**(H1) Mortality:** This folder includes three txt files. The first one “*Mortality\_Gammarus*” includes the dataset related to the mortality monitoring of the gammarids.

* The “Time” column refers to the survival time of each gammarid (i.e. a survival time of 28 means that the gammarid was alive for 28 days).
* The “Status” column refers to the state of the gammarids (i.e. 1 = alive, 2 = dead)
* The “Treatment” column refers to the different exposure treatments (1=GLS, 2=GHS, 3=GES, 4=GLL, 5=GHL, 6=GEL and 7=CG).

The two other files are just a subset of the “Mortality\_Gammarus” file, one containing only the gammarid exposed to small MPs (“Mortality\_Gammarus\_Small”) and the other to large MPs (“Mortality\_Gammarus\_Large”).

**(H2) Proteomic:** This folder includes two csv files containing the concentration of the quantified peptides of each replicate (in pmol/mg). The first file only contains the peptides with a quantification rate equal to 100% (“*Peptides\_100%\_Quantification*”), whereas the second file contain the peptides with a quantification rate in between 50% and 99% (“*Peptides\_50%\_Quantification*”).

**(H3) Shredding activities:** This folder includes a single csv file containing the Assimilation Efficiency and Feeding Rate values calculated during the last week of the experiment (D21-D28).

**Supplementary materials:** This folder includes a single cvs file containing the data related to the PVC-MP preparation process (i.e. abundance and mean size of the formed MPs depending on the different sieves size class used).