AKKA$_2$O PRODUCT CERTIFICATIONS

The certifications of non-toxicity on aquatic organisms such as fish, algae, and crustaceans, together with biodegradability certifications, are crucial in assessing the environmental impact of chemical products released into ecosystems. These certifications help ensure that the materials and compounds used in various industries are not harmful to aquatic life and that they can degrade efficiently and safely in the environment, leaving no residues (zero residue).

Non-toxicity tests evaluate the lethal and sublethal effects of a substance on various organisms, while biodegradability tests measure the ability of a substance to be broken down by natural biological agents. The goal is to minimize ecological risks and promote the development of sustainable products. All tests were conducted according to internationally standardized methods (OECD - Organisation for Economic Co-operation and Development).

The adoption of such certification practices is essential for the conservation of aquatic and terrestrial resources, as well as for the protection of biodiversity.

Attachments:

1. Eco-toxicity test report by ARPAE (Emilia-Romagna)
2. Eco-toxicity test report by Mérieux NutriSciences (Chelab srl)
3. Non-irritability test report by Mérieux NutriSciences (Chelab srl)
4. Biodegradability test report by Chem Service

AKKA2O Green Projects Srl
Sede Legale: P.zza IV Novembre, 5 – 20025 Legnano (MI)
Sede Operativa: Via S. Cristoforo, 95 - 20090 Trezzano sul Naviglio (MI)
CF/P.IVA 12120770966 – REA MI 2642382
Tel. 02 36516181 – mail segreteria@akka2o.eu – www.akka2o.eu

Laboratorio Multisito
Ferrara Headquarters
Responsible Person: Dr. Ivan Scaroni
Via Bologna, 534 44124 Ferrara
tel. +39 0532 901214 fax +39 0532 901241
e-mail aoofe@cert.arpa.emr.it

Sample: **01921001493** LIMS Code **22LA16470**

TEST REPORT NO. 22LA16470, of 04/20/2022

This test report cancels and replaces the test report No. 22LA11148
Reason: data change

Data under the care and responsibility of the collector/client

Sample of: **LIQUID SAMPLE**
Collector: **CHELAB S.R.L.**
Request/Report: **---** of **03/17/2022**
Collection Date: **03/15/2022** Collection time: **----**
Formal sampling: **NO**
Collection point: **SDG 241880/01 - 22.004325.0002 - FIELD ID IJ190**
Collection Company/Structure: **----**
Municipality of collection: **NOT TRANSMITTED (-)**
Client: **CHELAB S.R.L.**
Client address: **VIA FRATTA, 25 - RESANA(TV)**
Query: **SEE REPORT/REQUEST**
Sampling Mode: **BY THE CLIENT/COLLECTOR**

Acceptance by the FERRARA office

Receipt date: **03/18/2022**
Receipt Temperature: **Ambient**

Acceptance by the Lab

Sample Note: **--**
Receipt Temperature (°C): **----**
Quote Code: **FE/006/2021**

TEST RESULT

Parameter *Reference method*	Value	U.M.
Test 96h B. rerio (% mortality) *OECD 203/2019*	**0**	%
Test 96h Brachydanio rerio (LC50) *OECD 203/2019*	**> 100**	mg/l

Technical note in reference
Test 96h Brachydanio rerio (LC50): Acute test performed at the limit concentration of 100 mg/l. Survival in negative control = 100%

Test start date: 03/21/2022
Test end date: 03/25/2022

The analyzes were carried out in the area for which the responsible person is
Dr. Fabrizio Bandini

Note: If the requested tests include parameters to be processed within 24 hours, the Laboratory guarantees that the sample has been analyzed within the stipulated time.

The laboratory is not responsible for sampling except in cases where it has been carried out by the laboratory. The results of this test report are not corrected for the recovery factor, unless expressly indicated in relation to each single parameter. The measurement uncertainty and any recovery factor are reported in the test report when they have an influence on the assessment of conformity and the reference limits, or when expressly requested by the client. We represent that the results of this test report refer only to the sample tested as received.

End of test report no. 22LA16470

Document digitally signed according to the regulations in force by the laboratory manager or his representative.

To be signed in case of printing. This copy of test report No. 22LA16470, of 04/20/2022, consisting of page no. 1, is a true copy, in full, of the computerized original digitally signed by the laboratory manager or his representative.

