

ABSTRACT**METHOD FOR RECYCLING POLYETHYLENE TEREPHTHALATE**

Recycling PET water jugs exhibit significant intrinsic viscosity (IV) loss during the process, making their ability to be recycled back into water jugs or PET bottles problematic. This may be alleviated by the invention which in one aspect resides broadly in a method for recycling PET comprising the following steps, being provided with a plurality of PET water jugs, manually delabelling the jugs, granulating the jugs to form granulated pieces of PET material, washing these granulated pieces of PET material to remove any remaining pieces of labelling and/or the label attaching glue from the pieces, sieving the granulated pieces of PET material to remove granulated pieces of PET material fines to leave sorted pieces of PET material, homogenizing the sorted pieces of PET material to reduce the variance in their intrinsic viscosity (IV), drying the sorted pieces of PET material in a drying chamber wherein the drying chamber is capped at a fill percentage in the range of 50-60%, removing the resulting PET material and performing an IV check on the resulting PET material, and removing those pieces of PET material that fall outside the limits of food-grade PET; and subjecting the resulting PET material to solid state polycondensation (SSP) to increase its IV.

Fig 1 for publication