

**Certificate of Analysis**

**Dated:** 05/02/2015

**CLIENT:** Enviro Chemicals  
Pelikan Artline  
17-19 Waterloo Street  
Quenbeyan NSW 2620

**REF NO:** 1500784

**ATTN:** Erkan Ergun

**ORDER NO:** not given

**SAMPLE DESCRIPTION:**  
1 x Laundry Powder

**DATE RECEIVED:** 14/01/15  
**DATE COMMENCED:** 03/02/15

**EXAMINATION:** Anti-microbial Activity Challenge Test (Time-Kill Study)

**METHOD:** TMD 110

**CONDITIONS:**

**Test organisms:** *Staphylococcus aureus* ATCC 6538  
*Escherichia coli* NCTC 8196  
**Test Concentration:** 1.5% w/v  
**Contact Time:** 20 minutes  
**Test Temperature:** Ambient  
**Interfering Substance:** Dirty Condition  
**Neutralizer:** T6 1:10 (TSB + Lecithin + Tween 80)

**RESULTS:**

**Table 1: Surviving organisms after exposure to Laundry Powder**

Contact Time	Inoculum Count	Laundry Powder	
	CFU/mL (log <sub>10</sub> )	CFU/mL (log <sub>10</sub> )	Log Reduction
20 minutes			
<i>Staphylococcus aureus</i>	4.0 x 10 <sup>7</sup> (Log 7.60)	< 10 (Log 1.0)	> 6.60
<i>Escherichia coli</i>	3.5 x 10 <sup>7</sup> (Log 7.54)	< 10 (Log 1.0)	> 6.54

CFU = Colony Forming Unit

**COMMENTS:**

The sample "Laundry Powder" has demonstrated significant antibacterial activity against *Staphylococcus aureus* and *Escherichia coli*, by achieving a greater than 6.0 log reductions which equates to 99.9999% kill; when tested under the conditions described above.

**Signed:**

Imtiaz Ahmed  
Sterile Product Testing Manager