(place) (date) (name and surname) (title) (signature)

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TEST REPORT 22/000272120

Issue Date 04/27/2022

Client ID 0086088

Messrs.
AKKA2O GREEN PROJECTS SRL
PIAZZA IV NOVEMBRE, 5
20025 LEGNANO (MI)
IT

Sample information

Acceptance number	22.004325.0002
Delivered by	DHL International il 03/10/2022
Receiving Date	03/10/2022
Place of origin	AKKA2O GREEN PROJECTS SRL PIAZZA IV NOVEMBRE, 5 20025 LEGNANO (MI)
IT Sample Description	AKKA2O LMF
	Matrix: CHEMICAL PRODUCT

Sampling information

Sampled by	External staff TECNICO AKKA2O GREEN PROJECTS SRL

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CHELAB S.r.l. Sole Shareholder, Company subject to the direction and coordination of Mérieux NutriSciences Corporation Head office: Via Fratta 25 31023 Resana, Italy Phone. + 39 0423.7177 / Fax + 39 0423.715058
www.merieuxnutrisciences.com/it VAT No. 01500900269, R.E.A Treviso No. 156079 Fully paid up € 103,480.00.

ANALYTICAL RESULTS

	Value	Unit of Measure	LoQ	Analysis Start/End Date	Op. Unit	Row
ON SAMPLE AS IT IS						1
INHIBITION OF THE MOBILITY OF DAPHNIA SP. Met.: OECD NUMBER 23 + OECD 202:2004	see report			03/11/2022- -04/06/2022	13	2
INHIBITION OF ALGAL GROWTH Met.: OECD NUMBER 23 + OECD 201:2011	see report			03/11/2022- -04/06/2022	13	3
FISH ACUTE TOXICITY Met.: OECD 203:2019				03/11/2022- -03/25/2022	EXT	4
Acute fish toxicity	See certificate attached					5
Test organism	Danio rerio					6
LC50 A 96h	>100	mg/l				7
Mortality rate	0	%				8

Operative units

Unit 13: Corso Europa, 600/a 10088 Volpiano (TO)

Information on test methods and/or requirements/specifications

Row (2) - Method: OECD NUMBER 23 + OECD 202:2004 = OECD SERIES ON TESTING AND ASSESSMENT NUMBER 23 GUIDANCE DOCUMENT ON AQUATIC TOXICITY TESTING OF DIFFICULT SUBSTANCES AND MIXTURE

Row (3) - Method: OECD NUMBER 23 + OECD 201:2011 = OECD SERIES ON TESTING AND ASSESSMENT NUMBER 23 GUIDANCE DOCUMENT ON AQUATIC TOXICITY TESTING OF DIFFICULT SUBSTANCES AND MIXTURE

Row (4) - Method: OECD 203:2019 = The test was performed under subcontract by the laboratory ARPAE- AGENZIA REGIONALE PREVENZIONE E AMBIENTE DELL'EMILIA ROMAGNA

Information provided by the client

Sampled by: External staff
Description: TECNICO AKKA2O GREEN PROJECTS SRL
Place of origin: AKKA2O GREEN PROJECTS SRL PIAZZA IV NOVEMBRE, 5 20025 LEGNANO (MI) IT
Description: AKKA2O LMF

Responsible for biological tests
Operative Unit 13
Dr. Fulvia Lucia Querio
National Council of Biologists Professional Register n.AA_048529
Certificate No. WSREF-75890285909611 issued by the certifying body ArubaPEC S.p.A. NG CA 3, ArubaPEC S.p.A., IT

Responsible for biological tests
Operative Unit 02
Dr. Matteo Giacomelli
National Council of Biologists Professional Register n.AA_079105
Certificate No. 22468942 issued by the certifying body ArubaPEC S.p.A. NG CA 3, ArubaPEC S.p.A., IT

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www.merieuxnutrisciences.com/it VAT No. 01500900269, R.E.A Treviso No. 156079 Fully paid up € 103,480.00.

