TEST REPORT

Intrinsic aerobic biodegradability: COD extinction test (ZAHN-WELLENS)

I. Laboratory: Research and Development Laboratory REALCO S.A.

II. Testing start date: 25 november 2021

III. Tested substance

Name	:	Sikagard 1130 Stop Pro Evolution
Physical state	:	liquid
pH	:	6,5 ± 1,0
Density (kg/l)	:	NA
Physico-chemical property	:	Enzymatic facade cleaning
Stock solution concentration	:	325000 mg/l (DCO)
Initial concentration in the medium at t0	:	514 mg/L (DCO)
Sample volume	:	2,10 mL/L

IV. Defoamer

The tested product foams hence a defoamer was dosed in the bottles containing the product as well as the bottles with the reference substance.

Name: Tego antifoam 1488

Volumetric concentration: 400 µL/L

DCO equivalent concentration : 61 mg/l

V. Inoculum

Activated sludge from the Wavre waste water treatment plant. Sample collected in the aerated tank. Used after settling and rinsed with mineral medium, suspended in mineral medium.

Suspended particle concentration in reaction medium = 0,750 g/L

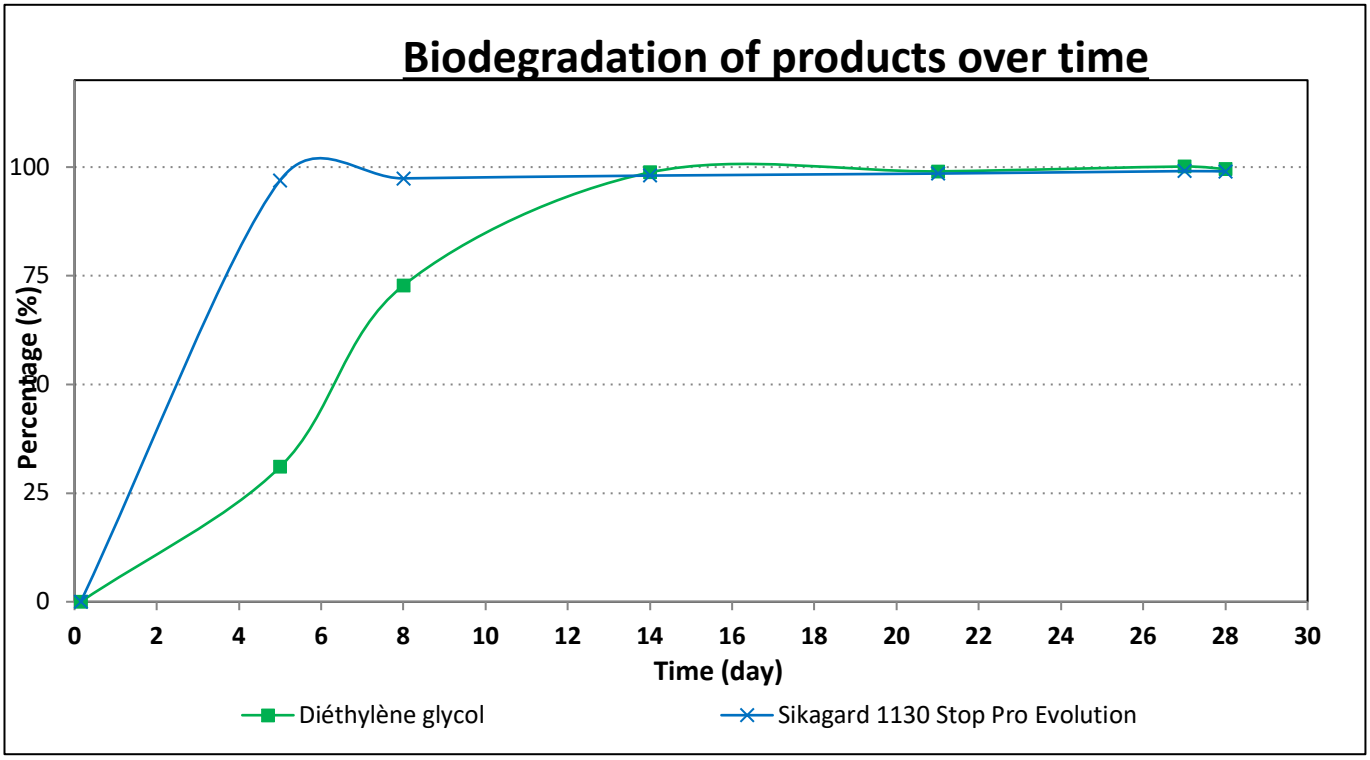
VI. Testing conditions

Analytical method used: Quantification of the soluble chemical oxygen demand (CODs) with the analogous method to DIN 38 409441 or ISO 6060

Procedure control: yes
Substance used in the control: Diethylene glycol

VII. Results

Biodegradation rate:



Toxicity evaluation: Not evaluated

Adsorbed quantity on the activated sludge: not monitored

Adaptation phase: below 5 days for both Sikagard 1130 Stop Pro Evolution and diethylene glycol.

Adaptation phase is the period separating inoculation from the moment when the biodegradation rate reaches 10%; this period is often highly variable and reproductible with difficulty.

Biodegradation phase: below 5 days

Period commencing at the end of the latency phase and ending when 90% of the maximal biodegradation rate is reached.

Biodegradation percentage reached after 14 days: 98%

Biodegradation percentage reached after 28 days: 99%

VIII. Results

The biodegradation rate of diethylene glycol, which is used as reference substance, reaches a value superior to 70% within 14 days. These results validate the functional capacity of the activated sludge and enables the validation of the entirety of the experiment.
The biodegradation rate of Sikagard 1130 Stop Pro Evolution is above 70%, this value points towards a final intrinsic biodegradability of the product. Hence Sikagard 1130 Stop Pro Evolution is intrinsically biodegradable without preadaptation according to the OCDE 302B guideline.