

# DuraLam TG™

From the SunStrato™ family of lamination inks

## 1. Description

DuraLam TG is a solvent based gravure lamination system intended for high end retort type applications

## 2. Product features\*

### DuraLam TG inks:-

- Have high bond strength on a variety of films when used in combination with correct adhesive
- Maintain high bond strengths after sterilisation or pasteurisation conditions up to 131°C for 30 minutes
- Have very high heat seal bonds
- Have excellent gravure printability
- Are suitable for the printing of polyester , Nylon (opa ) and opp
- Have low retained solvent levels
- Are a single pack system
- Are PVC free

\*Specific application performance data, where available can be provided by your Sun Chemical representative.

## 3. Product Suitability

### 3.1 Applications

DuraLam TG inks are intended for use in the following areas:

- High performance lamination with processing temperatures up to 131°C
- Adhesive lamination - both solvent based & solvent free technologies

DuraLam TG inks should not be used in the following area

- **Food packaging where the print is in direct contact with the food**
- **Metalic inks should not be used for pasteurisation or sterilisation applications**

For any other end uses not listed, please refer to your local Sun Chemical representative for specific details and advice.

### 3.2 Substrate

DuraLam TG inks are suitable for the following substrates and structures:-

- Chemically and corona treated polyester
- Opp
- Nylon (opa)
- Acrylic coated opp

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Primary web	Secondary web
Corona treated polyester*	Aluminium
	Cast PP
	PE
Chemically treated polyester	Aluminium
	Cast PP
	PE
OPP*	Aluminium
	Cast PP
	PE
Acrylic coated opp	Aluminium
	Cast PP
	PE
OPA-Nylon*	Aluminium
	Cast PP
	PE

Check the ink film combination before printing

\*Inline corona treatment is recommended

Please note that the information given here is for indication of potential uses only and more detailed information is available from your Local Sunchemical representative.

### 3.3 Adhesives

DuraLam TG printed films may be laminated with a number of suitable solvent-based and solvent-less adhesives. The actual bond strengths achieved will depend greatly on the choice of substrate, adhesive and applied film weights of both inks and adhesive. It is recommended that rigorous tests be carried out before commencing any commercial trials. Sun Chemical can provide assistance to confirm suitability however it is recommended that all ink / substrate specifications are tested against appropriate regulatory standards and test methods.

## 4. Colour Range

DuraLam TG inks are available as bespoke finished inks.

Please refer to your local Sun Chemical representative for specific details

## 5. General Handling

### 5.1 Storage

DuraLam TG inks are highly flammable. Suitable precautions should be observed to avoid ignition sources, temperature of storage: from 5°C to 35°C

Shelf life: 6 months under above conditions.

### 5.2 Waste disposal

Care should be exercised in the disposal of printing ink waste. This should be carried out in accordance with good industrial practice, observing all the appropriate regulations and guidelines

for more specific handling advice refer to the safety data sheet (SDS).

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## 6. Printing Conditions

### 6.1 Printing Viscosities

Inks must be thoroughly stirred and homogeneous before reducing with solvent.

The optimum printing viscosity depends on press and running conditions. Good results have been achieved with **DuraLam TG** inks at the following viscosities:

- Rotogravure: 13-18 sec (Din cup N°4).

### 6.2 Reducing solvents

For gravure

Normal:	Ethanol
Slow:	Normal propanol
Retarder:	Ethoxy propanol

### 6.3 Wash up solvents

Ethanol or ethanol / ethoxy propanol blends

### 6.4 Cylinders / Plates

Inks are suitable for all types of aniloxes, cylinders (chemical and mechanical engraving) and flexo plates.

## 7. End-use safety

All Sun Chemical products are formulated to the latest version of the CEPE/EuPIA exclusion list. This excludes the use of substances classified as carcinogenic, mutagenic and toxic for reproduction (CMR 1 and 2) or labelled (T) according to the Dangerous Substances Directive 67/548/EEC, substances classified as very toxic (T+) or toxic (T) and pigments based on compounds of Sb, As, Cd, Cr (VI), Pb, Hg, Se. The use of certain dyes, solvents, plasticisers and miscellaneous materials are also excluded. A copy of the document is available on request or directly from the EuPIA website, [www.eupia.org](http://www.eupia.org)

All Sun Chemical products are designed with end-use safety built-in. Combination of Sun Chemical products with products from other manufacturers may affect the suitability of the Sun Chemical product for specific end uses and/or applications. It is advised that in such circumstances the user undertakes a detailed risk assessment to ensure that safety is not compromised

Acceptable technical performance of **DuraLam TG** inks is dependent on:

- Control of product application weight (inks coatings and adhesives)
- Adequate drying on press (to ensure that the print is dry before conversion)
- Appropriate packaging design and structure
- Control of any migratable substances within the finished packaging structure
- Appropriate adhesive used in accordance with supplier recommendations

The choice and control of substrate, design (including coverage and coat weight), process conditions (e.g. to ensure proper drying) and any materials from other suppliers are printer or converter technical requirements. Your local Sun Chemical technical team can provide assistance in the form of suggestions or direct support for our products.

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To fulfill its responsibility within the food contact materials supply chain, and following the signing of a legally binding mutual non-disclosure agreement, Sun Chemical will provide relevant information to the customer regarding migratable components present in its products through the preparation and communication of a 'Statement of Composition'. The **DuraLam TG** inks are formulated with specific additives with the potential to migrate, details of these are available through statement of composition statements.

## 8. Disclaimers

The **DuraLam TG** ink range is only suitable for use on the non-food-contact side of food packaging provided that they are applied under the relevant Good Manufacturing Practices (GMP) and according to the recommendations of this Technical Data Sheet.

The printer, converter and the packer or filler entity have the legal responsibility to ensure that the finished article is fit for the intended purpose (s) and that the ink and coating components do not migrate into the food at levels that exceed legal and industry requirements as outlined in the EU Framework Regulation (EC) No 1935/2004 and the GMP Regulation (EC)No 2023/2006 and for film applications the Plastics Directive 2002/72/EC .We recommend that the finished packaging is tested under appropriate representative conditions of use if there are any doubts regarding compliance.

## 9. Technical Assistance / Contacts

For further information, please contact your local Sun Chemical team or visit our website on [www.sunchemical.com](http://www.sunchemical.com)

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