- LoQ is the limit of quantification; "<x" or ">x" indicate an amount inferior or superior, respectively, to the measurement field of the test.- If not differently specified, the sums are calculated by lower bound criteria (L.B.). - In case of alteration of the sample the laboratory disclaims any responsibility for the results that can be influenced by the deviation, in case the client asks for the execution of the test anyway. - If the sampling is not carried out by the laboratory staff, the results obtained are considered to refer to the sample as received and the laboratory disclaims any responsibility for the results calculated considering the sampling data provided by the Client. The name and contact information of the client are always provided by the client. - Unless otherwise specified, the quantitative microbiological tests (excluding MPN) on liquid and solid environmental matrices are performed on a single repetition and two consecutive volumes; the expanded uncertainty is expressed according to the ISO 29201:2012 standard, calculated with a coverage factor k=2 corresponding to a level of probability of 95%; for the methods in which the result is expressed in MPN (Most Probable Number) the measurement uncertainty is expressed as a confidence interval evaluated using the statistical tables of the reference method calculated with a coverage factor k=2 corresponding to a 95% probability level. - If if there is a specification (legal limits or client specifications) with which the analytical results have been compared, the values shown in bold indicate a result outside such specification. - Unless otherwise specified, any conformity/non-conformity judgments reported refer to the parameters analyzed and are based on the comparison of the value with the reference values without considering the confidence interval of the measurement.

END OF TEST REPORT

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www.merieuxnutrisciences.com/it VAT No. 01500900269, R.E.A Treviso No. 156079 Fully paid up € 103,480.00.

TEST REPORT No. 1154499/22

This report replaces Test Report No. 153085/22

Client	CHELAB S.r.l.
Address	Via Fratta 25 31023 RESANA (TV)
Project/Contract	BU ENVI or BU FOOD or BU PHARMA
Base/Site	-
Matrix	Chemical product
Receipt date	March-15-22
Client identification	22.004325.0002 FIELD_ID: IJ190
Internal identification	01 / 241880 RS: VO22SR0001443 INT: VO22IN0001103 QC Type N
Test Report Issue Date	Apr-19-22
Collection Date	March-15-22
Sampling Procedure	By the Client ref report COC_241880

Analyzed parameter		Value and IM	U.M.	MDL	R %	Analysis Date Start	End
Toxicological Parameters							
Transfer Test Method	OECD 23:2019						
Test Method	OECD 23:2019 + OECD 201:2011						
A	algal growth inhibition test with Pseudokirchneriella subcapitata (EC50)	>100	mg/L			03/21/22	03/24/22
A	algal growth inhibition test with pseudokirchneriella subcapitata (LIMIT TEST)	21	I %			03/21/22	03/24/22
Transfer Test Method	OECD 23:2019						
Test Method	OECD 23:2019 + OECD 202:2004						
A	acute toxicity test with daphnia magna (ec50)	>100	mg/L			03/21/22	03/23/22
A	acute toxicity test with daphnia magna (LIMIT TEST)	10	I %			03/21/22	03/23/22

A = Test performed at the Laboratory of Volpiano (TO) 10088, Corso Europa 600/A - ITALY.
B = Test performed at the Laboratory of Sannazzaro De' Burgondi (PV) 27039, Via E.Mattei, 46 - ITALY.
C = Test performed at the Laboratory of Uta (CA) c/o CACIP - 6 Strada Ovest snc (Loc. Macchiareddu) - ITALY.
E = Test performed in field - Registered Office Volpiano (TO) 10088, Corso Europa 609 - ITALY - ITALY
FE = Test performed at the Laboratory of Ferrara (FE) 44100, Piazzale G. Donegani, 12 - ITALY.
S = Test performed at a subcontracted laboratory.
RE = Test performed at the Laboratory of Resana (TV) 31023, Via Castellana, 118A - ITALY.
PL = Test performed at the Laboratory of Priolo Gargallo (SR) 96010, Contrada Biggemi - ITALY.
MDL=LOD: limit of detection, defined as the lowest measured concentration of a substance that can be detected with a 99% probability that it is distinguishable from the blank results of the method. RL=LOQ: limit of quantification, defined as the concentration of the lowest point of the calibration curve, corrected for the scale factors (weighings, dilutions) relating to the Standard or Procedure referred to; '<x' or '> x' respectively indicate a value below or above the test measuring range.
R%=Recovery: Recoveries marked with '# ' were not used in the calculations. Unless otherwise specified, the sums are calculated using the Lower Bound (L.B.) criterion. If there is a specification (legal limits or client specifications) with which the analytical results have been compared, the values shown in bold indicate a result outside this specification.

