

Summary of Testing

Test Sample

Sample reference: LDPE FILM CONTAINING 1% d₂w
Test Sample: 50 µm transparent plastic film
Material supplied by: SYMPHONY ENVIRONMENTAL LIMITED, ADDRESS: 6 ELSTREE GATE, ELSTREE WAY, BOREHAMWOOD WD61JD, HERTFORDSHIRE, UK

ASTM 6954 – Tier 1: UV Aging

Report No: 9882/16/1937

The test sample LDPE FILM CONTAINING 1% d₂w was exposed to accelerated UV ageing according to the following conditions. The molecular weight of the polymer was determined after the completion of UV ageing by gel permeation chromatography (GPC).

Accelerated aging: 120 hours by UV light based on the standard UNE EN ISO 4892-3.
Equipment: GPC-IR5 Polymer Char
Result: M_w (g/mol): 3,066

After the completion of UV ageing the test sample LDPE FILM CONTAINING 1% d₂w demonstrated a molecular weight of less than 5,000 g/mol in accordance with the requirements of standard ASTM 6954 – Tier 1.

At the completion of UV ageing the residues of sample LDPE FILM CONTAINING 1% d₂w was then tested for determination of heavy metals and toxic elements and Biodegradability (report 9882/16/6646-M1) according to the requirements outlined in ASTM 6954 tier 2.

ASTM 6954 – Tier 2: Determination of heavy metals and toxic elements and Biodegradability

Report No: 9882/16/6646-M1

Quantitative elemental analysis of the residues of sample LDPE FILM CONTAINING 1% d₂w after UV ageing (report 9882/16/1937) demonstrates that in accordance with the requirement of standard ASTM 6954 – Tier 2 the concentrations of regulated metals and other toxic substances in the sample do not exceed the values given in UNE EN 13432:2000 Table A.1 of the Annex A.

The residues of sample LDPE FILM CONTAINING 1% d₂w after UV ageing were tested for biodegradability according to the method UNE EN ISO 14855-1:2012, after 121 days the sample had reached a percentage of biodegradation of 88.86 %. This result demonstrates that the residues of sample LDPE FILM CONTAINING 1% d₂w after UV ageing meet the biodegradability requirement of standard ASTM 6954 – Tier 2 to demonstrate more than 60% biodegradation in this test.

At the completion of biodegradation testing, the compost from the biodegradation test was evaluated for ecotoxicological effects (report 17001074).

ASTM 6954 – Tier 3: Ecotoxicological effects

Report No: 17001074

Compost from the completed biodegradation test (report 9882/16/6646-M1) of the residues of sample LDPE FILM CONTAINING 1% d₂w has demonstrated no ecotoxicological effect from the residues of biodegradation of sample LDPE FILM CONTAINING 1% d₂w in accordance with the methods laid out in standard ASTM 6954 – tier 3:

A. Ecotoxicological effects on terrestrial plants

The results are in accordance with OECD Guideline 208

B. Ecotoxicological effects on earthworms

The acute toxicity test with earthworms is considered successful in accordance with OECD 207

There is no mortality in the tests carried out. The acute toxicity test with earthworms OECD 207 is considered successful for the Sample 17-0443-2.



Eurofins Product Testing Spain, SLU
NIF B-66137175
Barcelona, 25 th July 2017
Elena Mendez

Product Testing Spain BU

EUROFINS PRODUCT TESTING SPAIN S.L.

C/ Ausias March 148-150
08013 Barcelona
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Nº INFORME: 9882/16/1937
Acta: 23949

TEST REPORT EMITTED BY EUROFINS PRODUCT TESTING SPAIN SL

IDENTIFICATION PETITIONER DATA

NAME: SYMPHONY ENVIRONMENTAL LIMITED

ADDRESS: 6 ELSTREE WAY
BOREHAMWOOK-HERTORDSHIRE
WD61JD

SAMPLE IDENTIFICATION DATA

PRODUCT: TIER 1

S/REFERENCE:

SUPPLIER:

BRAND:

OBSERVATIONS:

DATE OF RECEPTION: 12/04/16

PHYSICAL AND CHEMICAL TESTS LAB

Start: 12/04/16

End: 15/07/16

TEST REQUESTED

Accelerated aging by UV light, based on the UNE EN ISO 4892-3

PROCEDURE AND RESULTS

ARTIFICIAL AGING, UV FLUORESCENT RADIATION AND WATER EXPOSURE

Test method based on the standard UNE EN ISO 4892/3

Equipment: Ultraviolet Camera (ATLAS)

Type lamps: UVB 313

No. of lamps: 8

Cycle: 8 hours UV light at T: (60±3)°C

4 hours of condensation / darkness at T: (50±3)°C

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Test period: approx 120 hours (until sample degradation observed by breakage and brittleness of the same)

Note 1: The degradation was carried out in various occupations machine.

