

# SunChemical®

a member of the DIC group



## Gravure Printing Innovations from Sun Chemical & DIC

Piacenza June, 19-20<sup>th</sup> 2013

**working for you.**



# Agenda

- Overview of Sun Chemical & DIC Gravure printing inks
- Sustainability Overview
- Innovation
  - SunBar<sup>®</sup> Barrier Solutions
  - SunLase<sup>™</sup> Laser Marking Solutions
  - SunUno Multi-purpose Inks



# Committed to fulfil your every need

## **sunvisto™**

Flexo & Gravure liquid inks,  
surface inks for paper, board, towel and tissue.

## **sunspectro™**

Flexo & Gravure liquid inks,  
surface inks for plastic films and foils.

## **sunstrato™**

Flexo & Gravure liquid inks,  
lamination inks.

## **Conventional**

Sheetfed - offset - inks

## **Energy Curing**

UV / EB - curing - inks

## **SOLARIS®**

Products / services for narrow - web

## **Brand Enhancement Effects**

Ink innovations to promote packaged brands

## **Consumables**

The one-stop-shop  
for pressroom consumables

## **Brand Protection Solutions**

## **Functional Coatings**

Innovative solutions



introducing ...

**SunVisto® family of surface inks meeting your every paper, board, towel or tissue printing need.**



introducing ...

**SunSpectro® family of  
surface inks meeting your  
every plastic film and foil  
packaging printing need.**





introducing ...

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



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# NEW

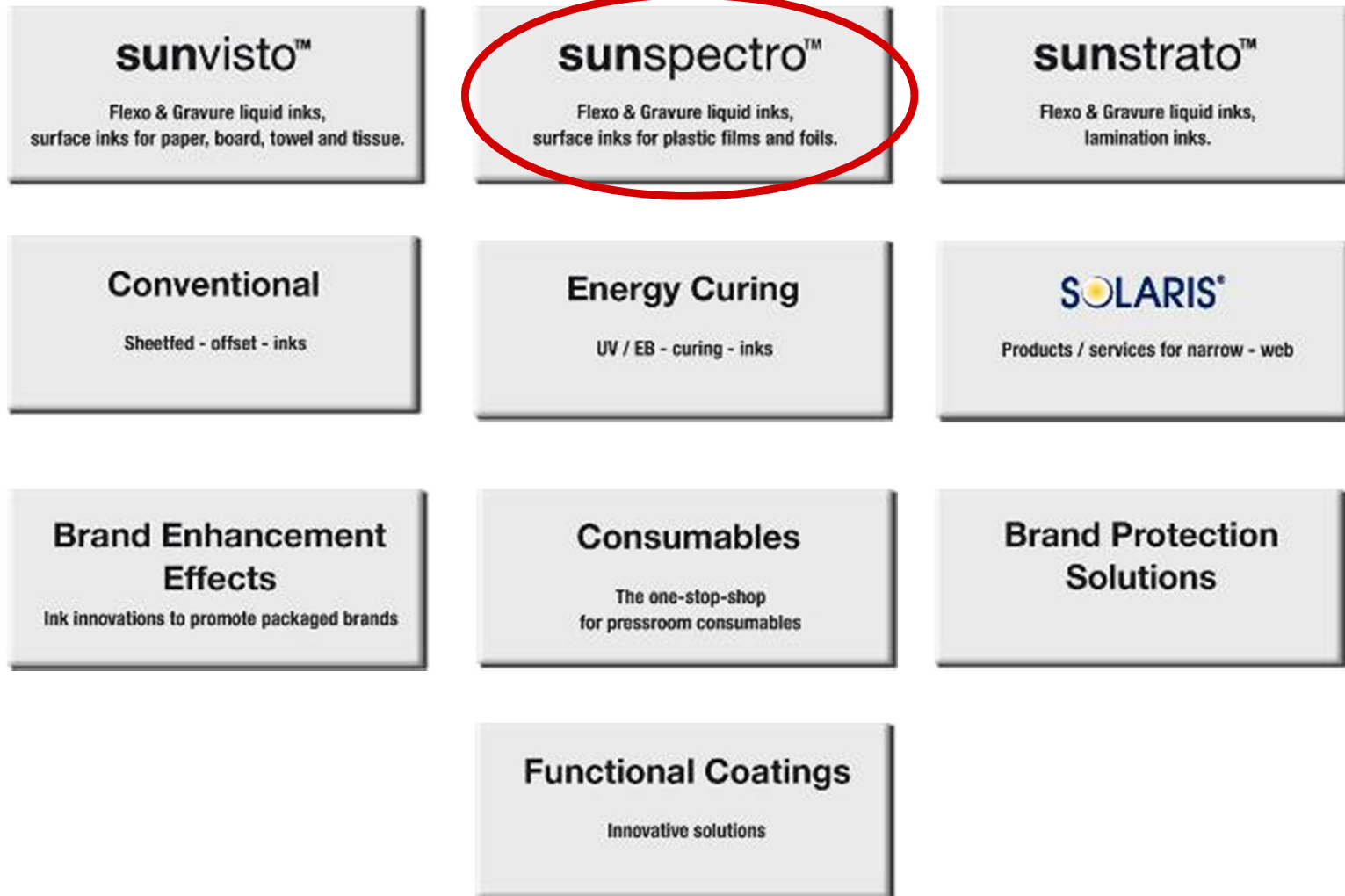
## New PU based ink solutions for gravure printing of high end retort packaging