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Information provided by client

Sampled by: Client

Description: 22.004325.0002
Collection place: -
Sample date: 03/15/2022

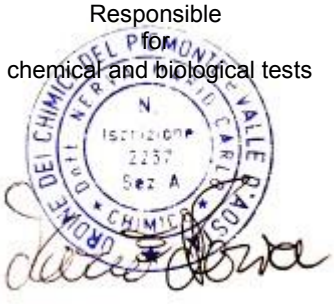
Sample Method: By the Client ref report COC_241880

Sample time: -

Reasons for the supplement

Sample details/description (matrix) changed to match client's request

Responsible
for
chemical and biological tests



END OF TEST REPORT

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CHELAB S.R.L.

Final Report

Execution of ecotoxicity tests on chemical product according to:

OECD 201:2011

OECD 202:2004

Messrs.

AKKA2O Green Projects Srl

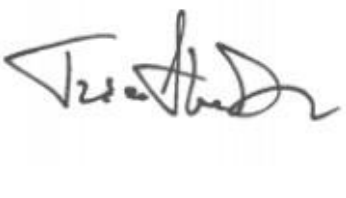
Via S. Cristoforo 95 - 20090

Trezzano sul Naviglio (MI)

Report Date	March 25, 2022
Last Version Date	April 27, 2022

Written by:	Verified by:	Approved by:
Dr. Fulvia Querio	Dr. Daniele Troiano	Dr. Daniele Troiano





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This document does not constitute and does not imply in any case an approval or justification of the operating or plant conditions being measured.
The laboratory tests were carried out at the Volpiano headquarters, Corso Europa, 600/A – Volpiano (Turin)
This document consists of a total of 12 pages, without exhibits.

1. Test sample

Name: 241880_01

Receipt date: 03/15/2022

ID: 22.004325.0002

Composition: not known

2. Summary

The purpose of this study is to determine the effects of the test sample on organisms of different trophic level and of different complexity:

- freshwater alga Pseudokirchneriella subcapitata (formerly known as Selenastrum capricornutum)
- freshwater crustacean Daphnia magna Straus

The endpoints evaluated in the tests are:

- the inhibition of the growth of Pseudokirchneriella subcapitata
- the immobilization of Daphnia magna Straus

The concentration causing the 50% effect is determined using statistical methods and is expressed as E_rC_{50} for the Pseudokirchneriella subcapitata test and EC_{50} per for the Daphnia magna test.

Given the nature of the sample to be tested, the tests were performed on eluates prepared according to the indications of the OECD standard No. 23, 2019 (Guidance Document on Aqueous-Phase Aquatic Toxicity Testing of Difficult Test Chemicals). The procedure used is the Water Accommodated Fraction (WAF) in which each concentration to be tested is prepared by adding the appropriate amount of sample in aqueous solution. The extracting solution used is the one foreseen by the specific test method for each organism (the same used for the negative control of the test).

According to the reference standards, a preliminary test of the sample under examination was performed on an aqueous extract (WAF) prepared at a concentration of 100 mg/L (LIMIT TEST).

For the test on Pseudokirchneriella subcapitata no further tests are necessary if the % of inhibition of algal growth of the limit test is < 25%.

For the test on Daphnia magna no further tests are necessary if the value of the % of immobilization of organisms of the limit test is = 10%.

3. Test description

Organisms used

The Daphnia magna and Pseudokirchneriella subcapitata organisms used in the tests come from a kit from the supplier ECOTOX LDS SRL.

Reagents and solutions

- Demineralized water
- Ephippia of Daphnia magna Straus (lot DM171121)
- Pseudokirchneriella subcapitata algal beads (batch SC181121)
- Culture medium for Daphnia magna (batch ISOD170122)
- Culture medium for Pseudokirchneriella subcapitata (batch SC170521)

Materials and instrumentation

- Analytical scale (± 0.0001 g)
- Technical Scale (± 0.01 g)
- Shakers
- pH meter
- Refrigerated thermostats
- Laboratory glassware
- Centrifuge
- Long cells with lid (capacity 25 mL)
- UV-VIS Spectrophotometer
- Stereomicroscope
- Multiwell plates of inert material

Sample preparation

The test was performed on test sample eluates prepared according to the indications of the OECD standard No. 23, 2019 (Guidance Document on Aqueous-Phase Aquatic Toxicity Testing of Difficult Test Chemicals).

