



Laundry Water Consumption

The All-Wales Laundry Service tendered the laundry detergent chemicals in a bid to standardise the wash process across Wales and improve the wash quality and make savings on the wash process.

The detergent chemicals which are now used in the wash process are:

- An alkali booster which increases the PH in the wash solution to aid stain removal.
- A liquid detergent which removes stains and suspends solids in the solution removing them from the linen helping disinfection.
- An emulsifier which breaks down fats and oils aiding the detergent.
- A bleaching agent which is made up of part hydrogen peroxide, helps with the whitening of linen and has chemical disinfection qualities.
- An acid neutralising sour which chemically rinses linen, neutralising the wash solution so the linen is safe for the end user and the wash solution is safe to go down the drain.
- Softener which softens the linen.

The acid neutralising sour has only recently been introduced at four of the five laundry sites across Wales. Traditionally when laundering linen in a washing machine, the wash load is rinsed at the end of the wash cycle with excess water which helps the remove the detergent chemicals from the wash solution diluting them to safe levels to go down the drain and making the linen safe for the end user. With modern chemistry the sour does the same job as rinsing but rinses chemically by neutralising the wash solution so it is safe to go down the drain and the linen is safe for the end user.

A recent survey of two of the laundry sites across Wales has shown a combined reduction in water of 1203m³ per month which has a monthly saving of around £3088 and massively reduces the carbon footprint of the organisation, with further savings to be seen as the system is further optimised.