

Laboratory Test Report

Report Number: 2025-753-5326

Page 1 of 2

Prepared for: Sigmund Lindner GMBH

Address: Oberwarmensteinacher Str 38
95485 Warmensteinach
Germany

Customer Sample Description: 1601A-52PF-2hex Deco Bioglitter SPARKLE V2- PF100
Red.015 Hex

Eurofins Registration Number: 20283 / 2025-753-5326

No. of samples: 1

Test(s) Performed: Readily Biodegradable: Manometric Respirometry OECD
301 F – July 1992

Date Received: 11/11/2025

Date(s) Tested: 17/11/2025 – 09/01/2026

Results and Observations

Please refer to the following page(s)



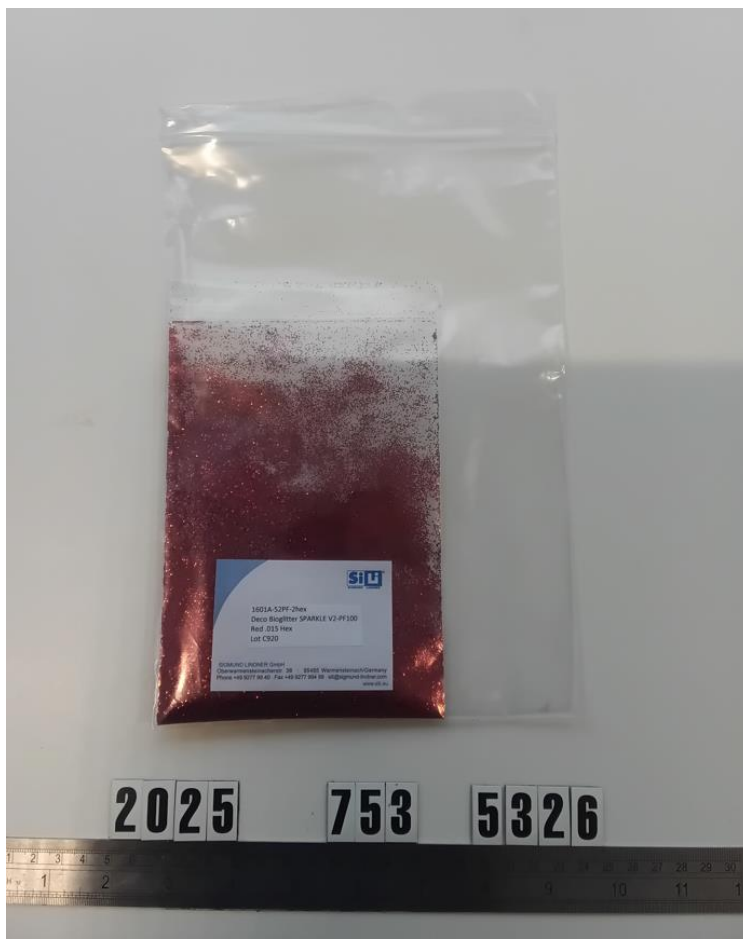
San Ho
Technical Services Manager**Date: 12/01/2026**

The reported results relate exclusively to the tested sample.
The testing was performed by a laboratory within the Eurofins Network.

Laboratory Test Report

Report Number: 2025-753-5326

Page 2 of 2

Sample Image**Eurofins Product Testing Services Limited**Suite 5A, 5th Floor, Duckworth House, Lancasterian

Talbot Road, Stretford, M32 0FP

Tel: +44 (0)161 868 7600

Fax: +44 (0)161 868 7699

Registered Office:

i54 Business Park, Valiant Way

Wolverhampton, WV9 5GB

Registration Number: 7401660

Vat Number: 887 1276 83

To

Singmnund Linder GmbH

***EVALUATION OF READILY BIODEGRADABLE FOLLOWING
THE OECD 301 F GUIDELINE***



Sample :
***2025-753-5326 - 1601A-52PF-2hex Deco Bioglitter SPARKLE V2-
PE100 Red.015 Hex***

Analysis report N°25EE4Z-0033 from 2026/01/09

*Reproduction of this document is only authorized in its integral form.
Results of this report are only about the sample tested and as received.
This report has 12 pages.*

[Eurofins Ecotoxicologie France](#)

[SAS au capital de 71676 € RCS Nancy 751 056 102 TVA FR 35 751 056 102](#)

[Siège social : Rue Lucien Cuenot site Saint Jacques II BP 51005 54521 MAXEVILLE cedex –
T 03 83 50 36 17 F 03 83 50 23 70](#)

