

PROCEDURE FOR THE CONTROL OF THE STRENGTH OF BLACKFAST 551 SOLUTION

Control of the strength of the Blackfast 551 conditioner working bath is achieved by an acid/alkali titration using Phenolphthalein as indicator. The test solution is N/10 (0.1M) Sodium Hydroxide.

PROCEDURE:

- 1 Take a 10ml sample of solution from the Blackfast 551 tank, transfer sample into a beaker.
- 2 Add a few drops of Phenolphthalein indicator to the beaker.
- 3 Fill a burette with 0.1M Sodium Hydroxide test solution.
- 4 Add the Sodium Hydroxide to the 551 solution in the beaker until the solution turns pink. Please note that the solution must remain pink when agitated vigorously.
- 5 An addition of 12ml indicates the working solution is satisfactory.
- 6 For every 1ml shortfall it is necessary to top up the working bath with 0.833% of Blackfast 551.

EXAMPLE:

For a 100 litre tank a shortfall of 6ml would require 6 x 0.833 litres = 5 litres of Blackfast 551.

- 7 The following table indicates the necessary addition to the tank solution.

SODIUM HYDROXIDE ADDED TO ACHIEVE PINK COLOUR (ml)	BLACKFAST 551 TO BE ADDED TO TANK (LITRES)				
	20.00	50.00	75.00	100.00	200.00
12.00	0.00	0.00	0.00	0.00	0.00
11.00	0.17	0.42	0.62	0.83	1.67
10.00	0.33	0.83	1.25	1.67	3.33
9.00	0.50	1.25	1.87	2.50	5.00
8.00	0.67	1.67	2.50	3.33	6.66
7.00	0.83	2.08	3.12	4.17	8.33
6.00	1.00	2.50	3.75	5.00	10.00
5.00	1.17	2.91	4.37	5.83	11.66

8

Chemicals required

Phenolphthalein indicator.
0.1M Sodium Hydroxide