

SunChemical®

a member of the DIC group



Gravure Printing Innovations from Sun Chemical & DIC

October 2013

working for you.



Agenda

- Overview of Sun Chemical & DIC Gravure printing inks
太阳化学和DIC凹版油墨概述
- Sustainability Overview
可持续发展概述
- Innovation(创新产品)
 - SunBar® Barrier Solutions
SunBar 阻隔涂层解决方案
 - SunLase™ Laser Marking Solutions
SunLase 镭射标记解决方案
 - Solimax Multi-purpose Inks
Solimax 多用途油墨
 - SUN Uno mono-solvent inks
SUN Uno 单一溶剂体系



Flexo and gravure liquid inks

SunVisto®

introducing ...

PAL-NT® family of surface inks meeting your every paper, film printing need.

PAL-NT表印油墨家族能对应各种纸张，薄膜印刷需求。



introducing ...

Xs-836® family of surface inks
meeting your every shrink
plastic film packaging
printing need.

Xs-836 油墨家族能对应您的
所有收缩膜印刷需求



introducing ...

UNIVERSAL® family of lamination inks deliver high speed, high bond strength and the excellent print definition needed for your packaging.

UNIVERSAL复合油墨家族能对应高速印刷、高复合强度的高性能包装印刷需求。





Sustainability 可持续性

Sun Chemical's Sustainability Policy

太阳化学的可持续战略

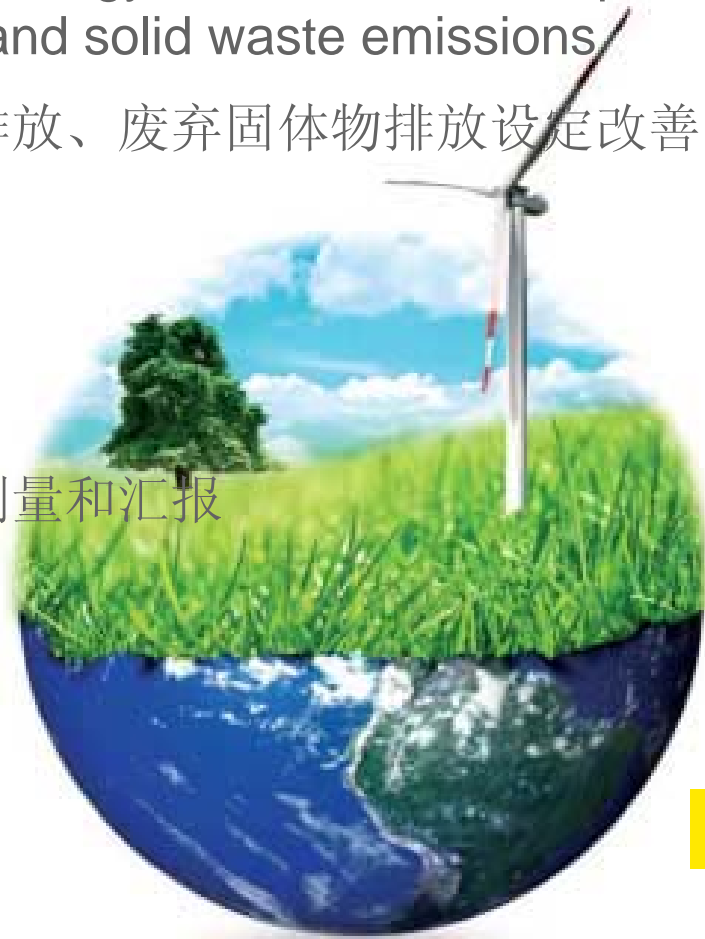
- Based on eco-efficiency
基于生态效率
- Delivery of economically competitive products and services
提供有竞争力的产品与服务
- Progressively reducing our impact on the environment in our processes and products
在我们的流程和工艺中逐步减少对环境的影响
- Data-driven approach
依靠数据推动

Key Measured Sustainability Criteria
Energy consumption/conservation (Production sites)
Energy consumption/conservation (Non-production sites)
Energy carbon footprint (Production sites)
Process waste reduction
Water consumption
Material safety
Employee safety



Sustainability in Processes

- Set improvement targets for energy and water consumption, greenhouse gas emissions, and solid waste emissions
对能源、水消耗、温室气体排放、废弃固体物排放设定改善目标
- Measure and report these parameters regularly, by site and by product
生产和场所定期对这些参数测量和汇报
- Establish actions to improve, then re-check and re-measure
建立有效行动再检测再测量



Sustainability in Products 产品的可持续性

- Product development approach that includes risk management and eco-efficiency improvements as key criteria

产品开发方法，包括风险管理和生态效益改善的关键指标，
Leading the industry with product stewardship

- 产品管理,处于行业领先地位.

