



总部: 山西省太原市府西街69号 国际贸易中心A座17层
Headquarter: 17th FL., Building A, World Trade Center, No. 69 Fuxi St.
Taiyuan City, Shanxi Province, P.R China
邮编 Postal Code: 030002
电话 Tel: (86) 351-8689356
传真 Fax: (86) 351-8689718

工厂: 山西省孝义市经济开发区
Factory: Xiaoyi Economic Development Zone,
Shanxi Province P.R.China
邮编 Postal Code: 032308
电话 Tel: (86) 358-7655111
传真 Fax: (86) 358-7655111

吉林公司: 吉林森瑞达高新科技有限公司
Jilin Subsidiary: Jilin Senruida High Technology Co.,Ltd
地址: 长春生物基产业创新基地
Address: Changchun Bio-based Material Industrial Innovation Base
邮编 Postal Code: 130102
电话 Tel: 15536307336

公司网址: www.jinhuizhaolong.com
公司邮箱: ecoworldsales@jinhui.com



**使用生物降解塑料
对抗白色污染**
*Using biodegradable
plastics to fight against white pollution*



爱柯沃得、爱柯维尔标由两片叶子相互环绕，共融一体，生生不息，诠释了金晖兆隆的核心价值观：通过对生物降解材料的不断求索，为顾客提供生态环保产品的同时，创造一个和谐共荣、可持续发展的健康世界。

The logo of Ecoworld® and Ecowill® is composed of two leaves around each other which ultimately turn into one. It interprets core values of JinHui ZhaoLong which is not only to provide customers with biodegradable plastics but also to provide human with a harmony, common prosperity and sustainable development of a healthy world.

Company Introduction

公司介绍



标志的颜色从翠绿到碧绿，通过绿意盎然的颜色变化传达了品牌活力与希望。

The color of logo changes from light to dark green. This change conveys the brand's vitality and hope through lushness.

我们以注重细节，追求卓越的金晖兆隆理念，为客户提供精益求精的生物降解塑料产品。

We follow JinHui ZhaoLong's concept of excellence by paying attention to details of products and services. We provide high quality biodegradable plastic products to customers.



金晖兆隆高科技股份有限公司是山西金晖能源集团旗下的全资子公司，成立于2012年，项目总规划年产生物降解塑料100,000吨，现已形成年产20,000吨生物降解聚酯原料，10,000吨生物降解聚酯改性材料。金晖兆隆生产的生物降解塑料产品已获得国内外行业权威认证，旗下的爱柯沃得®（Ecoworld®）生物降解聚酯原料和爱柯维尔®（Ecowill®）生物降解聚酯改性料已经成为行业内的国际知名品牌，产品远销30多个国家和地区，并设有多家海外代理分支机构。

JinHui ZhaoLong High Technology Co.Ltd., a wholly owned subsidiary of Shanxi JinHui Energy Group, was established in 2012. The total planned annual biodegradable polymer capacity is 100,000 tons. Currently, the production capacity has reached 20,000 tons/yr. The compounding line is 10,000 tons/yr. JinHui ZhaoLong's biodegradable polymer and compounds have obtained the most recognized certifications both in China and internationally. Ecoworld® biodegradable polymer and Ecowill® biodegradable polymer compounds are JinHui ZhaoLong's two international well known brands in the industry. JinHui ZhaoLong has set up many overseas sales channels, and is selling its products over more than 30 countries and regions.



Ecoworld[®]

is both biodegradable and compostable

爱柯沃得[®]是一种可堆肥的生物降解塑料

爱柯沃得[®]生物降解塑料在堆肥条件下，可以在180天内被微生物分解成二氧化碳和水，在堆肥条件下可以产生有机肥料，降解过程不会产生有毒气体，是目前生物降解塑料膜材的主要原材料，可以生物降解和可堆肥，能够有效对抗白色污染。

Ecoworld[®] biodegradable polymer can be broken down by microorganism into CO₂ and H₂O within 180 days without creating any poisonous gas. High quality organic fertilizers can be generated under composting condition. This product is the main raw material for biodegradable plastic films with its biodegradable and compostable properties. It can effectively fight against white pollution.



生物降解塑料是替代传统塑料的最佳材料
Biodegradable plastics are the best alternative to traditional plastics.

Technical Properties

性能指标

爱柯沃得[®]采用一步聚合法生产，产品完全符合美国及欧洲食品接触安全标准，同时完全符合欧盟EN13432及美国ASTM6400D生物降解塑料标准；在密封包装条件下的保质期是12个月。

Ecoworld[®] uses one-step polymerization technology during production. It corresponds with American and European food contact safety standards, EN13432 and ASTM6400D standards. Its shelf life is 12 months under sealed condition.

