To:

Eurofins - Dermatest Pty Ltd

LUMINESCENCE INHIBITION TEST ON MARINE BACTERIA ON A SAMPLE REFERENCED:

« FSI-DEFEND »

Analyses report n°20FER6-1076 V2 - 2020/11/27

NB: This report cancels and replaces the report 20FER6-1076 – 2020/11/19.

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SUMMARY

Modification: replacement of the sample reference throughout the report.

I. REPORT OBJECT

Client details:
Name: Eurofins - Dermatest Pty Ltd.
Address: 20 - 22 King St -– Rockdale NSW 2216 Australia.

This report gives results obtained on a sample received the 2020/09/17 for the realization of ecotoxicological assay.

II. SAMPLE PRESENTATION

Client sample reference: FSI-Defend

Reception date: 2020/09/17.

Batch number: unknown.

Conservation temperature: Ambient temperature.

EUROFINS Ecotoxicologie France reference: 20G008382-002.

III. TOXICOLOGICAL DESCRIPTORS

- EC X %-T: concentration inducing an effect on X% of the population after a T time.

IV. LUMINESCENCE INHIBITION TEST ON MARINE BACTERIA (VIBRIO FISCHERI OR MICROTOX®, NF EN ISO 11348-3, 2009)

This test is about the determination of the luminescent inhibition issued by a marine bacteria *Vibrio fischeri* (oldery *Photobacterium phosphoreum*). This assay allows to determine the sample concentration (in %) which, after 5, 15 and 30 minutes inhibits 50% of the luminescence of bacteria. This concentration is designed by EC 50-t, t representing the contact time of bacteria with the sample.

Number of replicate by tested concentrations and controls: 2.

Test specie: *Vibrio fischeri* (NRRL B-11177).

Test medium: 20g/L NaCl solution.

Supplier of the strain: R-Biopharm.

Positive control is conducted on each analytical series with at least one definitive test on the following reference substances: - ZnSO4, 7H2O or 3.5-dichlorophenol (C6H4OCl2) or K2Cr2O7.

CE50 calculation method: Microtox-Omni software.

Sample preparation: a 100mg/L solution (prepared in test medium) was agitated for 24 hours in a closed flask, on a magnetic stirrer (200 rpm) at 20°C ± 2°C.

V. BIOLOGICAL TOXICITY TESTS RESULTS

Tests	Effect	Toxicological Descriptors	**FSI-Defend**
Microtox®	Luminescence Inhibition	EC 50-5 min	>100 mg/L
		EC 50-15 min	>100 mg/L
		EC 50-30 min	>100 mg/L

Results in mg/L of FSI-Defend for the luminescence Inhibition test

VI. VALIDITY CRITERIA

- The ratios of controls are between 0.6 and 1.8.
- The deviation from the average of the controls is less than or equal to 3%.
- For duplicate determinations, inhibition rates do not result in deviations strictly greater than 3%.
- The inhibition of luminescence is between 20% and 80% after 30 min/- 20 seconds at the following concentrations (positive control):
  - 18,7 mg/L Cr6+ (using K_2Cr_2O7): 45%

In Maxéville, the 2020/11/27
Eloïse Renouf, Ecotoxicology Group Leader