The sample was mixed with the extracting aqueous solution at different levels of concentration, with a loading rate of 100 (concentration of the LIMIT TEST) and, in case of complete execution of the test, also at concentrations of 80, 50, 25, 10 mg/L and stirred for 24 hours.

At the end of the stirring period, the eluate was allowed to settle for 4 hours and the aqueous phase was taken to be used for execution of tests.

Evaluations of the achievement of equilibrium between the aqueous phase and the solid phase, and controls of the concentration of the test sample are not applicable in this study.

Once the test solutions were prepared, pH and dissolved oxygen were measured on a portion at the highest concentration; the measured values represent the initial values for all subsequent tests.

4. Test Execution

Test on Pseudokirchneriella subcapitata

The purpose of the tests is to determine the effect of the sample being tested on algal growth. The response of the organisms is evaluated as a function of the exposure concentration, comparing it with the average growth of replicates of control cultures not exposed to the sample. To obtain the full expression of the response of the system to toxic effects (optimal sensitivity), the cultures were left in the exponential growth phase, with sufficient nutrients and continuous light, for a period of time sufficient to evaluate the reduction of the specific growth rate.

Each concentration was tested in 3 replicates; at the same time, a negative control was run in 3 replicates using the specific culture medium.

Growth and growth inhibition were quantified by indirect measurements of algal biomass as a function of time; optical density was used as indirect parameter for biomass

calculation; a correction factor was applied between the measured optical density and the biomass, according to the specific indications of the supplier for each algal batch.

For both the negative control and the test solutions, 2 mL of algal stock, prepared according to the supplier's instructions, was added to 200 mL of each solution, to obtain an algal concentration of 1* 10^4 algae/mL. The inoculated solutions were mixed and transferred into 3 long cells for each solution (25 mL of test solution in each cell).

No initial algal density measurements were performed, but the nominal cell density of 1* 10^4 algae/mL was assumed.

Long, slightly open cells were randomly placed in the holder, to compensate for possible differences in environmental conditions during incubation. To obtain satisfactory algal growth, the media were incubated at 23°C ± 2°C under conditions of continuous illumination for 72 hours.

At 24-hour intervals, the optical density of each cell was measured by spectrophotometric reading at 670 nm wavelength.

Before measuring the optical density, the cells were mixed to homogenize the content, as reported in the kit instructions. The mixing procedure should be standardized as much as possible to ensure maximum reproducibility.

At the beginning and at the end of the test, observation with a stereo microscope was performed to verify the normal appearance of the algal inoculum. It was also verified that the pH did not vary by more than 1.5 during the test.

For the test to be considered valid, the following criteria shall be met:

- Exponential growth of biomass in control cultures by a factor of at least 16 over the 72-hour test duration; this corresponds to a specific growth rate of at least 0.92/day.
- The coefficient of variation (CV%) for section-by-section growth rates in control cultures should not exceed 35%.

- The coefficient of variation (CV%) for the mean growth rates μ over the entire test time, in control cultures should not exceed 7%.

The optical density data were entered into the appropriate spreadsheet for processing. The sheet provides indications relating to the validity of the test and the % of inhibition of algal growth in the sample, with the corresponding graph.

Test on Daphnia magna Straus

The purpose of the test is to determine the effects of the sample under examination on the mobility of Daphnia magna organisms born less than 24 hours before. Organism response is evaluated as a function of exposure concentration, relating to the mean immobilization of control organism replicates not exposed to the sample.

Newborns of Daphnia magna are born from durable eggs (ephippia) which can be hatched when needed, approximately 80 hours before the test is performed, following the supplier's instructions.

Two hours before the test, the newborns are fed with a suspension of microalgae of the Spirulina species.

Each concentration of the test solutions was tested in 4 replicates (wells containing 10 mL of solution); using a Pasteur pipette, about 20 organisms are transferred from the hatching plate to the appropriate support wells. Subsequently, 5 organisms were transferred from each support well into the 4 wells of each column.

