

ACTEX

EFFICACY DATA

Actex contains 70% v/v Ethanol in an aqueous solution, whose efficacy against different classes of micro-organisms is well known and documented in scientific literature.

To show the boosted efficacy of **Actex** compared to ordinary 70% v/v Ethanol, we commissioned Massey University's School of Food and Advanced Technology to run comparative testing with their specialist biofilm reactor and testing methods.

Two well known pathogens of particular concern to the infant formula and RTE foods industry were chosen, due to their known disposition to form biofilms to protect themselves from the effects of disinfectants and other stresses. These were *Cronobacter Sakazaaki* and *Listeria Monocytogenes*.

Environmental isolates of these two organisms from production sites around the country were used, and in the case of the *L. Mono* were screened to find the strongest biofilm producers. These were then grown on stainless steel coupons and treated to produce biofilms (method available on request). These were subjected to a 1-minute exposure time via dipping in standard 70% v/v Ethanol and **Actex**, with the results shown below

Cronobacter Sakazaaki Strain	CONTROL (Log CFU/cm ²)	70/30 ETHANOL (Log CFU/cm ²)	ACTEX (Log CFU/cm ²)
ASQ 5	5.3	0.6	0
ASQ 9	4.5	1.2	0
ASQ 10	4.6	2.6	0
NZRM 50	4.7	0	0

Listeria Monocytogenes	CONTROL (Log CFU/cm ²)	70/30 ETHANOL (Log CFU/cm ²)	ACTEX (Log CFU/cm ²)
NCTC 7973	3.52	1.32	0
EM-07	3.87	3.05	0
EM-08	3.48	3.04	0
M5	3.18	0	0

Hygiene Technologies Ltd,
PO Box 2366 Stortford Lodge
HASTINGS 4153
NEW ZEALAND