
	VINCOTTE – CERTEST PRODUCTS	
	OK Biodegradable SOIL : Initial acceptance tests	
	Doc Ref : OK10-E Edition : B ¹ Application Date : 2001-09-27 Page : 1 / 2 Replace : OK10-A	
<u>Program OK 10</u> Bio products – degradation in soil		

I. Applicable specifications :

- * European standard reference EN 13432 (2000)
- * European standard reference EN 29408 (1993)
- * European standard reference EN 29439 (1993)
- * International draft standard with reference ISO DIS 17566.2 (2001)
- * International standard with reference ISO 11266 (1994)
- * International standard with reference ISO 14851 (1999)
- * International standard with reference ISO 9408 (1991)
- * International standard with reference ISO 14852 (1999)
- * International standard with reference ISO 9439 (1990)
- * American standard with reference ASTM D.5988-96 (1996)
- * American standard with reference ASTM D.5271-92 (1992)
- * American standard with reference ASTM D.5209-92 (1992)
- * Document with reference OECD 301 C (1993)
- * Document with reference OECD 301 B (1993)
- * Document with reference OECD #208 (1993)

II. Documents to be supplied :

- * Description of the product to be certified. This includes:
 - Used constituents
 - If available, fingerprint analyses (e.g. IR or X-ray analyses)
- * Identification of the manufacturer and meaning of the codes used
- * Manufacturing specification and grounds for refusal
- * Available reports,...

III. Classification :

None.

IV. Examinations and tests - particular modalities :



A) Preliminary examinations

1. Study of the file and preliminary inspection of the state of the presented product.
2. Verification of the clarity of the instructions for use and the storage modalities

B) General test programme

B.1. Chemical characteristics

The heavy metals must be below following limits. These are based on European standard for compostability (EN 13432) which themselves are based on 50% of the criteria for the Community eco-label for soil improvers (EC OJL, 219, 7.8.98, p. 39).

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Zn	150	Cr	50
Cu	50	Mo	1
Ni	25	Se	0.75
Cd	0.5	As	5
Pb	50	F	100
Hg	0.5		

B.2. Biodegradation

To be eligible for “OK Biodegradable SOIL” certification, materials or products shall be inherently and ultimately biodegradable as demonstrated in laboratory tests.

Tests

The preferred type of biodegradation test is a soil biodegradation test according to ISO DIS 17566.2, ISO 11266 or ASTM D.5988-96.

Alternatively, also an aquatic, aerobic biodegradation test can be used with the prerequisite that these tests are executed at ambient temperature (20-25°C). Standards : ISO 14851, ISO 9408, OECD 301 C, ASTM D.5271-92, EN 29408, ISO 14852, ISO 9439, OECD 301 B, ASTM D.5209-92, EN 29439.

Criteria and pass levels

- Biodegradability must be determined for the complete product/material or for each significant organic constituent. Significant means any organic constituent present in more than 1 % of dry weight of the material.
- The total proportion of organic constituents, not tested on biodegradability, may not exceed 5 %.
- The percentage of biodegradation shall be at least 90 % in total or 90 % of the maximum degradation of a suitable reference substance after a plateau has been reached for both test material and reference substance.
- The duration of the test after which the 90% limit must be reached is 2 years.

B.3. Ecotoxicity

Ecotoxicity or detrimental environmental effects shall be evaluated on a case by case situation depending on the available information and the rate of biodegradation in soil.

- Complete materials/products are approved if they fulfill the conditions of EN 13432 on ecotoxicity.
- Inorganic constituents are approved if they do not show any toxic effect in the OECD #208 test when tested at a concentration of 10 times a typical maximum dosage.
- Organic constituents should be evaluated on ecotoxicity after they have gone through an extensive biodegradation phase. A suitable test method is OECD #208.

V. Marking : (only applicable for the supply of an end product)

The certified products or, if not possible on the product, his packaging will have to bear the following indications:

- * OK Biodegradable SOIL conformity mark, as well as a number to identify the holder of the mark
- * For products, this logo shall appear at least once on every product or, if not possible, on the packaging (f.e. with liquids)
- * Code of the manufacturer in order to be able to identify the batch.

VI. Possible extensions of the certification :

None