The plates were incubated in the dark for 48 hours; the temperature was kept in the range between 18°C and 22°C, constant ± 1°C. The wells were not aerated during testing and the organisms were not fed. The observation of the state of mobility of the organisms was performed after 24 and 48 hours of exposure, and the number of dead or immobile newborns was recorded in the appropriate raw data collection model. Organisms that were unable to move in the 15 seconds following slight movement were considered immobile, even if they were still able to move their antennae. In addition to immobilization, any abnormal behavior or appearance was recorded.

Simultaneously with the test on the sample under examination, a negative control was performed using the specific culture medium, to verify that neither the culture medium nor the equipment used was toxic to the organisms.

To consider the test valid, the following performance criteria must be verified:

- Immobilization percentage in the negative control = 10%
- The dissolved oxygen concentration (DOC) at the end of the test = 3 mg/L in the negative control and test wells

It was also verified that the pH did not vary by more than 1.5 during the test.

The percentage of immobilization was calculated after 48 hours, according to the formula:

%I = (n / tot) * 100

Where %I is the percentage of immobilization, n is the number of immobile organisms in the test solution, and tot is the total number of exposed organisms in the solution.

The number of immobile organisms in the test solution was compared with that obtained in the negative control.

5. Results

Test on Pseudokirchneriella subcapitata

Test Solution	Inhibition % Replicate 1	Inhibition % Replicate 2	Inhibition % Replicate 3	Inhibition % Average	Specific growth rates CV%
LIMIT TEST 100 mg/L	21.54	21.04	20.92	21.17	1.54
80	9.92	9.98	9.76	9.89	1.14
50	5.14	4.96	4.82	4.97	3.23
25	-1.20	-1.27	-1.38	-1.29	N.A.
10	-1.51	-1.61	-1.77	-1.63	N.A.

Table 1: % inhibition of algal growth – 72 hours

E_rC_{50} for the test sample: > 100 mg/L

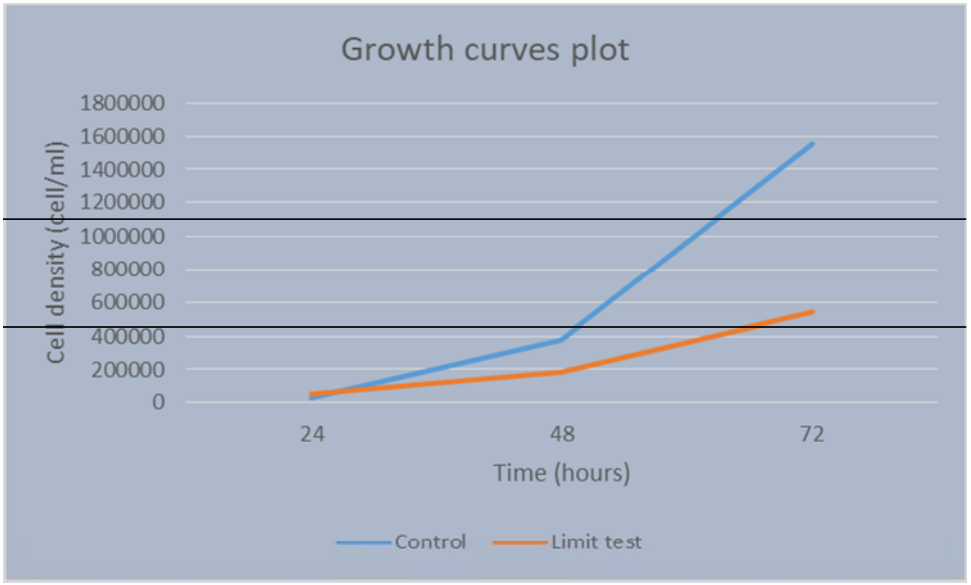

Figure 1: Algal growth (average algal biomass, in cells/mL, as a function of time, in hours)

initial pH (test 100 mg/L): 7.68 final pH

(test 100 mg/L): 8.19 pH change (test

100 mg/L): 0.51

Test on Daphnia magna Straus

Test Solution	% immobilization Replicate 1	% immobilization Replicate 2	% immobilization Replicate 3	% immobilization Replicate 4	Total immobile	% immobile
NEGATIVE CONTROL	0/5	0/5	0/5	0/5	0/20	0%
LIMIT TEST 100 mg/L	1/5	0/5	0/5	1/5	2/20	10%

Table 2: % organism immobilization for the sample and for the negative control (48 hours)

EC_{50} for the test sample: > 100 mg/L

initial pH (test 100 mg/L): 7.47 final pH (test 100 mg/L): 6.93 pH variation (test 100 mg/L): 0.54

6. Conclusions

Effect on Pseudokirchneriella subcapitata

The inhibition of growth performed on the limit test at the concentration of 100 mg/L was < 50% and therefore the value of E_rC_{50} is assumed to be > 100 mg/L.

