

HYDRAZINE METHOD 3

Using 4-Dimethylaminobenzaldehyde

PRINCIPLE OF THE METHOD

This modification of methods 1 uses a single stable reagent of 4-dimethylaminobenzaldehyde in powder form. The reagent reacts specifically with hydrazine to produce a yellow colour. The concentration is measured by comparison with a series of Lovibond permanent colour glass standards.

REAGENT REQUIRED

1. Lovibond Hydrazine Test Powder.

THE STANDARD LOVIBOND COMPARATOR DISCS 3/126 AND 3/135

Disc 3/126 contains standards corresponding to 0, 0.05, 0.10, 0.15, 0.20, 0.25, 0.30, 0.40 and 0.50mg./l. of Hydrazine (N₂H₄) and is for use with 13.5mm./10ml. moulded cells.

Disc 3/135 contains standards corresponding to 0.02, 0.04, 0.06, 0.08, 0.10, 0.12, 0.14, 0.16 and 0.20mg./l. of Hydrazine (N₂H₄) and is for use with 40mm./20ml. cells.

METHOD

Disc 3/126

1. Fill two clean 13.5mm./10ml. moulded cells to the 10ml. mark with the water sample. To one add about 1g. of the Hydrazine Test powder, measured using the scoop provided. Mix well using a clean stirring rod. Allow to stand for 2 minutes (not more than 3 minutes).
2. Place the cell in the right-hand compartment of the Lovibond Comparator and the other cell containing just the water sample in the left-hand compartment. Stand the Comparator facing a standard source of white light, such as the Lovibond Daylight 2000 Unit, or failing this North daylight (not fluorescent lighting). Rotate the disc and read off the Hydrazine concentration from the bottom right hand corner of the Comparator.

Disc 3/135

1. Follow the method for disc 3/126, but take a 20ml. sample in a 40mm. cell.

NOTES

1. To check the reagent during storage carry out the test as described above using tap water as the sample. After mixing, the colour of the solution should not be darker than the lowest step on the disc.
2. The sample must not be tested at a temperature exceeding 21°C. An efficient cooling coil should be fitted at the sampling point or the sample must be cooled immediately under running water. Turbid samples must be filtered before the test is carried out.

REVISION HISTORY

Date	Change Note	Issue
15/05/02	36/640	2
15/03/05	CA243	3
03/10/06	JC46	4