Note 2: The test samples were sent to the petitioner.

This test was performed in the collaborating laboratory Applus file number: 16 / 31703329, under the responsibility of Marina Curto



Eurofins Product Testing Spain, SLU
NIF B-66137175
Responsable Técnico
Elena Mendez
Barcelona, 15 de julio de 2016

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Referencia: EUROFINS- PEAD-27832

Ejemplares: 1

Muestra de: Polietileno - d2w-00427

EUROFINS PRODUCT TESTING SPAIN
C/ FONT DEL CARME S/N.
08193 BELLATERRA
Barcelona

Departamento: EUROFINS PRODUCT TESTING SPAIN
ID solicitante: EUROFINS

ENSAYO	Resultado	NORMA
GPC (MWD) GPC (MWD)	T	

RESULTADOS	
Equipo:	GPC-IR5 Polymer Char (CN12481191)
Disolvente utilizado:	1,2,4 Triclorobenceno
Temperatura (°C):	160
Número y tipo de columnas:	3 Columnas PL Gel Olexis
Flujo (ml/min):	1
Tipo de detector:	Concentración (IR5)
Tipo y patrón de calibración:	Convencional (PS)
Corrección calibración convencional:	Factor Q
Mn (g/mol):	919
Mw (g/mol):	3066
Mz (g/mol):	6969
Índice de polidispersidad (-):	3.3

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Nº INFORME: 9882/16/6646-M1

TEST REPORT EMITTED BY EUROFINS PRODUCT TESTING SPAIN SL

IDENTIFICATION PETITIONER DATA

NAME: SYMPHONY ENVIRONMENTAL LIMITED

ADDRESS: 6 ELSTREE WAY

WD61JD

BOREHAMWOOK-HERTFORDSHIRE

SAMPLE IDENTIFICATION DATA

- **S/REFERENCE: LDPE FILM CONTAINING 1%D2W**
 - **Cod: S16/1471/1**

Determinations have been performed under the responsibility of Laboratory Technical AIMPLAS file number REPORT AT-1683/16

PHYSICAL AND CHEMICAL TESTS LAB

Start: 06/06/2016

End: 6/11/16

TEST

Determination of the ultimate aerobic biodegradability of plastic materials under controlled composting conditions - method by analysis of evolved carbon dioxide - part 1: general method (ISO14855-1:2012).

SAMPLES

- **LDPE FILM CONTAINING 1%D2W**
 - **Cod: S16/1471/1**

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Nº INFORME: 9882/16/6646-M1

TEST METHOD**A. - Determination of the ultimate aerobic biodegradability of plastic materials under controlled composting conditions according to the Standard ISO14855-1:2012.**

It has been carried out the determination of aerobic biodegradability of the test sample of plastic material under controlled composting conditions.

The test method used is reflected in the UNE-EN ISO 14855-1:2013 and is based on the measurement of carbon dioxide generated.

The inoculum used was a stabilized mature compost. The test material was mixed with the inoculum introduced into a static container of 3 litre where intensively composted under optimum oxygen, temperature and humidity during a period of maximum six month trial.

Parameter identification for inoculum:

Table 1. Parameters of inoculum.

Parameters	Inoculum
Age (months)	3
Ntotal (%sms)	0.42
TOC (% sms)	10.30
Volatile-solids (% sms)	25.47
pH	8.13

Parameter identification for test material and reference:

Table 2. Parameters of sample and reference.

Parameters	Reference	16/1471/1
Humidity (%smh)	4.40	0.45
Ntotal (%sms)	0.16	0.10
TOC (% sms)	42.16	68.30
Volatile-solids (% sms)	91.40	99.62
Shape and physical appearance	powder	/

The test was carried out at a constant temperature 58 ± 2 °C. Air was supplied inside the containers and monitored continuously to ensure aerobic conditions throughout the test. Also, the test vessels were subjected to agitation twice a week in order that the air distribution is homogeneous throughout the container.