Considering the result of the limit test (% inhibition of algal growth equal to 21.17%) the laboratory deemed it appropriate to perform a test with successive dilutions to confirm the value of E_rC_{50} > 100 mg/L.

Based on the results obtained, the sample cannot be classified as ecotoxic with regard to the effects on Pseudokirchneriella subcapitata.

Effect on Daphnia magna Straus

The percentage of immobilization on the limit test at the concentration of 100 mg/L was < 50%, and therefore the value of EC_{50} is considered > 100 mg/L.

Considering the result of the limit test (% inhibition of the mobility of the organisms equal to 10%), further tests were not considered necessary.

Based on the results obtained, the sample cannot be classified as ecotoxic with respect to the effects on Daphnia magna.

7. References and guidelines

- OECD 201:2006 corr.2011
- UNI EN ISO 8692:2012
- OECD 202:2006
- ISO 6341:2012
- Methods C1 and C2 of Commission Regulation (EC) No. 440/008 of 30 May, 2008
- ISPRA Servizio AMB LAB "*La normativa ADR per la caratteristica di pericolo "Ecotossico" ed i metodi di analisi*" Daniela Conti - Andrea Paina
  Rome, 13 May 2015 ISPRA Seminar "*La nuova classificazione dei rifiuti*"
- ENV/JM/MONO(2000)6/REV1; OECD SERIES ON TESTING AND ASSESSMENT No. 23 (Second Edition) "GUIDANCE DOCUMENT ON AQUEOUS-PHASE AQUATIC TOXICITY TESTING OF DIFFICULT TEST CHEMICALS": Water accommodated fraction (WAF) procedure
- ASTM D6081-98 (2014)
- ISPRA "*La nuova classificazione dei rifiuti e i test eco tossicologici per la caratteristica di pericolo H14*" Andrea M.Lanz, Andrea Paina
- UNI EN 14735:2005

TEST REPORT 22/000279545

Issue Date 05/02/2022

Client ID 0086088

Messrs.
AKKA2O GREEN PROJECTS SRL
PIAZZA IV NOVEMBRE, 5
20025 LEGNANO (MI)
IT

Sample information

Acceptance number	22.004325.0001
Delivered by	DHL International il 03/10/2022
Receiving Date	03/10/2022
Place of origin	AKKA2O GREEN PROJECTS SRL PIAZZA IV NOVEMBRE, 5 20025 LEGNANO (MI) IT
Sample Description	AKKA2O LMF
	Matrix: CHEMICAL PRODUCT

Sampling information

Sampled by External staff TECNICO AKKA2O GREEN PROJECTS SRL

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test report no. 22/000279545 follows

ANALYTICAL RESULTS

	Value/Uncertainty	Unit of Measure	LoQ	R	Analysis Start/End Date	Op. Unit	Row
ON SAMPLE AS IT IS							1
IN VITRO SKIN IRRITATION (HUMAN SKIN MODEL) Met.: OECD 439:2021	not irritating				03/11/2022--04/29/2022	09	2

Operative units

Unit 09: Via Fratta Resana PHARMA (TV)

Information provided by the client

Sampled by: External staff
Description: TECNICO AKKA2O GREEN PROJECTS SRL
Place of origin: AKKA2O GREEN PROJECTS SRL PIAZZA IV NOVEMBRE, 5 20025 LEGNANO (MI) IT
Description: AKKA2O LMF

Responsible for biological tests

Dr. Federica Cattapan

National Council of Biologists
Professional Register No. 045961
sez.A

Certificate No. WSREF-80318565676047 issued by the certifying body ArubaPEC S.p.A. NG CA 3, ArubaPEC S.p.A., IT

