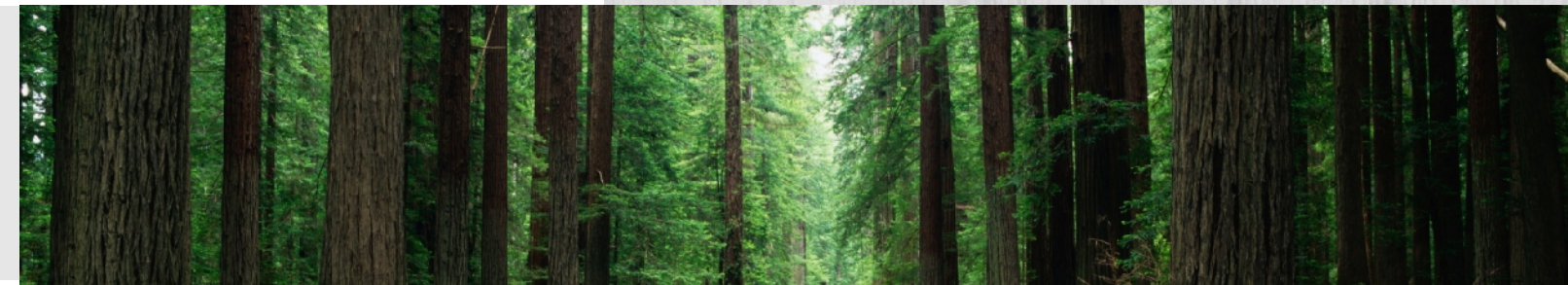


[Http://www.oceanpower.com](http://www.oceanpower.com)

全国免费服务电话：800-830 1966



# ASPHALT POWER™ 木质素

-- 天然环保型木纤维  
Natural and environmental wooden fibers

**Oceanpower**  
**海川新材**  
土木工程材料事业部

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**海川新材料科技有限公司**

OCEANPOWER NEW MATERIALS TECHNOLOGY CO.,LTD

# 简介

Introduction

## 海川新材料科技有限公司

OCEANPOWER NEW MATERIALS TECHNOLOGY CO.,LTD

**Oceanpower**  
**海川新材**  
土木工程材料事业部

深圳海川新材料科技有限公司成立于2010年10月，是由深圳市海川实业股份有限公司全资控股的海川化工、海川色彩和海川工程三个全资子公司合并重组而成，将致力于功能型添加剂的研发、生产和销售，为用户提供适应低碳绿色经济及高效工业化生产所需要的环保型添加剂产品，通过优化整合各专业子公司的优势资源，实现强强联合，提升研发、应用和销售的配套服务能力，为用户提供更优质的系统服务和产品。

海川公司亦是国内较早进行高等级路面材料研究和开发的单位，拥有自主知识产权，独立开发的高粘度沥青是铺设排水、低噪音和透水路面的最适合的材料。所铺设的排水、低噪音和透水路面在降低行车噪音污染、提高雨天行车的安全性、有效缓解城市热岛效应等方面有着十分重要的意义。海川公司整合多年积累的资源 and 经验，推出了个性化的DrainAPMax路面铺装整体解决方案，相信在针对性、适用性和实用性方面更加适合当前中国高等级路面的需要。

“应用技术和创新，为用户提供领先的一体化解决方案”是我们的服务理念和发展方向。海川新材料，将是您前进途中的坚实伙伴。

Shenzhen Oceanpower New Material Technology Co., Ltd., established in October 2010, by merger and reorganization of Oceanpower Chemical Engineering Co, Ltd., Oceanpower Color Technology Co, Ltd. and Oceanpower Engineering Technology Co, Ltd., which wholly owned by Oceanpower Industrial Co., Ltd., devoted itself to R&D, production and sales of functional additives and providing client with environmentally friendly additive products needed for low-carbon green economy and efficient industrial production. By optimizing the integration of advantages of professional resources of its subsidiaries, powerful combination and enhancing development, application and sales of ancillary services capabilities to provide client with better quality of system products and services.

Oceanpower also is the earlier high-grade road surface material R&D unit with independent intellectual property rights. The high viscosity asphalt developed independently is the most suitable material for drainage pavement and low noise and permeable pavement. The laying of drainage pavement and low noise and permeable pavement is of very important significance in reducing traffic noise pollution, improving traffic safety in rainy day and alleviating the urban heat island effect. With combination of the expertise of all companies and integrated resources over years, Oceanpower aim to introduce a personalized overall solution, DrainAPMax pavement, which is believed more suitable to the needs of China's current high-grade road construction.