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The test vessels were distributed as follows:

- Three containers for blanks or control (compost).
- Three containers for reference material (microcrystalline cellulose).
- Three containers for each test material.

The amounts in grams of dry solids test sample or reference material and inoculum introduced into each vessel composting.

During the aerobic biodegradation of the material it was recorded continuously the amount of carbon dioxide generated in each of the reactors. The percentage degradation was calculated by the ratio of carbon dioxide generated from the test material and the theoretical maximum amount of carbon (ThCO₂) that can be produced from the test material dioxide.

B. - Determination of the amount of metals in the test sample and verification of the compliance of the requirements according to the Standard EN 13432:2000.

Characterisation of the test samples was carried out using the methods listed in the following table:

Table 3. Analytical methods used for the chemical characterization of plastic materials. Maximum concentrations of regulated metals according to EN 13432.

PARAMETER	UNITS	ANALYTICAL METHOD	VALUE MAX (mg/kg)
Cd	mg/kg on dry substance	ICP-MS	0.50
Cu	mg/kg on dry substance	ICP-MS	50.00
Cr	mg/kg on dry substance	ICP-MS	50.00
Hg	mg/kg on dry substance	ICP-MS	0.50
Mo	mg/kg on dry substance	ICP-MS	1.00
Ni	mg/kg on dry substance	ICP-MS	25.00
Pb	mg/kg on dry substance	ICP-MS	50.00
Zn	mg/kg on dry substance	ICP-MS	150.00
Se	mg/kg on dry substance	ICP-MS	0.750
As	mg/kg on dry substance	ICP-MS	5.00
F	mg/kg on dry substance	Selective electrode	100.00

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RESULTS**A. Determination of the ultimate aerobic biodegradability of plastic materials under controlled composting conditions according to the Standard ISO14855-1:2012.**

The following table show the evolution of the degree of biodegradation of the containers containing the test sample (D_t, m =mean percent biodegradation achieved at time t).

Table 4. Cumulative production CO₂ (average) of the blanks.

Time	Cumulative production CO ₂ blanks (CO ₂ prod/g)
10 days	2.31
30 days	7.30
50 days	13.37
70 days	16.55
90 days	22.09
121 days	25.77

Table 5. Evolution of the percentage biodegradation and cumulative production CO₂ (average) of the sample 16/1471/1.

Time	Cumulative production CO ₂ sample 16/1471/1 (CO ₂ prod/g)	*ThCO ₂ (g) sample 16/1471/1	D _{tm} (%)
10 days	3.61	20.30	6.40
30 days	8.90	20.30	7.90
50 days	15.91	20.30	12.46
70 days	22.75	20.30	30.48
90 days	35.32	20.30	65.04
121 days	44.05	20.30	88.90

*Note: ThCO₂ calculate:

Average value of COT in sample **16/1471/1** (g) = 5.545 g per reactor.

$$ThCO_2 = 5.545 * \frac{44}{12} = 20,30 \text{ g}$$

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The following figure depict the evolution of the biodegradation of the sample 16/1471/1:

