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""Graph 43:""; ""Graph 44:""; ""Table 43:""; ""Table 44:""; ""Graph 45:"";
""Graph 46:""; ""Table 45:""; ""Table 46:""; ""Graph 47:""; ""Graph 48:"";
""Table 47:""; ""Table 48:""; ""Graph 49:""; ""Graph 50:""; ""Table 49:"";
""Table 50:""; ""Graph 51:""; ""Graph 52:""; ""Table 51:""; ""Table 52:"";
""Graph 53:""; ""Graph 54:""; ""Table 53:""; ""Table 54:""; ""Graph 55:"";
""Graph 56:""; ""Table 55:""; ""Table 56:""; ""Graph 58:""; ""Table 57:"";
""Table 58:""; ""Graph 59:""; ""Graph 60:""; ""Table 59:""; ""Table 60:"";
""Graph 61:""; ""Graph 62:""; ""Table 61:""; ""Table 62:""; ""Graph 63:"";
""Graph 64:""; ""Table 63:""; ""Table 64:""; ""Graph 65:""; ""Graph 66:"";
""Table 65:""; ""Table 66:""; ""Graph 67:""; ""Graph 68:""; ""Table 67:"";
""Table 68:""; ""Graph 69:""; ""Graph 70:""; ""Table 69:""; ""Table 70:"";
""Graph 71:""; ""Graph 72:""; ""Table 71:""; ""Table 72:""; ""Graph 73:"";
""Graph 74:""; ""Table 73:""; ""Table 74:""; ""Graph 75:""; ""Graph 76:"";
""Table 75:""; ""Table 76:""; ""Graph 77:""; ""Graph 78:""; ""Table 77:"";
""Table 78:""; ""Graph 79:""; ""Graph 80:""; ""Table 79:""; ""Table 80:"";
""Graph 81:""; ""Graph 82:""; ""Table 81:""; ""Table 82:""; ""Graph 83:"";
""Graph 84:""; ""Table 83:""; ""Table 84:""; ""Graph 85:""; ""Graph 86:"";
""Table 85:""; ""Table 86:""; ""Graph 87:""; ""Graph 88:""; ""Table 87:"";
""Table 88:""; ""Graph 89:""; ""Graph 90:""; ""Table 89:""; ""Table 90:"";
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Sommario/riassunto

As plastics are being used more extensively in high-performance markets, it is imperative that designers and engineers understand all aspects of polymer behavior over an extended service life. Dynamic Mechanical Analysis for Plastics Engineering describes practical uses for DMA information. All of the information for 120 families of thermoplastics is based on independent test data conducted exclusively for this product and is not available through any other source. This PDL addition shows how to use the DMA data to predict, at various temperatures, each materials estimated service life and potential for failure. This book explains the correlation between time and temperature-dependence and illustrates how time-dependent responses such as creep and stress relaxation affect the practical utility of different materials. Basic polymer structures are discussed and test results show how these structural details can be detected and understood.
