Available raw concentrations of individual PFAS species reported for individual products were compiled from multiple studies and separated into corresponding subcategories (paper, carpets, textiles). These can be seen in the Paper, Carpet, and Textiles tabs. Reported non-detect values were represented as 0, as used in the calculations. The median, maximum, minimum and mean values were then calculated for each study or subgroup of products within the study. The number of individual products was also recorded as the count. The raw data for some studies wasn’t available so the reported corresponding statistics were directly used. Then the average of these medians and the absolute max and min were calculated for each subgroup of MSW (i.e paper, carpet, and textiles) to get a more inclusive approximation of their median PFAS composition. For example, in the Carpet tab the median concentration of 36 PFAS compounds for four different studies are reported. The average median value of the four studies was then taken to characterize the average median composition of the carpet subgroup. These values for individual PFAS compounds were then grouped into families, most notably of which include diPAP, FTOH, FTS, PFCA, and PFSA.

The summary tab reports the average median, max, and min concentration and product count of notable PFAS families for the three subgroups of MSW. These concentrations were then multiplied by the MSW subcategory weight fraction of total landfilled MSW in the U.S. to normalize the concentration to total landfilled mass. Then the normalized concentrations for each subcategory were combined to get

The MSW screenings tab reports average PFAS leachate concentrations collected from a MSW landfill and water based leaching tests of MSW clippings from Liu et al., 2020. The leaching tests were performed over a range of liquid to solids ratios (2, 5, 10 and 20) which were used to calculate the leached mass of PFAS per weight of MSW from the reported leachate concentrations, assuming a leachate density of 1 kg/L. For example, a reported concentration of 100 ng/g PFOA in the leachate at a liquid to solids ratio of 2 would result in 200 ng/g PFOA leached from the MSW.