Data Dictionary

Filenames	Description
All_fast_data	This file contains the time-history of force and deformation magnitudes during the compression tests for each male Sprague-Dawley rat tail tested (3 tails) at the 0.15 mm/s deformation velocity (fast velocity). Time is in seconds, deformation is in mm, and force is in newtons.
All_medium_data	This file contains the time-history of force and deformation magnitudes during the compression tests for each male Sprague-Dawley rat tail tested (3 tails) at the 0.05 mm/s deformation velocity (medium velocity). Time is in seconds, deformation is in mm, and force is in newtons.
All_slow_data	This file contains the time-history of force and deformation magnitudes during the compression tests for each male Sprague-Dawley rat tail tested at the 0.015 mm/s deformation velocity (slow velocity). Time is in seconds, deformation is in mm, and force is in newtons.
Contact_Width_data	This file contains the measured contact width in mm for the three male Sprague-Dawley rat tails tested at each deformation magnitude (10% of tail diameter (0.75 mm), 18% of tail diameter (1.35 mm), and 25% of tail diameter (1.875 mm). These compression tests were all completed at a deformation velocity of 0.015 mm/s.
fast_ForceRelax	This file contains the time-history of force for the force-relaxations compression tests completed on three male Sprague Dawley rat tails. The force-relaxation test started right after a 1.875 mm deformation was completed at a deformation velocity of 0.15 mm/s. The deformation was held for 11 minutes. Time is in seconds and force is in newtons.

Headers for All_fast_data, All_medium_data, and All_slow_data	Description
Time1	Time in seconds for 1st tail tested. Time1 is time for Deform1 and Force1.
Deform1	Deformation magnitude in mm for 1st tail tested. Deform1 is deformation magnitude for Time1 and Force1.
Force1	Force magnitude in newtons for 1st tail tested. Force1 is force for Deform1 and Time1.
Time 2	Time in seconds for 2nd tail tested. Time2 is time for Deform2 and Force2.
Deform2	Deformation magnitude in mm for 2nd tail tested. Deform2 is deformation magnitude for Time2 and Force2.
Force2	Force magnitude in newtons for 2nd tail tested. Force2 is force for Deform2 and Time2.
Time3	Time in seconds for 3rd tail tested. Time3 is time for Deform3 and Force3.
Deform3	Deformation magnitude in mm for 3rd tail tested. Deform3 is deformation magnitude for Time3 and Force3.
Force3	Force magnitude in newtons for 3rd tail tested. Force3 is force for Deform3 and Time3.

Headers for Contact_Width_data	Description
Tail	Tail contact width was measured for three tails at each deformation magnitude (0.75 mm or 10%, 1.35 or 18%, 1.875 mm or 25%). The 1, 2, or 3 under the tail header is representing either the 1st tail, 2nd tail, or 3rd tail tested.
10% (mm)	This is the measured tail contact width in mm for each of the three tails tested (1-3) at the 0.75 mm deformation magnitude or 10% deformation of total tail diameter.
18% (mm)	This is the measured tail contact width in mm for each of the three tails tested (1-3) at the 1.35 mm deformation magnitude or 18% deformation of total tail diameter.
25% (mm)	This is the measured tail contact width in mm for each of the three tails tested (1-3) at the 1.875 mm deformation magnitude or 25% deformation of total tail diameter.

Headers for fast_ForceRelax_data	Description
Time1	Time in seconds for the 1st tail tested during the force-relaxation compression tests. Time1 is time for Force1.
Force1	Force magnitudes in newtons for the 1st tail tested during the force-relaxation compression tests. Force1 is force for Time1.
Time2	Time in seconds for the 2nd tail tested during the force-relaxation compression tests. Time2 is time for Force2.
Force2	Force magnitudes in newtons for the 2nd tail tested during the force-relaxation compression tests. Force2 is force for Time2.
Time3	Time in seconds for the 3rd tail tested during the force-relaxation compression tests. Time3 is time for Force3.
Force3	Force magnitudes in newtons for the 3rd tail tested during the force-relaxation compression tests. Force3 is force for Time3.