

Corrosion test report: Determination of total immersion corrosion **VIROCID**

1. Identification of the test laboratory

CIRLAM, Oostkai 38, 8900 Ieper, Belgium

2. Method

Corrosivity tests done at CIRLAM laboratory based on UN no. ST/SG/AC.10/11/Rev.4 guidelines.

1.1. Reagents

- Tap water
- Acetone
- Ethanol
- Pickling solution (30% sulfuric acid/70% Milli-Q Water)

1.2. Performance of the test

A beaker containing enough test substance to cover the test plates is placed during 1 hour in a thermostatic bath to heat the test solution to a temperature of $55 \pm 1^\circ\text{C}$ prior placing the test plates.

Two test plates are used for each metal and each concentration of test substance.

The plates are put in ethanol in an ultrasound bath for 5 minutes, degreased with acetone and dried.

These plates are weighed (the test with prepared plates is initiated on the same day of preparation to prevent reformation of oxide layer).

The plates are completely inserted into the test solution (the distance between the upper edge of the plate and the surface of liquid is 10 mm).

The plates are exposed at these test conditions for one week (168 ± 1 hour) at $55 \pm 1^\circ\text{C}$.

After finishing the test, the plates are dipped into the pickling solution for 5 minutes to remove adherent corrosion products. The plates are carefully cleaned with ethanol in an ultrasound bath for 5 minutes and degreased with acetone.

One dried, the plates are weighed.

3. Test substance

Virocid

4. Raw material

Standardized test plates: Stainless steel and anodized aluminium

5. Results

- Uniform corrosion :

Weight loss (stainless steel) = 0.00 %

Weight loss (anodized aluminium) = 0.00 %

According to the weight loss, Virocid is considered non corrosive for stainless steel and anodized aluminium.

- Localized corrosion :

Visually, Virocid is considered non corrosive because no change was observed on the plate surfaces.

6. Conclusion

According to CIRLAM procedure based on UN no. ST/SG/AC.10/11/Rev.4 guidelines, Virocid is considered non corrosive.

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