- Proactively working with suppliers, customers, and industry trade groups to promote best practices

主动与供应商，客户和行业贸易团体，

以达到最佳实践效果

All while maintaining
the highest-quality
print standards

同时依然以最高的印刷质量为标准





Innovation - SunBar® 创新-SunBar

Coating Applications涂层运用

SunBar Oxygen Barrier Coating offers

SunBar 氧阻隔涂层的运用

- ➔ **Replacement of PVdC and EVOH in packaging films**
在包装薄膜中替代PVDC和EVOH
- ➔ **Enhancement / replacement of oxide & metallized structures**
替代或增强原有的涂层或镀铝结构的阻隔功能

For dry/chilled food and liquid packaging in flexo, gravure or roller coat processes

对于干燥食品和液体包装是用于柔版/凹版/滚涂等工艺



Coating Applications

SunBar Oxygen Barrier Coating: Benefits 优点:

SunBar technology offers product performance and environmental advantages:提供了产品阻隔性和包装的环保性

- Enhanced barrier to O₂ and CO₂ to extend shelf life
增强对氧和二氧化碳的阻隔,提高内容物保质期
- Barrier to aromas and odors 保香和阻臭功能
- The ability to lightweight packs 使包装的轻量化
- Metal content removal 不含金属成分
- Increased pack recyclability 有利于包装的在循环
- Visible pack contents 内容物可见
- Improved graphic appeal 增加包装的艺术吸引力.



Coating Applications

Trend #1: Rigid to flexible 从刚硬变的柔软



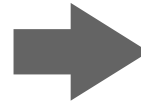
Efficient package storage and transportation. Reduction from triplex to duplex. No chlorine.

有利于存储和运输,从3层减为2层结构.不含氯.



