

DETERMINATION OF WATER SOLUBLE SALTS ACCORDING TO THE BRESLE METHOD (ISO 8502-6 1995)

1468

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WATER SOLUBLE SALTS ON THE STEEL SURFACE (ISO 8502-9 1998)

CHLORIDE TEST BY CONDUCTIVITY METER (TDSCAN 40)

Operating procedures for standard size Bresle Sampler (12,5cm²) (A-1250)

1. Look for suitable surface on which the chloride test can be made. It can be horizontal, vertical, slanting or somewhat bulging. The main thing is that the surface is relatively dry, i.e. without noticeable dampness. In most cases it is recommended to test more than one spot to catch the variations of the chloride level.
2. Remove the protective backing (w/Bresle Logo) and the 12,5cm² foam circle and dispose.
3. Adhere the cell to a dry surface and press firmly. It is critical to create a tight seal. The surface can be horizontal or vertical.
4. Insert the 5cc syringe into the cell through the spongy foam perimeter. Do not inject beneath the cell or directly into the semi-transparent test area. Evacuate the air from the cell by drawing back on the syringe plunger. Remove and evacuate the syringe.
5. Rinse the electrodes of the Conductivity meter with distilled or de-ionized water.
6. Take 15 ml distilled or de-ionized water in small container and check the conductivity with the TDScan 40 and write down the measured value. This is the blank liquid.
7. Take 3 ml from this blank liquid and inject into the cell, as above. Be certain there are no air bubbles in the syringe. Hold the perimeter of the cell firmly during injection/removal of the syringe, otherwise leakage may occur.
8. Remove the syringe from the test cell area and gently rub the top surface of the cell for 10-15 seconds to increase the dissolution speed of the water.
9. Withdraw and re-inject the water a minimum of three times, rubbing the top of the cell for 10-15 seconds each time.
10. Remove as much of the 3cc of liquid as possible using the syringe.
11. Empty the liquid through the syringe needle back into the blank liquid. So total amount of liquid should now approx. be 15 ml.
12. Measure the liquid in the container and write down the measured value shown in the display and deduct the readings of the blank liquid and write down the result.
13. The result is: the difference between the measured value and the one of the blank liquid.

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Next table gives the relation between the conductivity and the equivalent of sodium chlorides for V=15 ml:

Result of conductivity	Equivalent of sodium chloride
10.0 $\mu\text{S/cm}$	60 mg/m^2
13.3 $\mu\text{S/cm}$	80 mg/m^2
16.7 $\mu\text{S/cm}$	100 mg/m^2
20.0 $\mu\text{S/cm}$	120 mg/m^2
23.3 $\mu\text{S/cm}$	140 mg/m^2

REFERENCES

Cleaning of steel and removal of rust

see information sheet 1490

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