



JOHNSONS
Workwear

SINGLE USE PLASTIC REMOVAL MICRO TESTING RESULTS

At Johnsons Workwear as part of our sustainability strategy we are committed, wherever possible, to the removal of single use plastic arising from our activities.

In order to establish the impact on microbiological and allergen safety for garments in transit we have completed several tests comparing micro and allergen levels on garments packed in single use plastic within hamper bags to garments packed into reusable and washable zipped hamper bags without single use plastic packaging.



Objective

The aim of the tests was to establish if the removal of single use plastic packaging had any negative impact on garments in transit when the standard packing practice of single use plastic enclosed inside a standard three-strap hamper bag is replaced by a re-useable zipped hamper bag with all single use plastic packaging removed.

Method

Test garments were processed through the High Care Area in the standard manner, folded and packed into clean hamper bags in the following configurations.



Test Bag One – contained clean garments individually poly-bagged and placed into a clean standard hamper bag.



Test Bag Two – contained clean garments packed together into one plastic bag which was closed and placed into a clean standard hamper bag.



Test Bag Three – contained clean garments packed into a clean zipped hamper bag with no single use plastic.

The test bags were closed, labelled, loaded into a cage and sent out on route with the driver as per a normal delivery with the test bags left on the vehicle for the duration of the route – upon return to site the cage containing the test bags was unloaded with the three test bags packaged and sent to Precision Analysis for testing.

Upon receipt of the test bags Precision Analysis completed the following tests on the inside of the hamper bag and two garments taken at random from within the hamper bag.

Test	Target	Unit	Test	Target	Unit	Test	Target	Unit
E.coli	Absent	cfu/25cm ²	TACC@30°C	<20	cfu/25cm ²	Yeasts	<10	cfu/25cm ²
Staphylococci	<10	cfu/25cm ²	Salmonella	Absent	cfu/25cm ²	Moulds	<10	cfu/25cm ²
Bacillus	<10	cfu/25cm ²	Pseudomonas	<10	cfu/25cm ²	Peanut Allergen	<1	µg/ml
Streptococci	<10	cfu/25cm ²	Listeria	Absent	cfu/25cm ²			

Results

The tests were completed by two separate Johnsons Workwear Sites with six areas of each garment and three areas of each hamper bag tested, the table below shows the highest count/ result recorded for each of the samples tested.

Test	T.L.O.D.	With single use plastic packaging		Without single use plastic packaging
		Test Bag One	Test Bag Two	Test Bag Three
E.coli	1	Absent	Absent	Absent
Staphylococci	10	<10	<10	<10
Bacillus	10	<10	<10	<10
Streptococci	10	<10	<10	<10
TACC@30°C	20	<20	<20	<20
Salmonella	1	Absent	Absent	Absent
Pseudomonas	10	<10	<10	<10
Listeria	1	Absent	Absent	Absent
Yeasts	10	<10	<10	<10
Moulds	10	<10	<10	<10
Peanut Allergen	1	<1	<1	<1

Areas tested by item

Garments	Sleeve	Collar	Front	Back	Hem	Pocket
Hamper Bags	Top Flap - Internal		Inside LHS of bag		Inside RHS of bag	

Conclusion

The results received clearly demonstrate that packing garments into reusable and washable zipped hamper bags without single use plastic packaging has no impact on the microbiological and allergen safety of the garments while in transit.