

Statement of Results

Title of Study: Determination of the toxicity of Hydrogel BM048 towards *Desmodesmus subspicatus* according to OECD 201 and EU C.3

Sponsor:

Anogas
Frankenerf 42
7031 WP WEHL, The Netherlands

Test Facility:

LAUS GmbH
Auf der Schafweide 20
67489 Kirrweiler, Germany

Monitor:

Materials Factory
Irene Hovens
Hurksestraat 12
5652 AJ Eindhoven, The Netherlands

Study Director:

Manfred Muckle

Findings and Results:

One valid experiment was performed.

The study was performed as a three-stage limit test using 3 concentrations containing 1, 10 and 100 mg/L (nominal concentration). Incubation time (test system *Desmodesmus subspicatus*) was 72 hours. The cell concentration of each replicate was determined by measuring the cell numbers every 24 ± 1 hours with an electronic cell counter. Growth rate μ and the yield¹ were determined from the cell number at the respective observation times.

No inhibition of algal growth was observed at any tested concentration. Algal growth in the test solutions was higher than in the control.

The 72h-EC₅₀ values of potassium dichromate (K₂Cr₂O₇, CAS No. 7778-50-9) were determined in a separate reference test. The values lay within the range of the laboratory (growth rate 0.69 – 0.81 mg/L, yield 0.33 – 0.35 mg/L).

The following results for the test item Hydrogel BM048 were determined:

Table 3 Results of the test item

Endpoint	EC ₅₀
Growth Rate	> 100 mg/L
Yield	> 100 mg/L

¹ Yield (according to OECD Guideline 201) is defined as the biomass at the end of the exposure period minus the biomass at the start of the exposure period. Calculation see under 8.2 Growth and growth inhibition are quantified from measurements of the algal biomass as a function of time. Algal biomass is defined as the dry weight per volume, e. g. mg algae/L test solution. However, dry weight is difficult to measure and therefore surrogate parameters are used. Of these surrogates, cell counts are most often used.

For the accuracy of the data above:

13. Dec. 2022



Date

Anette Rudolf, Head of Test Facility LAUS GmbH