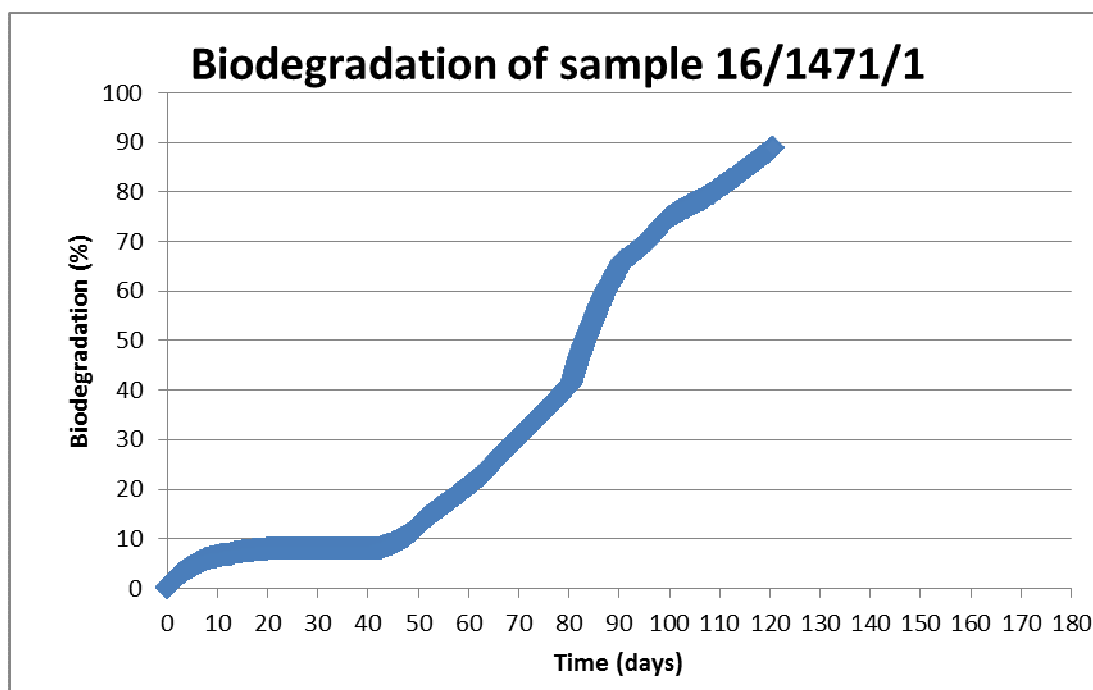


Figure 1. Evolution of the percentage of biodegradation (average value) of the test material 16/1471/1.

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B. - Determination of the amount of metals in the test sample and verification of the compliance of the requirements according to the Standard EN 13432:2000.

Parameter of heavy metals of test material:

Table 6. Parameters of heavy metals of the sample 16/1471/1.

PARAMETER	UNITS	Quantitative detection limit	Mean value	REQUIREMENT UNE EN 13432	CONFORMITY UNE EN 13432
Cr	mg/kg	0.05	1.77	50	YES
Ni	mg/kg	0.05	2.65	25	YES
Cu	mg/kg	0.05	0.75	50	YES
Zn	mg/kg	0.05	28.74	150	YES
As	mg/kg	0.05	0.09	5	YES
Se	mg/kg	0.05	0.27	0.75	YES
Mo	mg/kg	0.05	0.55	1	YES
Cd	mg/kg	0.05	0.07	0.5	YES
Hg	mg/kg	0.001	0.006	0.5	YES
Pb	mg/kg	0.05	1.40	50	YES
F	mg/kg	0.1	13.00	100	YES

CONCLUSIONS

According to the Standard UNE EN 13432 concentrations of regulated metals and other toxic substances are lower than values given in Table A.1 of the Annex A.

According to the test UNE EN ISO 14855-1, after 121 days the sample 16/1471/1 has reached a percentage of biodegradation of 88.86 %.

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EUROFINS PRODUCT TESTING SPAIN S.L.

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Nº INFORME: 17001074-M1

TEST REPORT EMITTED BY EUROFINS PRODUCT TESTING SPAIN SL

IDENTIFICATION PETITIONER DATA

NAME: SYMPHONY ENVIRONMENTAL LIMITED

ADDRESS: 6 ELSTREE WAY

WD61JD

BOREHAMWOOK-HERTFORDSHIRE

PHYSICAL AND CHEMICAL TESTS LAB

Start: 24/04/17

End: 30/05/17

SUBJECT

Chemical characterization and determination of the ecotoxicological effects of the samples and blank from the biodegradability test under composting conditions of service performed under the responsibility of Laboratory Technical AIMPLAS file number REPORT AT-1683/16

SUMMARY

A.- Ecotoxicological effects on terrestrial plants according to OECD Guideline 208 for the testing of chemicals 'Terrestrial plant test: seedling emergence and seedling growth test' and the modifications proposed in EN 13432:2000¹.

B.- Ecotoxicological effects on earthworms according to OECD Guideline 207 for the testing of chemicals 'Earthworm, Acute Toxicity Test'

SAMPLES

1. - Blank from S16/1471

Code: 17-0443-2

2. - Compost from LDPE FILM CONTAINING 1%D2W S16/1471

Code: 17-0443-1

The samples correspond to a representative sample of the contents of the samples and blank after the biodegradability test carried out in the S16 / 1471 service. Both samples and the blank after the completion of the S16 / 1471 service were packaged and frozen until this service was performed.

The date of receipt and beginning of tests of this service corresponds to the moment they were taken out of the freezer and were tagged with the codes used in this service.

¹ the number of replicates tested is not which the standard required because of the insufficient amount of compost derived from the amount of plastic sample received to be used in the biodegradability test.

