

## SHT Series Inks

## SunHytek™ family of Screen Automotive Inks

### 1. Description

SunHytek™ General Purpose dense blacks and opaque white have been specifically formulated for use on 2 dimensional automotive dashboard appliques and fascias.

### 2. Product features\*

- Excellent wide ranging adhesion
- Satin finish
- Good scuff and mar resistance
- Superior opacity and density
- Pinhole free prints

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

### 3. Product Suitability\*

#### 3.1 Applications

SunHytek™ General Purpose inks are two dense blacks and an opaque white for use on automotive appliques and fascias panels and are commonly used and recommended for the production of automotive dashboard panels and interior fascias.

#### 3.2 Substrates

SunHytek™ General Purpose inks are recommended for use on polycarbonate, print receptive polyester and PVC and can be printed on the first or second surface.

#### 3.3 Automotive Product Suitability

SunHytek™ General Purpose inks have been tested for automotive appliqué suitability and under the test conditions were found suitable for use. Common tests include:

Environmental cycle testing  
Heat ageing  
Scratch resistance  
Cross cut and adhesive tape adhesion  
Non yellowing and colour change

However, customers should always satisfy themselves of full suitability for specific final use under their print conditions prior to commencing full production runs.

#### 3.4 Durability

SunHytek™ General Purpose inks are only recommended for internal use and are not suitable for outdoor exposure.

#### 3.5 Overprinting

SunHytek™ General Purpose inks can be overprinted with common solvent based, UV or waterbased matt varnishes or hardcoats commonly used in automotive applications.

For specific, recommended overprint varnishes please refer to your local Sun Chemical representative.

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



## 4. Colour Range

SunHytek™ General Purpose Inks			
GP Dense Black	SHTN70	GP Opaque White	SHTW70
GP XD Dense Black	SHTN90		
Thinners and Retarders			
Thinner	TS23	Retarder	TS24
		Slow Retarder	TS15

### 4.1 Colour Range

SunHytek™ General Purpose inks are only available as dense blacks and opaque white, should a full colour range be required then SunHytek™ CX series inks are recommended.

## 5. General Handling

### 5.1 Storage and shelf life

SunHytek™ General Purpose inks should be stored in the original sealed containers at temperatures between 5 – 30 °C. They have a minimum shelf life of 30 months, but can remain usable for longer periods depending on storage conditions.

For more specific handling advice refer to the Safety Data Sheet.

## 6. Printing Conditions

### 6.1 Drying

SunHytek™ General Purpose inks dry by evaporation of volatile solvent. These inks are best dried through a commercial jet drier at 65 to 80 °C, although prints can be air dried on racks and dried in an oven.

Evaporation rate and hence drying speed is decreased by the use of retarder or slow retarder and drying times will vary depending on the substrate and print shop conditions. To avoid issues with overprinting and post processing, it is essential that these inks are fully dried before moving onto another print step.

It is always advisable to determine optimum drying schedules under specific conditions before starting full production runs.

### 6.2 Screen Stability

SunHytek™ General Purpose inks have been optimized for drying and screen stability, however should these products be found to dry too quickly on the screen, or if fine detail or tones are being printed then additions of retarder or slow retarder are recommended.

### 6.3 Viscosity Reduction

SunHytek™ General Purpose inks will require a degree of viscosity reduction before use. Thinner or retarder can be used at levels from 10 to 25% by weight to suit the specific print machine and conditions.

### 6.4 Printing materials

High quality stencil materials such as those in the SunCoat range are recommended for best results. Product 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 nylon or polyester mesh with a mesh count of 90 to 120 threads/cm and a medium/hard sharp polyurethane squeegee should be used.

### 6.5 Coverage

Up to 50 m<sup>2</sup>/kg may be expected, but coverage is dependant on a number of printing factors including, mesh choice, stencil thickness, 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.

## 7. End-use safety

### 7.1 Handling

SunHytek™ General Purpose 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 company statement concerning inks for toys.

## 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.