SUMMARY

I.	SUMMARY	3
II.	CUSTOMER INFORMATION	4
III.	SAMPLE PRESENTATION	4
IV.	DESCRIPTION OF THE EVALUATION OF "READILY" BIODEGRADABILITY TEST FOLLOWING THE OECD 301F GUIDELINE	4
IV.1	NORMATIVE AND REGLEMENTARY REFERENCES	4
IV.2	PRINCIPLE	4
IV.3	STANDARD TESTS CONFIGURATION	5
V.	TEST CONFIGURATION	5
VI.	RESULTS	6
VI.1	TEST OF READILY BIODEGRADABILITY (OECD 301F)	6
VI.1.1	Follow-up of the consumed oxygen cumulated (mg O ₂ /L)	6
VI.1.2	Follow-up of the degradation compared to ThOD	7
VI.2	TEST VALIDITY CRITERIA	8
VI.3	10-day time interval criteria	8
VII.	CONCLUSION	9

Appendix 1 : definition

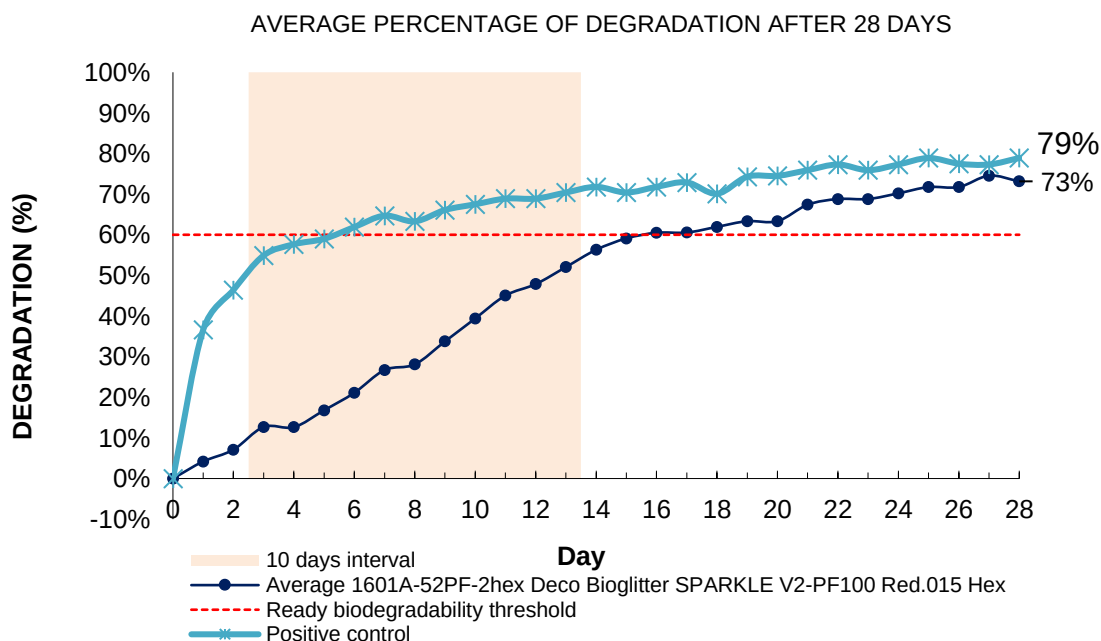
Appendix 2 : calculation rules

Appendix 3 : composition of mineral medium

I. SUMMARY

Normative reference	Readily Biodegradable: Manometric Respirometry OECD 301 F – July 1992
Test time	28 days
Customer sample reference	LA-52PF-2hex Deco Bioglitter SPARKLE V2-PF100 Red.015
Batch No.	C920
ThOD test product (mg O ₂ /mg)	1.23
Test product initial concentration expressed as ThOD in medium	81.1

Validity criteria	Direct addition
Average total O ₂ consumption in the negative control does not exceed 60 mg/L after 28 days.	28.1 mg
Difference between cumulative oxygen consumption values is less than or equal to 20%.	Except for days 1, 7 and 10 to 13, but this deviation is accepted due to the low cumulative O ₂ consumed values.
The percentage of degradation of the reference substance has reached at least 60% at 14 days.	72%
For the toxicity test, degradation is greater than 25% after 14 days.	54%
Biodegradation rate at end of test	73%
Conclusion	Not readily biodegradable
Respecting the 10-day interval	No



