.5192	6.3125	6.2293	6.3289	6.2241	6.2504	6.2690
503.50	2.7020	6.3100	6.2269	6.3232	6.2216	6.2452	6.2654
619.00	2.7917	6.3075	6.2245	6.3232	6.2191	6.2427	6.2634
695.67	2.8424	6.3075	6.2245	6.3232	6.2191	6.2427	6.2634
866.50	2.9378	6.3050	6.2222	6.3204	6.2167	6.2401	6.2609
1026.67	3.0114	6.3025	6.2198	6.3204	6.2143	6.2376	6.2589
0.00	#NUM!	5.6065	5.5357	5.5455	5.4991	5.4966	5.5367
0.00	#NUM!	5.6065	5.5357	5.5455	5.4991	5.4966	5.5367
0.00	#NUM!	5.6065	5.5357	5.5455	5.4991	5.4966	5.5367
0.00	#NUM!	5.6065	5.5357	5.5455	5.4991	5.4966	5.5367
0.00	#NUM!	5.6065	5.5357	5.5455	5.4991	5.4966	5.5367
0.00	#NUM!	5.6065	5.5357	5.5455	5.4991	5.4966	5.5367
0.00	#NUM!	5.6065	5.5357	5.5455	5.4991	5.4966	5.5367
0.00	#NUM!	5.6065	5.5357	5.5455	5.4991	5.4966	5.5367
0.00	#NUM!	5.6065	5.5357	5.5455	5.4991	5.4966	5.5367