

# Drycleaning & Laundry Institute

i n t e r n a t i o n a l

## CONFIDENTIAL LAUNDRY PERFORMANCE EVALUATION

Mr.Kotake  
 Nippon Sangyo Yucoh  
 4-15-25 Minamirinkan Yamatoshi  
 Kanegawa, 2420006 Japan

Date: 8/5/2014

Test Piece Number 64744	Plant Location:
Tensile Strength Loss	Classification unknown
Whiteness Degree	0 N/A
Yellowness	99
Blood Stain Removal	-3.2
Soil Removal	1
Chlorine Bleach Effectiveness	19.0
	46

CONDITION MEASURED	ACCEPTABLE	UNACCEPTABLE - Recheck
Final Whiteness Degree	80.0 or more	79.9 or less
Final Yellowness	-2.0 or lower	-1.9 or higher
Blood Stain Removal	40.0 or more	39.9 or less
Soil Removal	28.0 or more	27.9 or less
Bleach Effectiveness	52.0 or more	51.9 or less
<b>TENSILE STRENGTH LOSS</b>		
Light Soil Loads	5% or less	6% or more
Moderate Soil Loads	10% or less	11% or more
Heavy Soil Loads	15% or less	16% or more

LTP results should be used to monitor your particular wash formula. Fluctuations in an established pattern of results could warrant your investigation.

**Please see other side of this paper for Suggested Corrective Measures.**

## SUGGESTED CORRECTIVE MEASURES

- ▶ **A. Tensile Strength Loss**
  - ◇ Improper bleaching conditions; see guidelines below.
  - ◇ Excessive mechanical action caused by underloading, low water levels, and/or lengthy formulas.
  - ◇ Souring to a pH below 5.0.
  - ◇ Excessive use of alkali.
- ▶ **B. Final Whiteness Degree and Yellowness**
  - ◇ Insufficient bleaching conditions.
  - ◇ Poor soil removal (review recommendations under Category D).
  - ◇ Iron content above 0.2 ppm.
  - ◇ Color bleeding.
  - ◇ Insufficient rinsing or neutralizing of bleach.
  - ◇ Soil redeposition – more supplies needed.
- ▶ **C. Blood Stain Removal**

**Note:** This particular test may not be relevant to your specific formulas. Not all formulas are designed for blood removal.

  - ◇ Inadequate cold water flushing – flushes too hot.
    - One 95°F flush for General Hospital linen.
    - Two 95°F flushes for Operating Room linen.
  - ◇ Inadequate bleaching conditions.
  - ◇ Overloading.
- ▶ **D. Soil Removal**
  - ◇ Insufficient sudsing - too few sudsings or sudsings too short.
  - ◇ Insufficient amount of alkali/soap/detergent.
  - ◇ Overloading.
  - ◇ Hard water conditions not controlled by laundry chemicals.
  - ◇ Water levels too low.
  - ◇ Improper load classification for color, fabric type, or soil removal.
  - ◇ Insufficient temperature for proper use with product.
- ▶ **E. Bleach Effectiveness**

**Note:** This swatch is sensitive only to chlorine bleach. Formulas that use other bleaches will obviously give poor results. The chart below lists general recommendations for the use of bleaches. Depending on the product, manufacturer's recommendations may vary.

PROPERTY	CHLORINE	Oxygen Bleaches, Perborate, Peroxide, Percarbonate
Time	8 - 10 minutes	10 - 12 minutes (best added to break)
Temperature	140° - 160°F.	140°- 180°F.
pH	10.2 - 10.8	10.2 - 12.2
Concentration	1 -2 quarts of 1% per 100 lb. load	Per manufacturer's recommendations