Through application of technology and innovation to provide client with the leading integrated solutions, which creates synergy and driving forces for our developing direction and service concept, let Oceanpower New Material Technology become your one-stop destination for fulfilling your advanced technology needs. We believe we will be your loyal partners in your fast-developing process.



海川上海浦东技术与应用服务中心

SOLUTION & INNOVATION  
TODAY & TOMORROW.

## » SMA混合料现代化标志性道路 SMA mixture modern symbol pavement

SMA——沥青玛蹄脂碎石混石料，起源于六十年代的德国，几十年来以其优异的路用功能而风行于世。从90年代开始，我国充分利用SMA良好的高温稳定性和低温抗裂性，以及能保持较好抗滑能力和平整度、减少噪音、提高路面使用寿命等优点，研究、探讨适应当地情况的混合料配比设计，广泛用于国内高速公路及主要干道、机场跑道。

*The origin of SMA (stone matrix asphalt) comes from Germany in 1960s. For several decades and has been used all over the world with excellent road performance. During the 1990s, studies were carried out in China in order to find suitable mixes for the local conditions. The main focus lied on taking advantage of the good properties of SMA, such as high temperature stability, low temperature anti-cracking performance, anti-skid performance, good pavement level degree, noise reduction, prolonged service life, etc. Based on the results from the studies, China has widely applied SMA in national highway, trunk road, and airport runway.*



## » SMA——核心概念 SMA—Core concept

- 以优质轧碎粗集料形成一个自支撑的骨架碎石结构  
*To form a self-supporting base structure made of crushed aggregate*
- 以高沥青含量增加沥青膜厚度  
*To increase the thickness of the asphalt film by adding more asphalt*
- 以低孔隙率确保混合料不渗水  
*To guarantee impermeability with low void volume of mixture*

## » ASPHALT POWER™ 木质素纤维 ASPHALT POWER™ lignin fiber

——高效能创新级产品  
 high-performance innovative product

海川ASPHALT POWER™ 木质素纤维(plant fiber)为天然木纤维，属于有机纤维，为灰色、絮状；絮状木纤维经过特殊生产工艺，表面凹凸粗糙，具有良好的结合性，能确保沥青混合料不会因为高油石比带来负面影响，阻止沥青结合料从矿料中流失。

*Oceanpower ASPHALTPOWER™ Lignin fibre is a natural and organic fibre. It appears gray and flocculent. The flocculent lignin fiber can be made from a special process. It has a coarse irregular surface high endurance. This will guarantee that the high proportion of asphalt will not affect the asphalt mixture, and prevents the asphalt binder from bleeding away from mineral materials.*



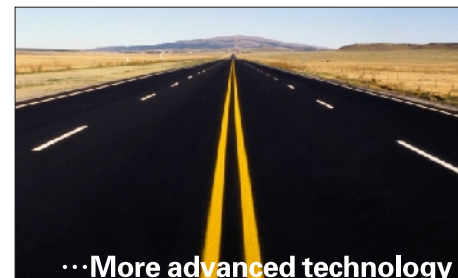
## 海川的追求 The pursuit of Oceanpower:



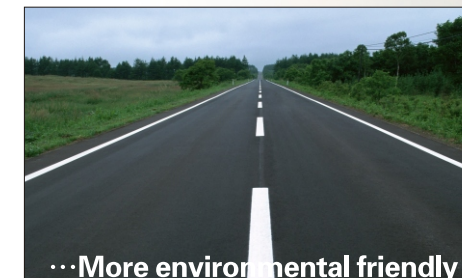
...More efficient product  
 ..... 更加高效的产品



...More user-friendly material  
 ..... 更加友好的材料



...More advanced technology  
 ..... 更加卓越的技术



...More environmental friendly  
 ..... 更加生态的环境



...More harmonious society  
 ..... 更加和谐的社会

» ASPHALT POWER™ 木质素纤维

ASPHALT POWER™ lignin fiber

——低价位、高性能沥青混合料的保障

Guarantees a low price & high quality asphalt mixture

- 抵抗永久变形能力

High durability

由于碎石骨架内部粗颗粒之间的相互磨擦作用，SMA产生非常好的高温抗车辙能力。平滑的路面增强驾驶舒适感及降低司机的疲倦度

Due to the mutual friction among the coarse aggregates of the inner stone skeleton, SMA has excellent anti-rutting performance in high temperature. It can provide good driving qualities and safety.
- 抗滑及降低行车噪音