II. CUSTOMER INFORMATION

Details	Informations
Applicant's name	EUROFINS PRODUCT TESTING SERVICES LIMITED
Adress	Suite 5A, 5th Floor, Duckworth House, Lancastrian , Talbot Road, Stretford, M32 0FP
Order number	2025-753-5326

III SAMPLE PRESENTATION

Details	Sample
Customer sample reference	1601A-52PF-2hex Deco Bioglitter SPARKLE V2- PF100 Red.015 Hex
Batch Number	C920
Nature of the sample	Not reported
Solubility of the sample	Insoluble
Composition	Not reported
CAS number	Not reported
Aspect	Red dry powder
Conservation temperature	Room temperature
Expiration date	2028/11/31
EUROFINS Ecotoxicologie France reference	25G006485-001
Reception date	2025/11/17

IV. DESCRIPTION OF THE EVALUATION OF "READILY" BIODEGRADABILITY TEST FOLLOWING THE OECD 301F GUIDELINE

IV.1 NORMATIVE AND REGLEMENTARY REFERENCES

- OECD 301 F Guidelines (1992.07.17 revised on 2013.07.26)« Readily biodegradable: Manometric Respirometry Test ».
- Standard ISO 10634:2018: Water quality - Preparation and treatment of sparingly water-soluble organic compounds for assessment of their biodegradability in aqueous media.

IV.2 PRINCIPLE

Biodegradability of organic compounds by micro-organisms in an aquatic medium is determined using a static test system. The test blend contains an inorganic medium, the organic compound as the only nominal source of carbon and energy with a theoretical demand in oxygen of 100 mg/L, and a mixed inoculation from an urban waste water treatment plant (amount of suspended matter inferior to 30 mg/L in the final blend).

The oxygen consumed by microbial degradation is measured by the OXITOP system.

The oxygen consumed is compared to the theoretical oxygen demand (ThOD) or chemical oxygen demand (COD) and the biodegradability is expressed as a percentage.

The test standardly lasts 28 days, but can be extended if the biodegradation curve does not reach a plateau on the 28th day.

A substance is considered «readily biodegradable» when the 10-day window is met within the test duration, i.e. within the first 28 days.

IV.3 STANDARD TESTS CONFIGURATION

An analytic session has:

- Negative control (mineral medium and inoculum): 2 replicas
- Positive control (mineral medium, reference compound and inoculum): 1 replica
- Test substance (mineral medium, test substance and inoculum): 2 replicas
- Toxicity control*: 1 replica

*A test product's toxicity control: mineral medium + mix of the reference substance and the test product (tested concentrations) + inoculum

V. TEST CONFIGURATION

Details	Informations
Test start date	2025/12/10
Reference substance	Sodium acetate (CAS n°: 127-09-3) ThOD :0.78mg O ₂ /mg.
Bacterial inoculum origin and information	Maxéville wastewater treatment plant (France) treating mainly domestic wastewater (98%), sampled on 2025/12/09.
	4.2.10 ⁷ UFC/L (Theoretical value following the OECD 301F: concentration between 10 ⁷ and 10 ⁸ cells/L).
	Suspended matter concentration : 11.4g/L (added volume :0.43mL).
Incubation	Temperature: 22°C ± 2°C. Duration: 28 days.
pH	Start: 7.5 ; End:7.3
Concentration and mode of introduction	The test substance is tested at a ThOD equal to 100mg O ₂ /mg. Due to the nature of the sample, it was dissolved in the test medium using a mechanical disperser (45s at 17,000 rpm).
	The mass of raw product is 81.1 mg/L.
ThOD	1.23 mg O ₂ /mg.
Organic carbon content	42.6 %

VI. RESULTS

VI.1 TEST OF READILY BIODEGRADABILITY (OECD 301F)

VI.1.1 Follow-up of the consumed oxygen cumulated (mg O₂/L)