Coating Applications

Trend #2: Visible product contents 内容物可见



Longer shelf life. Visible content packs become a reality.
选用透明包装也使延长保质期成为可能。



Coating Applications

Trend #3: Light-weighting轻量化



An alternative to traditional packaging. Lower carbon footprint.
替换包装.低碳环保



Coating Applications

Trend #4: Single piece packs 单层包装



Excellent oxygen and aroma / odor barrier for base substrates.
对基材有很好的阻氧保香,防异味性能



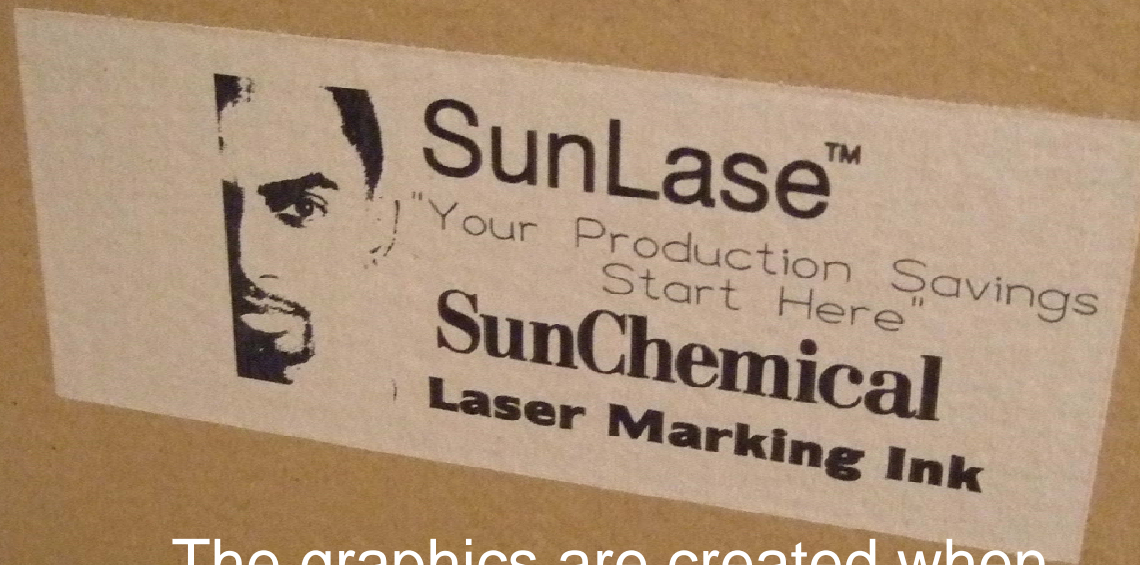


Innovation – SunLase™

创新-Sunlase

SunLase - Introduction

SunLase ink is used to print a white patch
SunLase 油墨印刷在白片上



The graphics are created when
a low powered CO₂ laser changes the colour of the
patch to black where marked
低能量CO₂激光使白片变成黑色图案印记

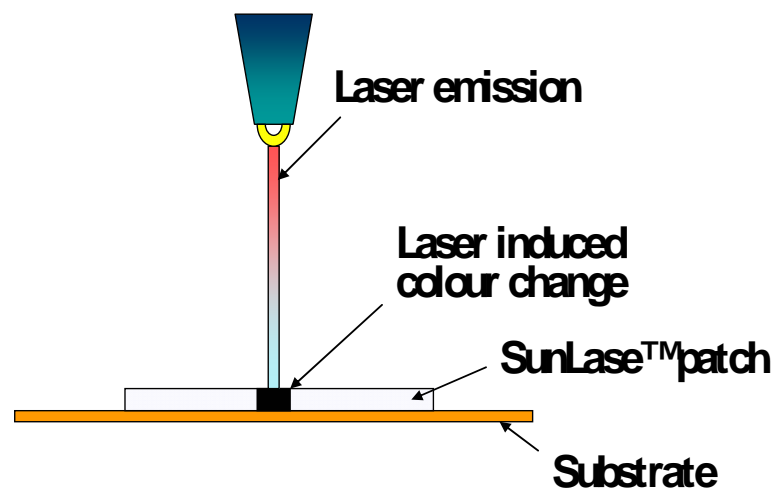


SunLase - Description

What is SunLase?什么是SunLase?

SunLase™ is a specialised range of laser marking coatings for flexo, gravure, screen and offset printing, based on Datalase® pigment, which allows a variety of substrates to be marked, in line, with CO2 laser technology.

SunLase 是利用特殊能量段的激光,在用柔版\凹版\丝网印刷有Datalase 颜料的各种基材上,刻出各种横图案的CO2激光技术



SunLase - Key benefits 主要优点

- No resetting nor consumables in packing line
在生产线上不用重新矫正,也不会用完
- Cost savings and flexibility through improved productivity and the need for secondary applications removed
在后加工需要删除和提高效率上有很好的灵活性和低成本性.
- Reduction of SKU's, and move to fewer standard designs that can be marked at the last step of the packing line
减少SKU, 工序设置灵活.可以在最后激光蚀刻.
- Excellent quality at high speeds
高速下稳定的质量
- Packaging can be nominally marked
一般的包装都可以用来打标记



SunLase™ - Variable Data Applications 各种日期打印运用

- Need of sequential numbers per pack / batch...
需要对每包的序列号/批...
- Unique identifiers per pack, batch, consumer...
独特的标识符，每包，批号，消费者...
- Personalisation 个性化
- Network based coding 基于网络编码
- Primary coding on flexible films 主要的编码柔性薄膜
- Date / Price / Batch codes 日期/价格/批次编号
- Language / Ingredients / GDA panels /
Nutritional Information
- 语言/材料/的GDA板/营养信息



Sun Chemical has already delivered SunLase to various converters and brand owners globally, in different markets for the food industry.





Innovation –SUN Uno创新-SUN Uno

SunUno Solimax Range of Multipurpose Inks 多用途油墨

Single high speed ink systems for
lamination & surface printing

单一溶剂高速复合或表印油墨

Reduce converter waste

减少溶剂循环使用中的浪费

Reduce converter downtime

缩短回收溶剂实践

Reduce converter energy usage

减少回收溶剂的能量耗用



Thank you for your attention
Any questions?