GNA002

SAMPLE PREPARATION FOR GNA PIGMENTS
FOR SALIVA, PERSPIRATION, RUB FASTNESS AND & pH TESTING

AIM OF THE TEST:

To produce samples of the pigments for external testing. The samples need to be prepared in accordance with GNA and Bureau Veritas requirements. **Please note** that these requirements are frequently adjusted - please confirm the method with GNA via the website and Bureau Veritas before carrying out the work.

EQUIPMENT:

- Manual printing press (e.g. M&R SIDEWINDER™)
- Quartz Flash Cure Unit (e.g. M&R RED CHILI model D™)
- Dryer (e.g. M&R SPRINT® 2000 SERIES Screen Printing Conveyor Dryer)
- 43T/110 screen
- Woven fabric 100% cotton

PROCEDURE:

A. Sample preparation for Saliva, Perspiration and pH testing:

1. Prepare the screen by masking four areas 10cm x 10cm.

2. Add 5% of the pigment into a suitable base e.g. MagnaPrint® Aquaflex V2 Neutral where it is known the base will comply with GNA requirements.

3. Print using the recommended method from the product's TDS. For example:
FABRIC: White woven 100% cotton
SCREEN: 43T/110
PRINTING CONDITIONS: 2 strokes / flash / 2 strokes / flash / 2 strokes
FLASH CONDITIONS: 4 seconds at 100°C
CURING: at 165°C for 2.5 minutes

4. Cut the fabric so that you have four prints (10cm x 10cm each):

a. Pack one of the prints for pH of the print testing

b. Pack three of the prints together for saliva and perspiration fastness testing
There is no issue with contamination; the prints can be placed in an envelope or a plastic wallet.

5. Label each print with exact pigment name (same as on the label) and the batch number. Put all into a big plastic wallet and label with the test name (e.g. Saliva & Perspiration fastness testing).

Please note: The printing inks also require pH of the fabric testing, however the sample preparation is different for this type of products. Please refer to GNA003 for the procedure.

B. Sample preparation for rub fastness testing:

1. Prepare the screen by masking an area of 25cm x 25cm.

2. Add 5% of the pigment into a suitable base e.g. MagnaPrint® Aquaflex V2 Neutral where it is known the base will comply with GNA requirements.

3. Print using the recommended method from the product's TDS. For example:
FABRIC: White woven 100% cotton
SCREEN: 43T/110
PRINTING CONDITIONS: 2 strokes / flash / 2 strokes / flash / 2 strokes
FLASH CONDITIONS: 4 seconds at 100°C
CURING: at 165°C for 2.5 minutes

4. Label the prints with exact pigment name (same as on the label) and the batch number. Put all into a big plastic wallet and label with the test name.
There is no issue with contamination; the prints can be placed in an envelope or a plastic wallet.