爱柯沃得[®]性能指标 / Ecoworld[®] Technical Properties

性能 Property	单位 Unit	测试标准 Test Method	吹塑级 Blow Molding Grade
密度 Density	g/cm ³	ISO1183	1.22-1.25
熔程 Melting Range	°C	ISO3146	95-135
维卡软化点 Vicat Softening Point	°C	ISO306	≥90
熔指 (190°C, 2.16Kg) Melting Flow Rate	g/10min	ISO1133	≤5
水份 Moisture	%	ISO15512	≤0.1
灰分(质量分数) Ash Content (Weight)	%	ISO3451	≤0.1
拉伸强度 Tensile Strength	Mpa	ISO527-2	≥18
断裂伸长率 Elongation at Break	%	ISO527-2	≥500

相较于传统塑料制品，爱柯维尔®生物降解改性材料生产的产品兼具生物降解、可堆肥、可印制、可降解的生化及物理特征优势。爱柯维尔®已经被广泛应用于工业及农业生产，终极产品包括购物袋、垃圾袋、食物包装袋及地膜等。爱柯维尔®目前有三个主要系列产品，分别是爱柯维尔®FS-0330，爱柯维尔®FP-0325和爱柯维尔®FM-0625。

爱柯维尔®FS-0330是由爱柯沃得®与淀粉改性而成。爱柯维尔®FP-0325是由爱柯沃得®与聚乳酸改性而成。爱柯维尔®FM-0625是由爱柯沃得®与聚乳酸及淀粉改性而成。这一改性过程可以在不影响之后正常加工工艺的同时提高产品的延展性和断裂伸长率，可以在维持产品的生物降解及可堆肥特性的同时有效地降低材料成本。

In contrast to conventional plastics, Ecowill® allows its final plastic products to possess both biological (biodegradable and compostable) and physical (printable and weldable) advantages at the same time. Ecowill® has been widely applied to industrial and agricultural sectors, such as shopping bags, garbage bags, food packages and mulch films etc. Currently there are three main series of products, which are Ecowill® FS-0330, Ecowill® FP-0325 and Ecowill® FM-0625 respectively.

Ecowill® FS-0330 is Ecoworld® and starch compound.

Ecowill® FP-0325 is Ecoworld® and PLA compound.

Ecowill® FM-0625 is Ecoworld® starch and PLA compound.

The compounds help to increase the tear strength and elongation of finished products greatly while not affecting the later processing. In addition, the compounds can reduce the product cost while still remain the biodegradable and compostable properties.

爱柯维尔® FS-0330性能指标 / Ecowill® FS-0330 Technical Properties

性能 Property	单位 Unit	测试依据 (方法) Test Standard	数值 Value
熔融指数 (190°C, 2.16kg) Melt Flow Rate	g/10min	ISO1133	≤5
密度 Density	g/cm ³	ISO1183	1.26-1.3
熔程 Melting Range	°C	ISO3104	95-135
拉伸强度 Tensile Strength	mpa	ISO527-2	≥18
断裂伸长率 Elongation at Break	%	ISO527-2	≥300

爱柯维尔® FP-0325性能指标 / Ecowill® FP-0325 Technical Properties

性能 Property	单位 Unit	测试依据 (方法) Test Standard	数值 Value
熔融指数 (190°C, 2.16kg) Melt Flow Rate	g/10min	ISO1133	≤5
密度 Density	g/cm ³	ISO1183	1.26-1.3
熔程 Melting Range	°C	ISO3104	95-155
拉伸强度 Tensile Strength	mpa	ISO527-2	≥25
断裂伸长率 Elongation at Break	%	ISO527-2	≥300

爱柯维尔® FM-0625性能指标 / Ecowill® FM-0625 Technical Properties

性能 Property	单位 Unit	测试依据 Test Standard	数值 Value
熔融指数 (190°C, 2.16kg) Melt Flow Rate	g/10min	ISO1133	≤5
密度 Density	g/cm ³	ISO1183	1.26-1.3
熔程 Melting Range	°C	ISO3104	95-155
拉伸强度 Tensile Strength	mpa	ISO527-2	≥20
断裂伸长率 Elongation at Break	%	ISO527-2	≥300

Application Fields 应用领域

1 农林业

Agriculture Forestry

地膜、保水材料、育苗钵、苗床等
Mulch film, water retaining material,
seedling bowl and seedbed, etc.



2 包装业

Packaging Industry

购物袋、垃圾袋、快递袋、缓冲包装材料等
Shopping bags, garbage bags,
courier bags and packing cushion, etc.



使用生物降解塑料 对抗白色污染

Using biodegradable
plastics to fight against white pollution

3 日用杂货

Daily Groceries

一次性餐具、手套、餐布等
Disposable tableware, gloves and tablecloth, etc.



4 纺丝用品

Textile Products

织布、纱布、口罩、过滤棉等
Weaving, gauze, breathing masks and
filter cotton, etc.



5 卫生用品

Sanitary Products

妇女卫生用品、婴儿尿布、医用垫褥等
Feminine hygiene products, diapers and
medical mattress, etc.



Vision of Enterprise 企业发展愿景

**致力绿色产业发展
呵护自然造福人类**
Committing to the Development in Green Industry
Caring for Nature & Benefiting Mankind

金晖兆隆将把绿色创新视为企业发展的原动力，继续推进世界生物降解科学的发展与应用，按照“合作、协同、分享”的理念，成为**全球生物降解塑料产业领跑者**。

Regarding the green innovation as the driving force of enterprise development, JinHui ZhaoLong will continue promoting the developments and applications in the biodegradable plastic worldwide. JinHui ZhaoLong's vision is **"Becoming Global Leading Enterprise in the Biodegradable Plastic Industry"**. We believe in Cooperation, Coordination and Sharing.

金晖兆隆将继续以“**致力绿色产业发展 呵护自然造福人类**”为使命，为全球环保事业做出自己最大的贡献，让子孙后代生活在更加绿色的世界里。

"Committing to the Development in Green Industry, Caring for Nature & Benefiting Mankind" is the mission of JinHui ZhaoLong. We will continue contributing to global environmental protection and creating a greener world for future generations.

100% **生物降解 & 可堆肥**
100% Biodegradable & Compostable

