

Toucan 6700 Series**SunPromo® Graphic Screen
Printing Inks****1. Description**

Toucan 6700 series inks are two pack epoxy resin screen printing inks that have been specifically formulated to give excellent adhesion on a wide range of substrates, often when all else fails. Toucan 6700 series inks adhere to primed, enameled and uncoated metal, glass, many plastics, printed circuit boards, laminates, wood and composite woods such as hardboard. Toucan 6700 series inks have exceptional resistance to physical wear and aggressive chemicals, but are not recommended for prolonged outdoor use.

2. Product Features*

- Wide ranging adhesion
- High chemical resistance
- Excellent physical / abrasion resistance
- Strong durable marking inks

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

3. Product Suitability***3.1 Applications**

Toucan 6700 series inks are ideally suited for use in many applications, including electronic control panels, domestic appliance fascias, melamine laminates and for notation work on printed circuit boards.

3.2 Substrates

Toucan 6700 series inks exhibit excellent adhesion on a very wide range of materials, often exhibiting adhesion when many other ink types offer limited or no adhesion. However, many factors are involved, and users should satisfy themselves of the suitability of the system before commencing a full print run.

Some example substrates Toucan 6700 series inks have been successfully printed onto are primed, enameled and uncoated metal, glass, boards, many plastics including various duroplastics, printed circuit boards, laminates, wood and composite woods such as hardboard.

3.3 Exterior Durability

Toucan 6700 series inks are not suitable for prolonged outdoor use.

Further advice and guidance on the suitability of inks for prolonged outdoor use can be obtained from your local Sun Chemical branch.

*Please refer to your local Sun Chemical representative for specific details.

3.4 Circuit Boards

3.5 Abrasion Resistance

Toucan 6700 series inks exhibit excellent abrasion resistance and therefore provide strong and durable markings.

3.6 Chemical Resistance

The chemical resistance of fully cured Toucan 6700 series inks is excellent. They are resistant to many domestic products, such as oils, hair lacquers, household cleaners and chlorinated hydrocarbons.

4. Product Range

Toucan 6700 series inks			
Primrose	67Y30	Blue	67B50
Golden Yellow	67Y50	Green	67G50
Orange	67O50	Black	67N50
Red	67R50	White	67W50
Magenta	67M50	Extender Base	67E50
Violet	67V50	Overprint Varnish	6795**
Toucan 6700 series catalysts			
Gloss Catalyst	6791	Superflow Catalyst	6793
Matt Catalyst	6792	Extra Catalyst	67901
Toucan 6700 series reducers			
Fast Thinner	TS23	Retarder	TS22
Slow Thinner	TS24		

** Requires special mixing ratios, refer to note under mixing ratio table

4.1 Colour Range

Toucan 6700 series inks colour range consists of 8 bright, lead free, SunMatch mono-pigmented mixing shades which when used with black, white and extender base can be readily mixed to produce almost any colour including Pantone®, RAL and HKS.

The matt catalyst can be used to reduce the gloss finish should a matt finish be required.

* Pantone Inc.'s check standard trademark for colour

5. General Handling

5.1 Storage and Shelf Life

Toucan 6700 series inks should be stored in closed containers at temperatures between 5-32°C and when stored appropriately will have a shelf life of up to 12 months.

Toucan 6700 series catalysts stored in closed containers at temperatures between 5-32°C and when stored appropriately will have a minimum shelf life as below, but if stored correctly

6. Printing Conditions*

6.1 Mixing

Toucan 6700 series inks are supplied as two components, separately packed, a pigmented paste and a catalyst. The mixture of paste and catalyst will remain usable for up to 6 hours, to allow for a full shifts work.

Four grades of Toucan 6700 series catalyst are available and the physical properties of Toucan 6700 series inks can be adjusted by varying the choice and the proportions of the catalyst. See table below for typical mixing ratios.

Toucan 6700 series ink to catalyst mixing ratios			
Required cured ink / print property	Mixing ratio (pigmented ink weight : catalyst weight)		
	Gloss Catalyst and Superflow Catalyst 6791 and 6793	Matt Catalyst 6792	Extra Catalyst 67901
Maximum flexibility and gloss finish			

Metals	120°C for 10 minutes
Glass	120°C for 5 minutes
Plastics	90°C for 10 to 15 minutes

No advantage is gained by exceeding 140°C and higher temperatures may damage certain substrates. Stoving rather than air drying may enhance adhesion on some difficult stocks.

6.3 Viscosity Reduction

Toucan 6700 series inks can be thinned for use, with additions of up to 10% Slow Thinner TS24 recommended for most situations. Should for any reason, excessive bubbling occur, reduction with Fast Thinner TS23 can be helpful. Retarder TS22 is also available when maximum screen stability and fine detail reproduction is required.

6.4 Printing Materials

High quality stencil materials such as those in the SunCoat range are recommended for best results. Technical Data Sheets and detailed specialist advice on choice of emulsions, films and all related stencil products can be obtained from your local Sun Chemical branch.

Fine polyester mesh with a mesh count of 90 – 120 threads/cm and a medium/hard sharp polyurethane squeegee should be used.

6.5 Coverage

Up to 17 m²/kg may be expected, but coverage is dependent on a number of printing factors including, mesh choice, stencil thickness, ink reduction, squeegee, etc.

6.6 Washing Up

Commercial screen cleaners, such as those in the 'SunCoat' range are recommended for best results. Product Data Sheets and advice on the SunCoat range of screenwashes is available from your local Sun Chemical branch.

*Please refer to your local Sun Chemical representative for specific details.

7. End-use safety

7.1 Handling

Toucan 6700 series inks should be used in accordance with normal standards of industrial hygiene. Please refer to the information provided on product labels and relevant Safety Data Sheets.

7.2 Toys (Safety) Regulations EN71-3: 1995

These inks have been formulated to exclude heavy metal based pigments. However, inks are supplied without warranty due to risk of contamination throughout the many processing steps from raw materials to finished toy. To ensure conformity analysis, is therefore essential. The inks may be analysed or alternatively the finished toy (note however that the legislative limits apply to the toy itself and not to the wet ink as supplied). Please refer to our

7.3 Food Contact

Sun Chemical cannot guarantee the suitability of any of its products for use where direct or indirect food contact may occur.

7.4 EuPIA

Toucan 6700 series inks are formulated in accordance with the EuPIA Exclusion policy for printing inks and related products. In particular, this excludes from use all materials classified according to the CLP Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures as carcinogenic, mutagenic or toxic for reproduction in categories 1A or 1B with hazard statements H340, H350 or H360, in addition to toxic or highly toxic materials with hazard statements H300, H301*, H310, H311*, H330, H331, H370 or H372* (* may be permitted if safe use can be demonstrated following risk assessment). Pigments based on compounds of Sb, As, Cd, Cr (VI), Pb, Hg, Se, certain dyes, solvents, plasticisers and miscellaneous materials are also excluded.

8. Technical Assistance / Contacts

For further information, please contact your local Sun Chemical team.

Our Products are intended for sale to professional users. The information herein is general information designed to assist customers in determining the suitability of our products for their applications. All recommendations are made without guarantee, since the application and conditions of use are beyond our control. We recommend that customers satisfy themselves that each product meets their requirements in all respects before commencing a print run. There is no implied warranty of merchantability or fitness for purpose of the product or products described herein. In no event shall Sun Chemical be liable for damages of any nature arising out of the use or reliance upon this information. Modifications of the product for reasons of improvements might be made without further notice.