美国标准 ASTM D 6400 环保降解材料测试

产品名称	美国标准 ASTM D 6400 环保降解材料测试
公司名称	深圳市实测通技术服务有限公司
价格	.00/件
规格参数	测试周期:5-7天 寄样地址:深圳宝安 价格费用:电话详谈
公司地址	深圳市罗湖区翠竹街道翠宁社区太宁路145号二单元705
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产品详情

Test item 测试名称: Biodegradability 环保降解材料

Norm Refer 涉及标准：DIN V 54900, EN 13432, ASTM D 5388, ISO 16929,OECD 208, ASTM D 6868, NF T51-800

Test info 测试内容：

化学测试， Chemical Characteristic Test

生物降解能力测试， Biodegradability test

生物分解, Disintegration test

生态无毒测试, Ecotoxicity test: Plant

这些测试可以保证没有重金属进入土壤并没有副作用

Brief Summary of ASTM D 6400 & ASTM D 6868

Both ASTM D6400 and ASTM D6868 include the same three components of testing (the difference between the

specification is that the criteria themselves are slightly different).

1.Disintegration During Composting (on final product) Measured the by physical breakdown of product to pass a 2mm sieve

2.Inherent Biodegradation(on individual constituents)

Measured by carbon dioxide (CO_2)evolution as the product biodegrades

Or some materials can qualify for the “ materials of natural original ” exception in whichcase biobased content must be measured by ASTM D6866

3.No Adverse Impacts on the Ability of Compost to Support Plant Growth (on final product)

Testing for heavy metals

Plant Growth Study

In addition, the material must be chemically characterized to defend product claims:

FTIR & Ash Content (to help with fingerprinting the material)

Density (grammage) for bagasse and paper based products.

Which Standard Applies to Your Product?

ASTM D 6400 塑料is to be used for plastic products

ASTM D 6868 纸制品is used for products such as molded pulp products or coated paper, basically non-plastic items (may be an oversimplification, but expresses the general idea).

Sample size 送样规格：5000g

Lead time 测试周期: 常规 Regular 5-8 months working daysFTIR, ash content, and regulated metals plus flourine – 3 weeks (can be done quicker if needed)Biobased testing (ASTM D6866) – approximately 7 work daysDisintegration – about 18 weeks; includes 12 weeks of composting plus a bit of time to set up the test, then at the end of the test to make the final measurements and type the reportEcotoxicity – about 3-4 weeks, this starts at the end of disintegration testing thoughBiodegradation – up to 180 days (plus 2 weeks for setup & reporting) or as few as 45 days (plus 2 weeks); it is dependent on how fast the material biodegrades, not on how fast we work.Reference Picture 参考图片：

Others 其他信息：

1、体外试验是将样品浸泡在溶液中，不同时间点，取出样品称重，根据重量变化看材料有无降解，

2、体内试验是将样品植入到动物皮下组织，不同时间点，处死动物，观察样品是否有降解，且进行局部的组织病理观察。

Characterization of the test material 化学测试according to Table A.1 of EN 13432*determination of Zn, Cu, Ni, Cd, Pb, Hg, Cr, Mo, Se, As, dry content, loss on igni
Characterization of the test material 化学测试according to Table A2 of the DIN CERTCO certification scheme 'Additives harmless to the composting process'*deter
Characterization of the test material 化学测试infrared transmission spectroscopy*, per spectrum
Characterization of the test material 化学测试cobalt content*
Characterization of the test material 化学测试layer thickness*
Biodegradability tests 生物降解能力测试according to ISO 14851*determination of aerobic biodegradability in an aqueous medium by measurement of oxygen dema duration: 6 months - basic fee including a test duration of 2months
Biodegradability tests 生物降解能力测试according to ISO 14851*determination of aerobic biodegradability in an aqueous medium by measurement of oxygen dema duration: 6 months - test prolongation (after end of 2nd month), per additional month
Biodegradability tests 生物降解能力测试according to ISO 14855 / ASTM D 5338*determination of aerobic biodegradability under controlled composting condition dioxide, test temperature: 10 - 60 ° C, maximum duration: 6 months - basic feei ncluding a test duration of 2 months
Biodegradability tests 生物降解能力测试according to ISO 14855 / ASTM D 5338*determination of aerobic biodegradability under controlled composting condition dioxide, test temperature: 10 - 60 ° C, maximum duration: 6 months - - test prolongation (after end of 2nd month), per additional month .
Biodegradability tests 生物降解能力测试according to ISO 17556 / ASTM D 5988determination of aerobic biodegradability in natural or artificial soil by measuremer temperature: 10 - 25 ° Cbasic fee including a test duration of 2 months
Biodegradability tests 生物降解能力测试according to ISO 17556 / ASTM D 5988determination of aerobic biodegradability in natural or artificial soil by measuremer temperature: 10 - 25 ° C test prolongation (after end of 2nd month), per additional month
Disintegration tests 生物分解according to EN 14045 / ISO 16929pilot scale composting test with controlled temperature, moisture and aeration in 2 replications inclu (weight of residual fraction > 2 mm) or qualitative disintegration (referring to residual area), characterization of the obtained compost industrial composting*meets re EN 14995 and of the labcertification scheme 'Products made of compostable materials', duration: 12 weeks +2 weeks for analyses

Disintegration tests 生物分解according to EN 14045 / ISO 16929pilot scale composting test with controlled temperature, moisture and aeration in 2 replications inclu (weight of residual fraction > 2 mm) or qualitative disintegration (referring to residual area), characterization of the obtained compost industrial composting* home-c T51-800, AS 5810 and of the lab certificationscheme 'Products made of compostable materials for home and garden composting',duration: 26 weeks + 2 weeks for ana
Disintegration tests 生物分解in-house methodpilot scale composting test according to the minimum requirements of EN 13432,determination of residual fraction > 2 compost,duration: 12 weeks + 2 weeks for analyses
Disintegration tests 生物分解Disintegration dynamicsAs an option for disintegration tests, we offer a documentation of disintegrationdynamics by taking subsamples e.g.weekly, for gravimetric and photographic analysis; per sampling
Ecotoxicity tests 生态无毒测试with two terrestrial plant species according to OECD guideline 208*modified according to section 8 and appendix E of EN 13432 in c disintegration testaccording to one of the options under item 3
Ecotoxicity tests 生态无毒测试with two terrestrial plant species according to OECD guideline 208*modified according to section 8 and appendix E of EN 13432with production required).
Ecotoxicity tests 生态无毒测试with two terrestrial plant species according to OECD guideline 208*modified according to section 8 and appendix E of EN 13432 after processaccording to the DIN CERTCO certification scheme 'Additives harmless to thecomposting process'
Ecotoxicity tests 生态无毒测试with one lumbricide species according to ASTM E 1676* and the requirements of AS 5810 und EN 13432in combination with a prece the options under item 3 .
Ecotoxicity tests 生态无毒测试with one lumbricide species according to ASTM E 1676* and the requirements of AS 5810 und EN 13432without preceding disintegra
Ecotoxicity tests 生态无毒测试with one lumbricide species according to ASTM E 1676* and the requirements of AS 5810 und EN 13432after and including a shorten DIN CERTCO certification scheme 'Additives harmless to thecomposting process'.

Sample Report 报告样本：