- Unless otherwise specified, the uncertainty is extended and has been calculated with a coverage factor k=2 corresponding to a level of probability of approximately 95% or as a confidence interval calculated at a confidence level of approximately 95%. - LoQ is the limit of quantification; "<x" or ">x" indicate an amount inferior or superior, respectively, to the measurement field of the test.- If not differently specified, the sums are calculated by lower bound criteria (L.B.). - In case of alteration of the sample the laboratory disclaims any responsibility for the results that can be influenced by the deviation, in case the client asks for the execution of the test anyway. - If the sampling is not carried out by the laboratory staff, the results obtained are considered to refer to the sample as received and the laboratory disclaims any responsibility for the results calculated considering the sampling data provided by the Client. The client's name and contact details are always provided by the client. - R: recoveries, recoveries marked with a hash (#) were not used in the calculations. The recovery relates to the analytical phases performed in the laboratory. - Unless otherwise specified, quantitative microbiological tests (excluding MPN) on liquid and solid environmental matrices are performed on a single replicate and two consecutive volumes; the expanded uncertainty is expressed in accordance with the ISO standard 29201:2012, calculated with a coverage factor k=2 corresponding to a probability level of 95%; for the methods in which the result is expressed in MPN (Most Probable Number), the measurement uncertainty is expressed as a confidence interval valued using the statistical tables of the reference method calculated with a coverage factor k=2, corresponding to a probability level of 95%. - If there is a specification (legal limits or client specifications) with which the analytical results have been compared, the values shown in bold indicate a result outside such specification. - Unless otherwise specified, any conformity/non-conformity judgments reported refer to the parameters analyzed and are based on the comparison of the value with the reference values without considering the confidence interval of the measurement.

END OF TEST REPORT

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CERTIFICATE OF ANALYSIS

July 12, 2022

AKKA2O® LMF
Ready Biodegradability in a Manometric Respirometry Test

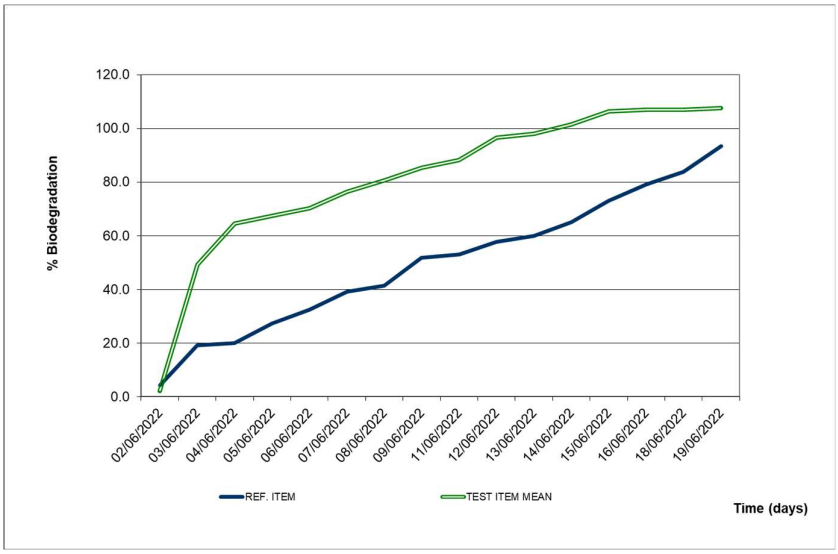
Sponsor(s):

AKKA2O Green Projects Srl
Sede Legale:
P.zza IV Novembre, 5
20025 Legnano (MI)
Sede Operativa:
Via S. Cristoforo, 95
20090 Trezzano sul Naviglio (MI)
ITALY

Test item: AKKA2O® LMF

Conclusion: The test item, AKKA2O® LMF was found to be ready and completely biodegradable under the conditions applied in a manometric respirometry test, having showed at the end of the 10-day window a maximum biodegradation of 96.5% (mean percentage values between two replicates).

Figure 1 Percentage biodegradation-time chart for the test item and the reference item Sodium Benzoate.



REGULATORY REQUIREMENTS

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008, on classification, labelling and packaging of substances and mixtures and successive renewals.

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GUIDELINE

OECD Guideline for Testing of Chemicals No. 301F, "Ready Biodegradability, Manometric Respirometry test", 1992.

This Certificate of analysis is referred to the GLP Study CH-0557-2022

Technician Signature

Rachele Dini

Rachele Dini

July 12, 2022

Date