Skid resistance and noise reduction

由于SMA路面构造深度比较大，能够提供路面与轮胎非常好的接触面。同时，深路面构造非常有效地降低行车噪音

Due to the higher texture depth, SMA pavement can provide excellent interface between pavement and tyre, as well as an efficient noise reduction in the traffic noise.
- 减少水雾/滑水板现象

Reduce the risk for the aquaplane phenomenon

在雨季，SMA可有效地减低因为水雾及滑水板现象所产生的危险性，而且能够提高路面能见度

In rainy season, SMA can effectively reduce the danger caused by splash or the aquaplane phenomenon, and by that improve the roads visibility.
- 耐久性

Durability

实践证明SMA路面能抵抗永久变形，抗车辙、耐磨损；抵抗温度及交通裂缝，防止松散。在全球不同气候条件下的国家的范例显示SMA路面寿命可达20年，甚至更长！

It is proved that SMA pavement can resist permanent deformation, rutting, abrasion, temperature crack, traffic crack, and un-consolidation. According to the cases of different countries in different weather condition, the service life of SMA pavement can reach 20 years or even longer.

» 海川木纤维技术指标

Specifications of Oceanpower Lignin Fibre

海川ASPHALT POWER™ 木质素纤维执行并完全符合中华人民共和国交通部颁布的行业标准JT/T 533-2004《沥青路面用木质素纤维》所规定的木质素纤维质量要求。其技术指标如下：

Oceanpower ASPHALTPOWER™ Lignin fibre can meet the quality requirements of lignin fiber described in “lignin fiber for asphalt pavement” JT/T533-2004, which is edited by Ministry of communications of the people’s republic of China.

序号 No.	项 目 Item			技 术 指 标 Specifications
1	长度，mm Length, mm			<6.0
2	筛分析 % Sieve analysis %	冲气筛分析 Air jet sieve analysis	0.150mm筛通过率 Passing percentage of 0.150 mm sieve	70 ± 10
		普通网筛分析 Conventional sieve analysis	0.850mm筛通过率 Passing percentage of 0.850 mm sieve	85 ± 10
			0.425mm筛通过率 Passing percentage of 0.425 mm sieve	65 ± 10
			0.106mm筛通过率 Passing percentage of 0.106 mm sieve	30 ± 10
3	灰份含量，% Ashes Content, %			18 ± 5，无挥发物 18±5, without volatile substance
4	PH值 PH value			7.5 ± 1.0
5	吸油率 Oil absorption			不小于纤维自身质量的5倍 No less than 5 times of the fiber's mass
6	含水率，%（以重量计） Moisture content, %( by weight)			<5.0
7	耐热性，210℃，2h Heat resistance, 210℃，2h			颜色、体积基本无变化， 热失重不大于6% Basically no change on color and bulk, thermal weightlessness no more than 6%

## » 使用方法简单 Easy Usage

可按照不同客户需求进行分装的ASPHALT POWER™ 木纤维，特殊工艺提供的PE无毒包装，可一同直接投放在搅拌缸中，搅拌时间为3-5秒，适用于各种强制式拌和机。通常情况下木纤维稳定剂的掺和比例，以沥青混合料总量的质量百分比计算，用量根据沥青混合料的种类由试验确定，一般用于SMA路面的木质素纤维为0.3%~0.5%。根据施工工艺要求，最高拌和温度可达200℃，铺筑温度可达180℃。

## » 储存及运输 Torage & Transportation

- 木纤维应储存在室内或有棚盖的地方，在运输及使用过程中应防止受潮、结团；已经受潮、结团的纤维、不能在拌和时分散的纤维均不能使用；
- 木纤维能承受250℃以上的环境温度不变质，且无毒无害，不危害身体健康；
- 在 施工过程中应保证木纤维不受潮结块，并确认纤维能在沥青混合料拌和过程中均匀地分散开。
- 木纤维塑胶袋小包装适合手工添加，计量准确，方便简单；大包装适用于自动添加系统；

*ASPHALT POWER™ lignin fiber can be packed in PE bags according to the requirements of customs regulations. It can be put into the mixing plants directly without opening the package. Generally, the fiber can be mixed in different kind of mixers for 3~5 sec. And the dosage of the lignin fiber is decided from different tests of the asphalt mixture. Basically, the dosage of lignin fiber for SMA pavement is 0.3% to 0.5%. According to the requirement of construction technology, the highest mix temperature can reach 200℃, and the pave temperature can reach 180℃.*

