

# Australian Standard™

## Paints and related materials—Methods of test

### Method 401.3: Drying times using a BK-type recorder

AS 1580.401.3

#### 1 SCOPE

This Standard sets out a method for determining the times corresponding to defined drying stages of paints using the BK-type drying recorder.

NOTE: Although this test is primarily intended for conventional solvent-borne paints, it may also be used, as appropriate, to assess the drying and curing characteristics of other types of paints.

#### 2 REFERENCED DOCUMENTS

The following documents are referred to in this Standard:

AS

|            |  |
|------------|--|
| 1580       | Paints and related materials—Methods of test                               |
| 1580.101.1 | Method 101.1: Conditions of test—Temperature, humidity and airflow control |
| 1580.102.1 | Method 102.1: Sampling procedure   |
| 1580.102.2 | Method 102.2: In-process sampling  |
| 1580.103.1 | Method 103.1: Examination and preparation of samples for testing           |

#### 3 DEFINITIONS

For the purpose of this Standard the definitions below apply.

##### 3.1 Wet time

The period corresponding to the length of track traced out between the starting point and the *commencement of the continuous groove* cut to the substrate level in the paint surface (see Figure 1, Point A).

##### 3.2 Surface dry time

The period corresponding to the length of track traced out between the starting point and the *end of the continuous groove* cut to the substrate level in the paint surface (see Figure 1, Point B).

##### 3.3 Through-dry time

The period corresponding to the length of track traced out between the starting point and the *end of the last visible tear/break* in the paint surface (see Figure 1, Point C).

NOTE: In the case of chemically cured paints and paints that dry by evaporation of solvent only, the through-dry time may be the only recognizable drying period.

#### 4 PRINCIPLE

The test paint is applied to the test panel using an applicator. The coated panel is immediately transferred to the test apparatus where the paint film is subjected to the pressure of a prescribed pin drawn over its length at a specified rate. The panel is then examined to determine the periods required to reach defined drying stages.