- **Lowers production costs**
  - Prints at high speed - low solvent retention properties
- **Increases design capabilities**
  - Facilitates the use of shallower cylinder engraving for better print quality
- **Food packaging compatible**
  - For use for 121' to 134' retort processing conditions
  - low migration of ink components
  - low solvent retention
  - better organoleptic properties –  
low odour & taste properties





## Committed to fulfil your every need



# SunSpectro® WB Gravure Surface Printing Inks

**NEW**

- Water based PU Gravure Inks
- Currently Juice carton applications
- Surface print of PE vs lamination solution
  - Reduce need for multiple laminators at press
  - Good resistance to line lubrication (Alkali)
  - Flexible printing solution
  - Excellent printability





## Sustainability

# Sun Chemical's Sustainability Policy

- Based on eco-efficiency
- Delivery of economically competitive products and services
- Progressively reducing our impact on the environment in our processes and products
- Data-driven approach

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
- Measure and report these parameters regularly, by site and by product
- Establish actions to improve, then re-check and re-measure





# Sustainability in Products

- 🌱 Product development approach that includes risk management and eco-efficiency improvements as key criteria
- 🌱 Leading the industry with product stewardship
- 🌱 Proactively working with suppliers, customers, and industry trade groups to promote best practices

All while maintaining  
the highest-quality  
print standards





## Innovation - SunBar®

## SunBar Oxygen Barrier Coating offers

- ➔ Replacement of PVdC and EVOH in packaging films
- ➔ Enhancement / replacement of oxide & metallized structures

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



## SunBar Oxygen Barrier Coating: Benefits

**SunBar technology offers product performance and environmental advantages:**

- Enhanced barrier to O<sub>2</sub> and CO<sub>2</sub> to extend shelf life
- Barrier to aromas and odors
- The ability to lightweight packs
- Metal content removal
- Increased pack recyclability
- Visible pack contents
- Improved graphic appeal



# Coating Applications

## Trend #1: Rigid to flexible

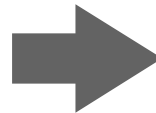


Efficient package storage and transportation. Reduction from triplex to duplex. No chlorine.





## Trend #2: Visible product contents



Longer shelf life. Visible content packs become a reality.

