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Customer Details: EcoEgg Limited

P O Box 1221 MAIDSTONE

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For the attention of: Rob Knight

# **Technical Report**

Subject: Evaluation of EcoEgg for Deposition of Chemical Residues

Your Ref: e-mail, 28<sup>th</sup> January 2009

Our Ref: FAB0171844C
Date: 6<sup>th</sup> March 2009

## **Conditions of Issue:**

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Report signed by: Christine Antrobus
Position: Business Centre Manager
Department: Cleaning Technology

MAntobus



# Technical Report

# **WORK REQUESTED:**

EcoEgg Limited wished to compare the chemical residue deposition properties of the EcoEgg against those of a branded Biological washing powder.

A set of experiments was requested to measure and compare the chemical residue deposition properties of these products over the course of five washes.

## **CONCLUSIONS:**

The results obtained indicate that the EcoEgg has deposited 73.3% less residue than the benchmark product (Branded Biological Powder) over the course of five washes.

## **TESTING:**

Standard white fabric test pieces (WFK W-10W) were washed five times using Hotpoint First Edition front loading domestic washing machines (SER numbers 2677, 2678 and 2714) using the following conditions - Programme E - a cotton cycle at 40°C using 26° FH hard water. A third standard white fabric test piece was washed five times in water alone to provide a control result. After each wash the standard white fabric test pieces were ironed on a two dot setting without steam.

Each load was comprised of 100% cotton (boil washed) sheeting, making a total load of 2.5kg, weighed using the top pan balance (SER1249). The cotton sheeting was boil-washed in an industrial washing machine (SER2022) and then dried using an industrial dryer (SER1233).

Detergent dosages were as follows:

EcoEgg – 1 EcoEgg Branded Biological Washing Powder – 195 ml Water – no detergent

Each washing machine was subjected to a boil wash with Decon 90 degreasing agent before a product change.

At the completion of the five washes, the standard white fabric test pieces were ironed and then allowed to dry. They were then tested for Inorganic Incrustation (chemical residue deposition) according to DIN 53919 Part 2 (ISO 4312 Clause 7) - Inorganic Incrustation (modified).

Report by: M F Denton Ecoegg Limited FAB0171844C 6<sup>th</sup> March 2009 Signed:

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# **RESULTS:**

Test Specimen (standard white fabric)	Inorganic Incrustation (%)	Chemical Residue Deposited (%)	% Difference
Control	0.45		
Branded Biological Washing Powder	0.60	0.15	· · · · · ·
EcoEgg	0.49	0.04	73.3

# **DISCUSSION:**

The results indicate that the standard white fabric test specimen washed in the branded Biological washing powder has given an inorganic incrustation result 0.15% greater than that given by the standard white fabric test specimen washed in water alone. This increase in the amount of inorganic incrustation can be attributed to the deposition of chemical residues during the wash processes.

Similarly the standard white fabric test specimen washed using the EcoEgg has given an inorganic incrustation result 0.04% greater than that given by the standard white fabric test specimen washed in water alone.

Thus the amount of chemical residues deposited by the EcoEgg over the course of 5 washes is 73.3% less than that deposited by the benchmark product, branded Biological washing powder.

Report by: M F Denton Ecoegg Limited FAB0171844C 6<sup>th</sup> March 2009 Signed:

Business Centre Manager

Cleaning Technology



# **Technical** Report

## TERMS AND CONDITIONS OF BUSINESS:

## 1.

Work done or services undertaken are subject to the terms and conditions detailed below and all other conditions, warranties and representations, expressed or implied are hereby excluded.

## 2.

Prices are based on current material and production costs, exchange rates, duty and freight and are subject to change without notice.

#### 3. **DELIVERY ESTIMATES**

Delivery estimates are made in good faith and date from receipt of a written order and full information to enable us to proceed. While we make every effort to fulfil them, such estimates are subject to unforeseen events and if not maintained, cannot give rise to any claim. Offers "ex stock" are subject to prior sale.

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### 5.

Claims for errors, shortages etc should be notified within 10 days of date of receipt. In the event of goods damaged in transit, packing materials should be retained for examination; otherwise no liability can be accepted.

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## CONSTRUCTION AND ARBITRATION

The laws of England shall govern all contracts and the parties submit to exclusive jurisdiction of the courts of England, unless otherwise agreed.

Report by: M F Denton **Ecoegg Limited** FAB0171844C 6<sup>th</sup> March 2009

Signed:

Business Centre Manager

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