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EXPERIMENTAL

A.- Ecotoxicological effects on terrestrial plants according to OECD Guideline 208 for the testing of chemicals 'Terrestrial plant test: seedling emergence and seedling growth test' and the modifications proposed in EN 13432:2000.

The work included:

1. Seedling emergence test on two different species of terrestrial plants.
2. Seedling growth test on two different species of terrestrial plants.

Seeds of the same species were planted in pots containing a reference substrate (standard substrate EE0, EINHEITS ERDE Classic) and final compost generated in biodegradation test.

The test conditions were:

- Emergence period: 8 days (ray –grass) and 6 days (barley) (24-h darkness), temperature: 20 °C, and relative humidity of 80 %.
- Growth period: 15 days (ray –grass), and 14 days (barley), 16-h light/8h darkness photoperiod, max/min temperatures: 22°C -24 °C/15°C -16 °C, and relative humidity of 80 %.
- Test plants: ray grass and barley.

Adverse effects on the final compost were evaluated comparing the results obtained for the final compost generated in test and control samples taken from the same process without plastic material.

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B.- Ecotoxicological effects on earthworms according to OECD Guideline 207 for the testing of chemicals 'Earthworm, Acute Toxicity Test'.

• **Test with artificial soil (1000 ppm):**

The artificial soil test (1000 ppm) involves exposing earthworms to a concentration of 1000 mg / kg (dry weight of artificial soil) in order to identify chemicals potentially toxic to earthworms in the soil. The duration of the test is 14 days (evaluation of mortality at 7 and 14 days).

Earthworms: *Eisenia foetida*. Adult (clitellate) with weights between 300 and 600 mg. (N = 40)

Artificial soil: a reference vermicompost is used (from the same origin where the earthworms have been cultivated). It constitutes control.

Test conditions: containers with 100 g of artificial soil with 1000 ppm of test substance (N = 4). 10 worms container.

Test temperature: 20 ± 2 °C.

Substrate moisture: Field capacity (70-75%).

The test is performed with continuous light.

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- **Test with artificial soil (50 %):**

The artificial soil test (50%) involves exposing earthworms to a concentration of 500 mg / g (dry weight of artificial soil) in order to identify chemicals potentially toxic to earthworms in the floor. The duration of the test is 14 days (evaluation of mortality at 7 and 14 days).

Earthworms: *Eisenia foetida*. Adult (clitellate) with weights between 300 and 600 mg. N = 8

Artificial soil: a reference vermicompost is used (from the same origin where the earthworms have been cultivated). It constitutes control.

Test conditions: containers with 30 g of the artificial soil with a concentration of 500 mg / g (artificial dry weight of the soil) (N = 4). 2 worms per container.

Test temperature: 20 ± 2 ° C.

Substrate moisture: Field capacity (70-75%).

The test is done with continuous light.

A simple paper contact toxicity test is described as an optional screen to indicate those substances likely to be toxic to earthworms in soil and which will require further more detailed testing in an artificial soil. The simple contact test is easy to perform and gives reproducible results with the recommended species. The artificial soil test gives toxicity data more representative of natural exposure of earthworms to chemicals.

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Nº INFORME: 17001074-M1

RESULTS

A.- Ecotoxicological effects on terrestrial plants according to OECD Guideline 208 for the testing of chemicals 'Terrestrial plant test: seedling emergence and seedling growth test' and the modifications proposed in EN 13432:2000.

The seedling rate germination rate and biomass of ray grass and barley have been studied for the 1/1 and 1/3 mixtures of compost/reference substrate following the guidelines established in EN13432 and OECD 208.

The number of replicates tested is not which the standard required because of the insufficient amount of compost. The following table shows the number of replicates for each sample, concentration and test plant used:

Sample	Replicates/Concentration/Plant tested
Reference Substrate EE0	Sust.EEO-Ray Grass-1
	Sust.EEO-Ray Grass-2
	Sust.EEO-Ray Grass-3
	Sust.EEO-Barley-1
	Sust.EEO-Barley-2
	Sust.EEO-Barley-3
Reference Substrate EE0 + Blank compost from S16/1471	C. Blank-(1:3)-Ray Grass-1
	C. Blank-(1:3)-Barley-1
	C. Blank-(1:1)-Barley-1
Reference Substrate EE0 + Compost from S16/1471: LDFE FILM CONTAINING d2W	M1-(1:3)-Ray Grass-1
	M1-(1:3)-Ray Grass-2
	M1-(1:3)-Barley-1
	M1-(1:3)-Barley-2
	M1-(1:1)-Ray Grass-1
	M1-(1:1)-Barley-1
	M1-(1:1)-Barley-2
	M1-(1:1)-Barley-2

Figures 1 and 2 shows the number of germinated seeds of the different test series.