*Lignin fiber should be stored in room or the place with shed roof. During the transportation and usage, it should prevent moisture and lumping.*

*Lignin fiber can keep quality in temperatures above 250℃. It has been proven harmless to humans and doesn't risk the health of people.*

*During construction, we should protect the fiber from water or humidity since block formation will occur. And make sure that the fibers are distributed homogeneously during the mixing process.*

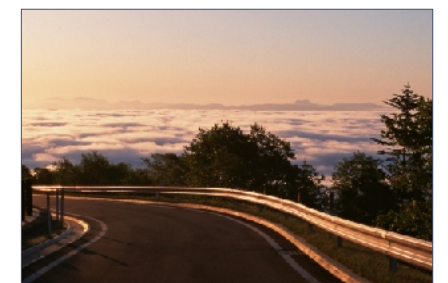
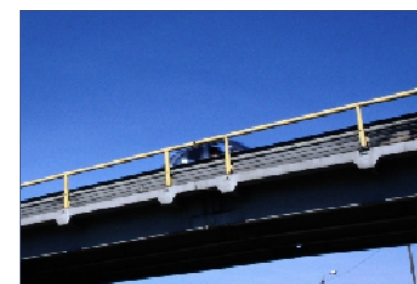
*Lignin fiber is packed in small plastic bags, sized for personal usage. Measured accurately, convenient and easily packed. The usage of the big packages can be used in automatic mixing system.*

## » 应用领域 Application Areas

海川木质素纤维化学性质非常稳定，不会被酸、碱和一般的溶剂所腐蚀，广泛应用于SMA（沥青玛蹄脂碎石混合料）和OGFC的高速公路路面上。



*The chemical property of Oceanpower lignin fibre is very steady. It will not be corroded by acid, alkali and common solvent, and can be widely applied in highway pavement of SMA (stone matrix asphalt) and OGFC.*

- ※ 高速公路与城市快速路、干线道路的抗滑表层
- ※ Antiskid surface of highway, urban expressway and arterial highway
- ※ 旧公路养护，维修
- ※ Maintenance and repair of old pavement
- ※ 桥面铺装
- ※ Bridge deck pavement
- ※ 城市道路的公交车专用道
- ※ Urban bus accommodation lane
- ※ 机场跑道
- ※ Airport runway



交通部公路工程检测中心检测报告

Test report presented by the ministry of communications highway engineering test center



(2005)鉴认(国)字(P1820)号  
No. L2093

编号: (路材)字 2007—046

检测报告

委托(受检)单位: 深圳海川工程科技有限公司

产品(工程)名称: 木质素纤维

检测项目: 木质素纤维质量

检测类别: 送检

报告发出日期: 2007年1月31日

交通部公路工程检测中心

检测专用章

共 2 页 第 1 页

交通部公路工程检测中心  
检测报告

试验编号: (路材)字 2007—046

产品名称	木质素纤维												
受检单位	深圳海川工程科技有限公司												
生产单位	上海启鹏化工有限公司												
样品编号	/												
检测日期	2007年1月25日												
检测项目	按照《公路沥青路面施工技术规范的“木质素纤维质量技术要求”												
检测依据	《公路沥青路面施工技术规范												
检测环境	室												
检测用主要仪器和设备	<table><tr><td>序号</td><td>名称</td></tr><tr><td>1</td><td>干燥箱</td></tr><tr><td>2</td><td>电子天平</td></tr><tr><td>3</td><td>分析天平</td></tr><tr><td>4</td><td>酸度计</td></tr><tr><td>5</td><td>显微镜</td></tr></table>	序号	名称	1	干燥箱	2	电子天平	3	分析天平	4	酸度计	5	显微镜
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检测: 刘玉红 审核: 李海

共 2 页 第 2 页

交通部公路工程检测中心  
检测报告

试验编号: (路材)字 2006—046

项 目	单位	指 标	试验结果
纤维长度, 不大于	mm	6	均小于6
灰分含量	%	18±5	18.46
PH值	-	7.5±1.0	7.17
吸油率, 不小于	-	纤维质量的5倍	5.81
含水率(以质量计), 不大于	%	5	4.33

评价意见: 该纤维样品质量符合《公路沥青路面施工技术规范》(JTG F40-2004)规定的木质素纤维质量技术要求。

检测: 刘玉红 审核: 李海 批准: 李海

交通部公路工程检测中心

2007年1月31日

检测专用章

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