

Tests report (EN 14348)

This test report specifies a suspension test for establishing whether a chemical disinfectant or an antiseptic has a **mycobactericidal** activity in the area and fields described in the scope. This laboratory test takes into account practical conditions of application of the product including:

- contact time
- temperature
- test organisms
- interfering substances

Test condition

Reference regulation	BS EN 14348
identification of the testing laboratory	CIF B-96337217
Test organism	M. avium ATCC 15769 Mycobacterium avium and Mycobacterium terrae
Sample volume	1 Liter
Active substance(s)	NaOCL-HOCL-H ₂ O ₂ -Cl ₂ -CLO ₂ -O ₃ -O ['] -Water

Identification of the sample and experimental conditions

Name of the product	Multi Oxidant Disinfection Solution
batch number	20-04-01
manufacturer	BACO Environmental Engineering & Technology S.L.
date of delivery	15/04/2020
storage conditions	Room temperature and darkness
product diluent recommended by the manufacturer for use	Potable water (soft water)
active substance(s) and its/their concentration(s) (optional)	-
appearance of the product	clear
diluent used for product test solution	Distilled water
product test concentrations (ppm)	(% 100)8000-(% 75)6000-(% 50)4000-1000-100-20-10-2
contact time(min)	60-5-2
test temperature	Room temperature and darkness
stability and appearance of the mixtures during the procedure,	Transparent
temperature of incubation	36 °C
Interfering substances	bovine albumin 0,3 g/l.

1 Test method and its validation (mycobactericidal activity)

This laboratory test takes into account practical conditions of application of the product, including contact time, temperature, test organisms and interfering substances, i.e. conditions which may influence its action in practical situations. Full details of the test for validation of the neutralizer is given below:

1.1 Requirements

The product, when diluted with hard water or - in the case of ready-to-use products - with water and tested in accordance with clause 5 under simulated clean conditions (0,3 g/l bovine albumin solution) or simulated dirty conditions (3 g/l bovine albumin solution, plus 3 ml/l washed sheep erythrocytes) according to its practical applications and under the obligatory test conditions (one or two selected test organisms, 20 °C, 60 min), shall demonstrate at least a decimal log (lg) reduction in counts of 4. It is possible to test also the product as delivered (highest test concentration is 80 %).

The mycobactericidal activity shall be evaluated using the following two test organisms:

Mycobacterium avium and *Mycobacterium terrae*.

The tuberculocidal activity shall be evaluated using the following test organism:

Mycobacterium terrae.

1.2 Test methods

A test suspension of mycobacteria in a solution of an interfering substance is added to a sample of the product as delivered and/or diluted with hard water (for ready to use products: water). The mixture is maintained at 20 °C ± 1 °C for 60 min ± 10 s (obligatory test conditions). At the end of this contact time, an aliquot is taken; the mycobactericidal and/or the mycobacteriostatic activity in this portion is immediately neutralized or suppressed by a validated method.

1.3 Materials and reagents

1.3.1 Test organisms

The mycobactericidal activity shall be evaluated using the following two test-organisms:

- *Mycobacterium avium* ATCC 15769
- *Mycobacterium terrae* ATCC 15755
- The tuberculocidal activity shall be evaluated using only *Mycobacterium terrae*.

1.4 Culture media and reagents

- Water
- Middlebrook and Cohn 7 H 10 medium with 10 % OADC enrichment (MCO)
- Diluent
- Neutralizer
- Middlebrook 7 H 9 broth with 10 % ADC enrichment (MADC-broth)
- Hard water for dilution of products

Test results

From the outcomes for experimenting 2 of repetitions per test with different microorganism mentioned Table 1 in 2, 5, and 60 min, might demonstrate at least a decimal log (lg) reduction in counts of 4 when tested in accordance with Table 1 & 2 through all diluted samples.