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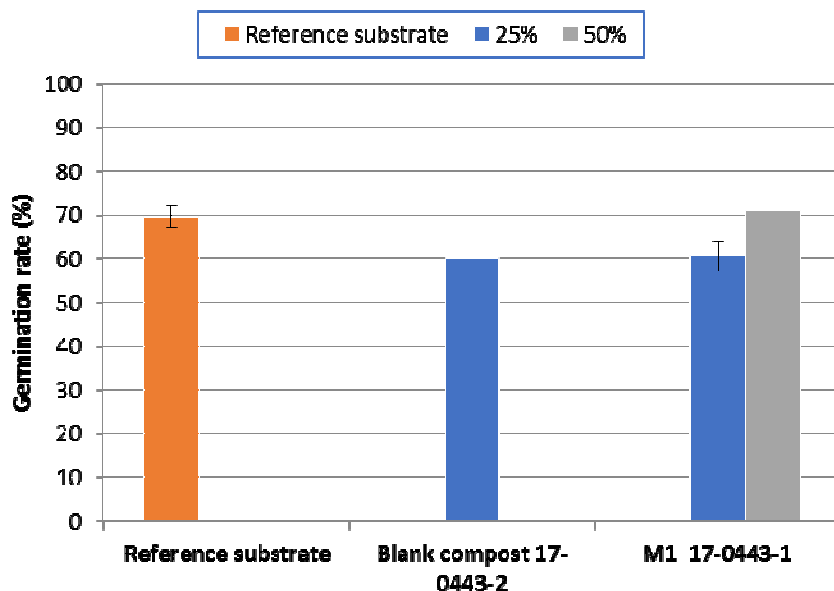


Figure 1. Average germination number of ray grass plants of the reference substance, blank compost and test compost mixture (1/1 and 1/3 mixtures of compost/reference substrate). Error bars show the standard deviation (n=3).

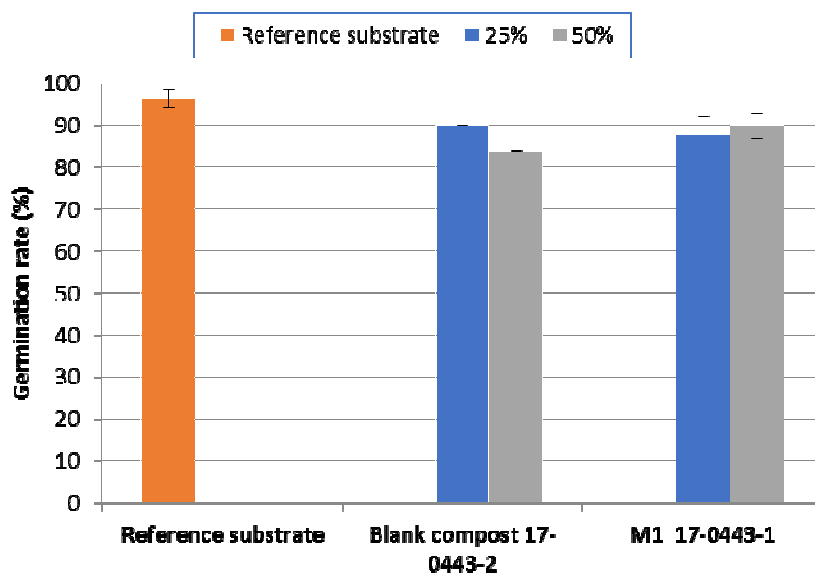


Figure 2. Average germination number of barley plants of the reference substance, blank compost and test compost mixture (1/1 and 1/3 mixtures of compost/reference substrate). Error bars show the standard deviation (n=3).

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The germination rate (as a percentage of blank compost) for the 1/1 and 1/3 mixtures of compost/reference substrate are reported in Table 2.

Table 2. Germination of the 1/1 and 1/3 mixtures of compost/reference substrate as a percentage of the corresponding mixture of the blank compost.

Test compost	Mixture	Germination (as % of blank compost)	
		Ray grass plant	Barley
Blank compost 17-0443-2	1/3	100.0	100.0
	1/1	-	100.0
M1 17-0443-1	1/3	100.8	97.8
	1/1	-	107.1

Figures 3 y 4 shows the biomass of the germinated species for the reference substrate, blank compost and samples compost mixtures.