Day n°	Negatif control			Positive control	Sample 1601A-52PF-2hex Deco Bioglitter SPARKLE V2-PF100 Red.015 Hex				Toxicity control
	Direct addition 1	Direct addition 2	Average		Direct addition 1	Direct addition 2	Average	Difference in cumulative oxygen consumption	
1	0	0	0.0	36.6	5.6	2.8	4.2	50%	47.8
2	5.6	2.8	4.2	50.6	11.3	11.3	11.3	0%	59.1
3	5.6	2.8	4.2	59.1	16.9	16.9	16.9	0%	67.5
4	11.3	8.4	9.9	67.5	22.5	22.5	22.5	0%	78.8
5	11.3	11.3	11.3	70.3	28.1	28.1	28.1	0%	81.6
6	14.1	14.1	14.1	76.0	33.8	36.6	35.2	-8%	90
7	16.9	16.9	16.9	81.6	39.4	47.8	43.6	-21%	95.7
8	19.7	16.9	18.3	81.6	42.2	50.6	46.4	-20%	98.5
9	19.7	16.9	18.3	84.4	47.8	56.3	52.05	-18%	104
10	22.5	16.9	19.7	87.2	53.5	64.7	59.1	-21%	110
11	22.5	19.7	21.1	90.0	59.1	73.2	66.15	-24%	113
12	25.3	22.5	23.9	92.8	64.7	78.8	71.75	-22%	121
13	25.3	25.3	25.3	95.7	70.3	84.4	77.35	-20%	129
14	25.3	22.5	23.9	95.7	73.2	87.2	80.2	-19%	132
15	28.1	28.1	28.1	98.5	81.6	92.8	87.2	-14%	141
16	28.1	25.3	26.7	98.5	81.6	92.8	87.2	-14%	141
17	28.1	28.1	28.1	101.0	81.6	95.7	88.65	-17%	146
18	30.9	30.9	30.9	101.0	87.2	98.5	92.85	-13%	155
19	28.1	25.3	26.7	101.0	84.4	95.7	90.05	-13%	155
20	30.9	28.1	29.5	104.0	87.2	98.5	92.85	-13%	163
21	28.1	28.1	28.1	104.0	90	101	95.5	-12%	166
22	28.1	25.3	26.7	104.0	90	101	95.5	-12%	166
23	28.1	28.1	28.1	104.0	92.8	101	96.9	-9%	172
24	28.1	25.3	26.7	104.0	92.8	101	96.9	-9%	172
25	28.1	28.1	28.1	107.0	95.7	104	99.85	-9%	177
26	30.9	28.1	29.5	107.0	98.5	104	101.25	-6%	183
27	28.1	25.3	26.7	104.0	98.5	104	101.25	-6%	180
28	28.1	28.1	28.1	107.0	98.5	104	101.25	-6%	180

Validity criteria:

- Oxygen consumption in the negative control is normally between 20 and 30 mg O₂/L on test day 28 and must not exceed 60 mg O₂/L. If values in excess of 60 mg O₂/L are obtained, the results and experimental methods should be examined critically.
- The difference between cumulative oxygen release values is less than or equal to 20% on all measurement days.

VI.1.2 Follow-up of the degradation compared to ThOD

Day n°	Positive control	Sample 1601A-52PF-2hex Deco Bioglitter SPARKLE V2-PF100 Red.015 Hex			Toxicity control
		Direct addition 1	Direct addition 2	Average	
1	37%	6%	3%	4%	24%
2	46%	7%	7%	7%	27%
3	55%	13%	13%	13%	32%
4	58%	13%	13%	13%	34%
5	59%	17%	17%	17%	35%
6	62%	20%	23%	21%	38%
7	65%	23%	31%	27%	39%
8	63%	24%	32%	28%	40%
9	66%	30%	38%	34%	43%
10	68%	34%	45%	39%	45%
11	69%	38%	52%	45%	46%
12	69%	41%	55%	48%	49%
13	70%	45%	59%	52%	52%
14	72%	49%	63%	56%	54%
15	70%	54%	65%	59%	56%
16	72%	55%	66%	61%	57%
17	73%	54%	68%	61%	59%
18	70%	56%	68%	62%	62%
19	74%	58%	69%	63%	64%
20	75%	58%	69%	63%	67%
21	76%	62%	73%	67%	69%
22	77%	63%	74%	69%	70%
23	76%	65%	73%	69%	72%
24	77%	66%	74%	70%	73%
25	79%	68%	76%	72%	74%
26	78%	69%	75%	72%	77%
27	77%	72%	77%	75%	77%
28	79%	70%	76%	73%	76%

Validity criteria:

- The percentage degradation of the reference substance has reached at least 60% after 14 test days.
- The percentage degradation of the toxicity control must be greater than 25% after 14 days of testing.

