



Test instructions

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Enclosures

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Title

Qualitative confirmation of chromium VI in coatings

1. Apparatus and chemicals

- Watch-glasses
- Pipettes (e.g. disposable Pasteur pipettes)
- Test tubes (1 ml)
- Reagent 1: 70 ml phosphoric acid (75%) made up to 100 ml with bidest.
- Reagent 2: 1.5 g diphenylcarbazide dissolved in 100 ml acetone
and acidulated with one drop of acetic acid (useable for one month).
- Sandpaper, P800 grade

2. Procedure

- Each analysis is to include a positive-test sample and a blank sample using sample screws.
- The sample is to be coated with 1 ml of reagent 1.
- 1 ml of reagent 2 is then added.

If lacquered or other hydrophobic surfaces are to be tested, then the test sample must first be roughened carefully with sandpaper.

3. Evaluation

After a reaction time of 10 min, a pink discolouration indicates the presence of chromium VI. Transferring the solutions to 1 ml test tubes increases the depth of view and simplifies observation. If a clear evaluation is not possible, yellow chromated sample screws can be tested for comparison.