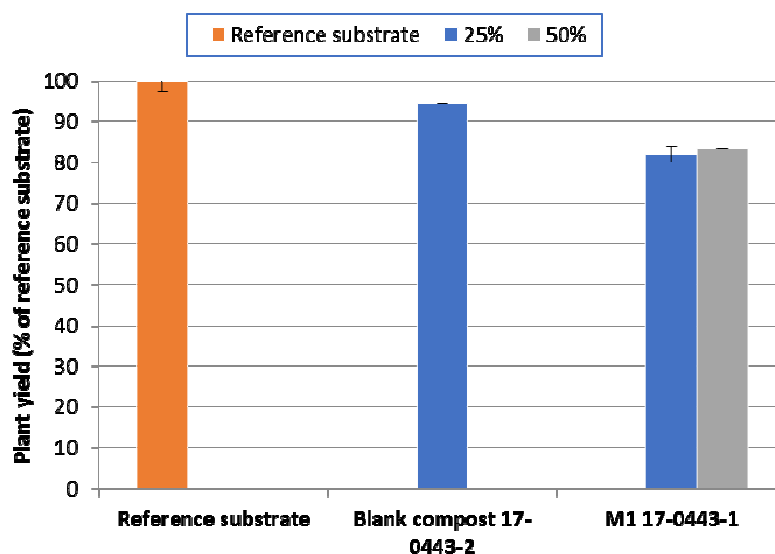


Figure 3. Dry weight plant yield obtained at the end of the test for the ray grass plants for the reference substrate, blank compost and sample compost mixtures. Error bars show the standard deviation (n=3).

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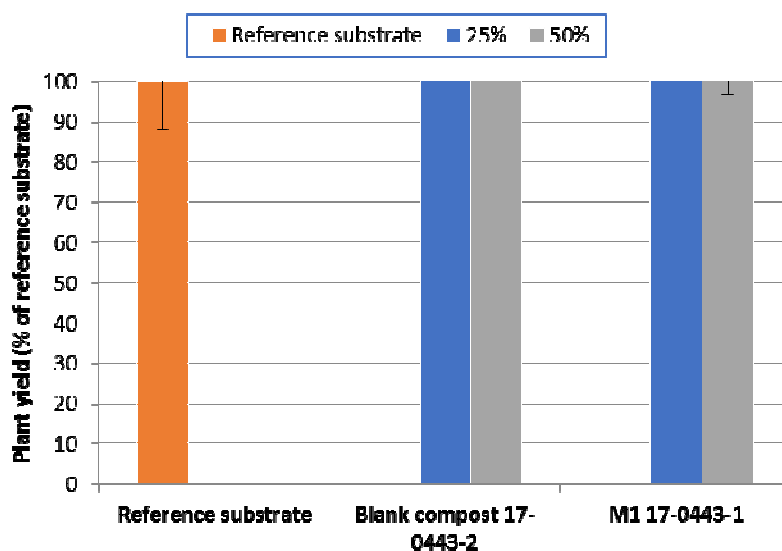


Figure 4. Dry weight plant yield obtained at the end of the test for barley plants for the reference substrate, blank compost and sample compost mixtures. Error bars show the standard deviation (n=3).

The average dry weight plant yield (as percentage of reference substrate and as a percentage of blank compost) for the sample compost mixtures is summarized in Table 3.

Table 3. Average dry weight plant yield (as percentage of reference substrate and blank compost) obtained at the end of the test for the ray grass and barley plants for the reference substrate, blank compost and samples compost mixtures.

Test compost	Mixture	Plant yield (as % of reference substrate)	Plant yield (as % of reference substrate)	Plant yield (as % of blank compost)	Plant yield (as % of blank compost)
		Ray grass plant	Barley	Ray grass plant	Barley
Blank compost 17-0443-2	1/3	94	111	100.0	100.0
	1/1	-	107	-	100.0
M1 17-0443-1	1/3	82	105	86.8	94.7
	1/1	83	102	-	95.2

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The following table shows the visual appearance of the pots tested at the end of the test.

Table 4. Visual appearance of the pots tested at the end of the test.

Test compost	Ray grass plant	Barley
<p>Substrate EE0, EINHEITS ERDE Classic</p>		
<p>Blank compost 17-0443-2</p>		
<p>M1 17- 0443-1</p>		

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B.- Ecotoxicological effects on earthworms according to OECD Guideline 207 for the testing of chemicals 'Earthworm, Acute Toxicity Test'.