VI.2 TEST VALIDITY CRITERIA

Validity criteria	Test results
	In direct addition
Average total O ₂ consumption in the negative control does not exceed 60 mg/L after 28 days	28.1 mg
Difference between cumulative oxygen consumption values is less than or equal to 20%	Except for days 1, 7 and 10 to 13, but this deviation is accepted due to the low cumulative O ₂ consumed values.
The percentage of degradation of the reference substance has reached at least 60% at 14 days	72%
For the toxicity test, degradation is greater than 25% after 14 days	54%
The pH at the end of the test was between 6 and 8.5	7.3

The test is thus valid.

VI.3 10-day time interval criteria

	Addition directe	
	Day	% degradation
Start of 10-day interval	3	13%
End of 10-day interval	13	52%

For direct addition:

The product tested has not reached at least 60% degradation (52%) 10 days after reaching 10% degradation.

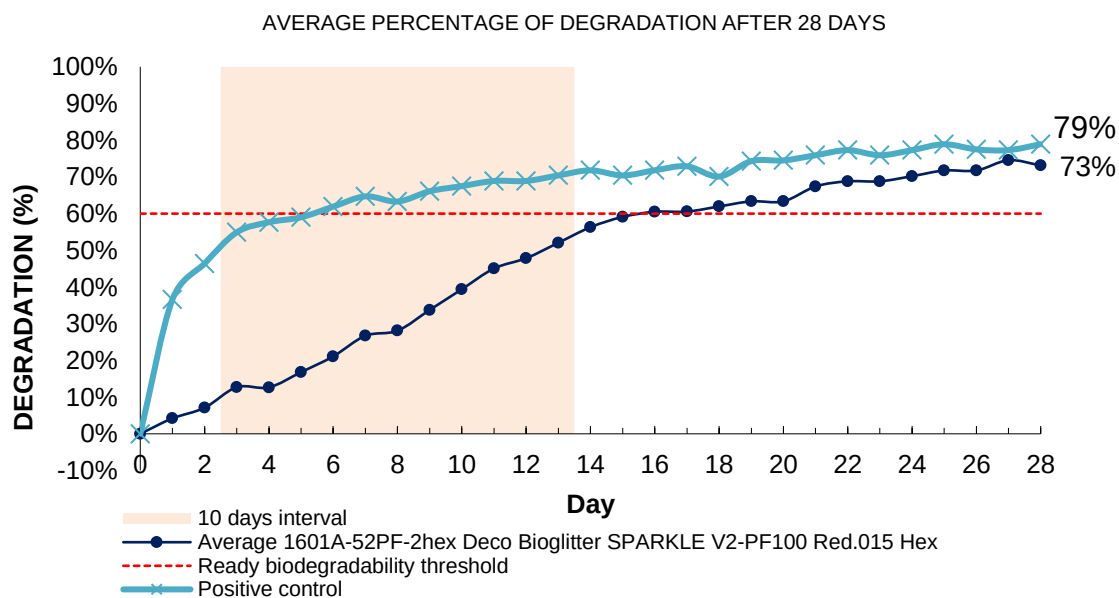
The 10-day interval is not respected.

VII. CONCLUSION

The report's conclusions are based on OECD 301 criteria.

- The 10-day interval is not respected.
- The test product « 1601A-52PF-2hex Deco Bioglitter SPARKLE V2-PF100 Red.015 Hex» is not considered as readily biodegradable.
- The biodegradability of the product « 1601A-52PF-2hex Deco Bioglitter SPARKLE V2-PF100 Red.015 Hex » is 73% after 28 days.

NB: The « readily biodegradable » is only applicable to ingredients.



In Maxeville (France), on 2026/01/09
Mathilde Roche Bril, Study manager



APPENDIX

Appendix 1: definition

- BOD: Biochemical Oxygen Demand (mg) is the amount of oxygen consumed by micro-organisms when metabolising a test compound; also expressed as mg oxygen uptake per mg test compound.
- Lag phase: period between the sowing moment and the moment when the percentage of degradation has reached around 10 %.
- Degradation period: period which begins at the end of the latency period and ends when 90% of the degradation maximal rate is reached.
- Readily biodegradable: a product is considered as easily biodegradable if the biodegradation rate has reached at least 60% in the 10-day interval which has to fall within the 28 (firsts) days of the test.
- 10-day window: 10 days which directly follow the moment when the biodegradation rate has reached 10 % within the 28 (firsts) days of the test.
- ThOD: Theoretical oxygen demand (mg) is the total amount of oxygen required to oxidise a chemical completely; it is calculated from Chemical Oxygen Demand (COD) and is also expressed as mg oxygen required per mg test compound.