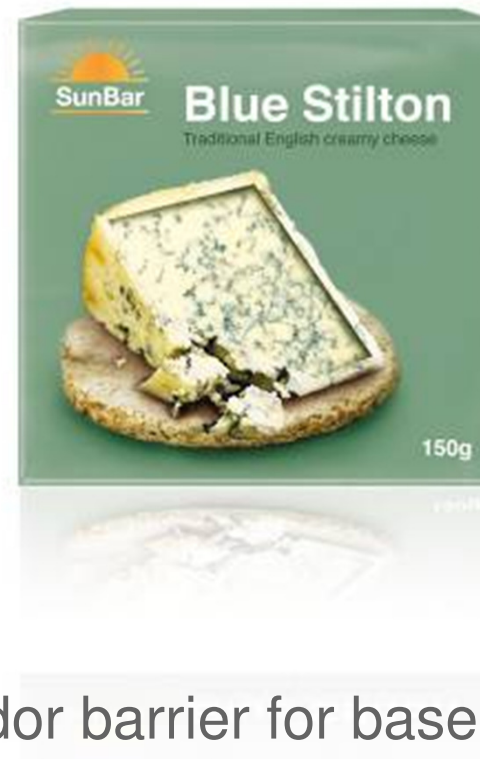
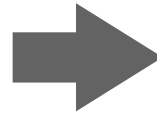
## Trend #3: Light-weighting



An alternative to traditional packaging. Lower carbon footprint.



## Trend #4: Single piece packs



Excellent oxygen and aroma / odor barrier for base substrates.





## Innovation – SunLase™



SunLase ink is used to print a white patch



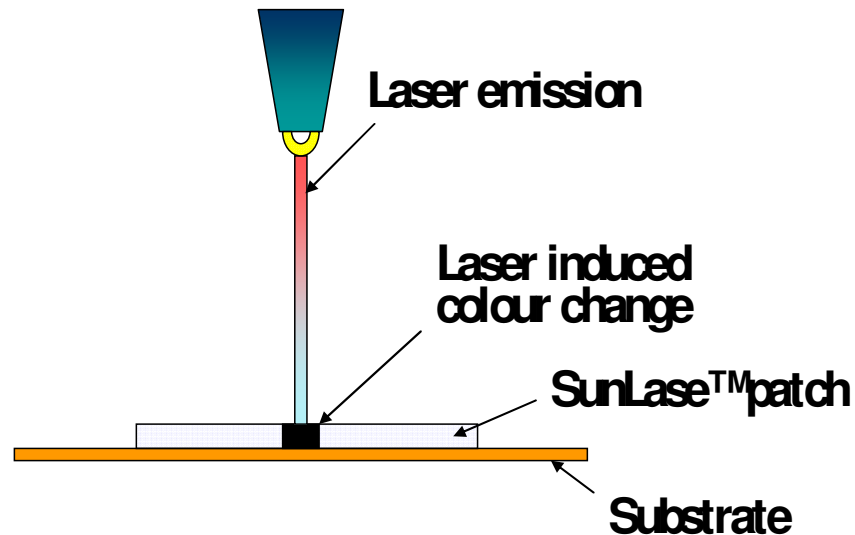
The graphics are created when a low powered CO<sub>2</sub> laser changes the colour of the patch to black where marked





## What is 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 - Key benefits

- No resetting nor consumables in packing line
- Cost savings and flexibility through improved productivity and the need for secondary applications removed
- Reduction of SKU's, and move to fewer standard designs that can be marked at the last step of the packing line
- Excellent quality at high speeds
- Packaging can be nominally marked



# SunLase™ - Variable Data Applications

- Need of sequential numbers per pack / batch...
- Unique identifiers per pack, batch, consumer...
- Personalisation
- Network based coding
- Primary coding on flexible films
- Date / Price / Batch codes
- Language / Ingredients / GDA panels / Nutritional Information



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





## Innovation – SunUno

# SunUno Solimax Range of Multipurpose Inks

- Single high speed ink systems for lamination & surface printing
- Reduce converter waste
- Reduce converter downtime
- Reduce converter energy usage





**Thank you for your attention**

**Any questions?**