- **Sample 17-0353-1**

Weight characteristics of the earthworms used in the test (average weight):

Table 5. Weight characteristics of the earthworms used in the test (average weight, mg specimen⁻¹) for Sample 17-0443-1.

Test with artificial soil (1000 ppm):			
	START	7 DAYS	14 DAYS
CONTROL	499±25	444±15	409±20
TEST	502±32	440±29	369±31
Test with artificial soil (50 %):			
	START	7 DAYS	14 DAYS
CONTROL	589±6	491±17	426±13
TEST	515±30	450±30	423±16

*average value ± standard error.

Characteristics of the substrate used in the test:

Table 6. Characteristics of the substrate used in the test for Sample 17-0353-1.

Test with artificial soil (1000 ppm):		
PARAMETER	START	FINISH
Substrate moisture (%)	74.48±1.00	73.03±0.72
pH	7.18±0.01	7.08±0.01
Conductivity (mS cm ⁻¹)	0.61±0.02	0.43±0.02
Organic Matter (%)	72.14±0.86	70.15±0.74
Test with artificial soil (50 %):		
PARAMETER	START	FINISH
Substrate moisture (%)	66.08±0.57	61.4±0.23
pH	7.85±0.01	7.86±0.01
Conductivity (mS cm ⁻¹)	0.60±0.13	0.34±0.013
Organic Matter (%)	62.77±1.25	59.15±0.17

*average value ± standard error.

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Mortality results:

Results obtained from the study of Ecotoxicological effects on earthworms according to OECD Guideline 207 are shown in Table 7.

Table 7. Values obtained from from the study of Ecotoxicological effects on earthworms according to OECD Guideline 207 for Sample 17-0353-1.

Sample 17-0443-1			
TEST	UNITS	Mortality in control	Mortality in substrate
Test with artificial soil (1000 ppm):	%	0	0
Test with artificial soil (50 %):	%	0	0

There is mortality in the tests carried out. The acute toxicity test with earthworms OECD 207 is considered successful for the sample 17-0443-1

- **Sample 17-0443-2**

Weight characteristics of the earthworms used in the test (average weight):

Table 8. Weight characteristics of the earthworms used in the test (average weight, mg specimen⁻¹) for Sample 17-0353-2.

Test with artificial soil (1000 ppm):			
	START	7 DAYS	14 DAYS
CONTROL	499±25	444±15	409±20
TEST	478±12	402±11	407±9
Test with artificial soil (50 %):			
	START	7 DAYS	14 DAYS
CONTROL	589±6	491±17	426±13
TEST	585±46	509±48	450±45

*average value ± standard error.

Characteristics of the substrate used in the test:

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Table 9. Characteristics of the substrate used in the test for Sample 17-0443-2.

Test with artificial soil (1000 ppm):		
	START	FINISH
Substrate moisture (%)	73.64±0.23	72.34±0.36
pH	7.17±0.01	7.15±0.01
Conductivity (mS cm ⁻¹)	0.65±0.01	0.42±0.01
Organic Matter (%)	71.19±0.38	68.39±0.92
Test with artificial soil (50 %):		
	START	FINISH
Substrate moisture (%)	67.05±0.43	65.59±0.42
pH	7.90±0.01	7.98±0.06
Conductivity (mS cm ⁻¹)	0.66±0.02	0.43±0.02
Organic Matter (%)	63.79±0.41	63.84±0.38

*average value ± standard error.

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Mortality results:

Results obtained from the study of Ecotoxicological effects on earthworms according to OECD Guideline 207 are shown in Table 10.

Table 10. Values obtained from from the study of Ecotoxicological effects on earthworms according to OECD Guideline 207 for Sample 17-0353-2.

Sample 17-0353-2			
TEST	UNITS	Mortality in control	Mortality in substrate
Test with artificial soil (1000 ppm):	%	0	0
Test with artificial soil (50 %):	%	0	0

There is no mortality in the tests carried out. The acute toxicity test with earthworms OECD 207 is considered successful for the Sample 17-0443-2.

Determinations have been performed under the responsibility of Laboratory Technical AIMPLAS file number REPORT AT-1155/17 LI-170443 Technical department manager Eva Teresa Verdejo.



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Elena Verdejo
Eurofins Product Testing Spain, SLU
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