



Technische Steekkaart  
Fiche Technique  
Technisches Merkblatt  
Technical Data Sheet

**TOYO INK**

## EXCURE 20000

### CHARACTERISTIC

*The inks of Excure 20000 series show very good adhesion on all possible closed substrates.*

### PROPERTIES

- ☞ Good adhesion
- ☞ Excellent film lamination properties
- ☞ Good 'post-curing' rate
- ☞ The Excure 20000 series contains carefully selected raw materials to minimise the risk of skin irritation and causes as little odour as possible. It does not contain raw material listed on CEPE or TSCA exclusion list
- ☞ Optimal resistance properties will be obtained 24 hours after printing
- ☞ Formulated without benzophenone
- ☞ Formulated without ITX

### APPLICATION AREA

- Letterpress
- Wet offset

### UV CURING SPEED (with 3 lamps of 120 W/cm)

- ➔ 300 m/min or 9000 sheets/hour  
*(the reactivity is also influenced by the substrate, the condition of the lamps, the condition and adjustment of the reflectors, the thickness of the ink layer, colour, etc.)*

### SUITABLE SUBSTRATES (surface tension see 'Recommended treatment levels')

- ☞ High gloss paper and board
  - ☞ Hard and soft vinyls (corona treated)
  - ☞ Coated metals
  - ☞ Pre-treated plastic films (polyester, acetate)
  - ☞ Pre-treated PP films (e.g. for IML labels)
- Preliminary adhesion tests are recommended*

## AVAILABLE COLOUR SHADES

- ☼ Process colours
- ☼ Mixing system
- ☼ Opaque white
- ☼ Other colours: on request

## REFERENCES EXCURE 20000

		IWS	Alcohol	Nitro	Alkali	Heatres. 10'
<b><u>Process colours – wet offset</u></b>						
Yellow	EXC20001	5	+	+	+	180 °C
Magenta	EXC20002	5	+	+	-	170 °C
Cyan	EXC20003	8	+	+	+	220 °C
Black	EXC20004	8	+	+	+	220 °C
<b><u>Lightfast process inks</u></b>						
Yellow	EXC20021	7	+	-	+	160 °C
Magenta	EXC20022	7	+	+	+	180 °C
<b><u>Base Inks</u></b>						
Mixing white	EXC20900					
Opaque white	EXC20901					
Transparent white	EXC20902					
Yellow	EXC20912	5	+	+	+	180 °C
Yellow fast 6	EXC20913	6	+	+	+	220 °C
Yellow IWS 7	EXC20914	7	+	-	+	160 °C
Warm yellow	EXC20916	5	+	+	+	220 °C
Orange	EXC20920	5	+	+	+	140 °C
Orange fast	EXC20921	7	+	+	+	220 °C
Warm red	EXC20930	3	+	+	-	180 °C
Warm red fast	EXC20931	7	+	+	+	220 °C
Red 032 IWS 7	EXC20933	7	-	-	+	170 °C
Rubine red	EXC20940	5	+	+	-	170 °C
Rubine red fast 6	EXC20941	6	+	+	+	180 °C
Rubine red fast 7	EXC20942	7	+	+	+	200 °C
Rhodamine red	EXC20950	3	-	-	-	140 °C
Rhodamine red fast 7	EXC20951	7	+	+	+	180 °C
Purple*	EXC20952	3	-	-	-	140 °C
Purple fast*	EXC20953	7	+	+	+	220 °C
Violet	EXC20960	3	-	-	-	140 °C
Violet fast	EXC20961	7	+	+	+	220 °C
Reflex blue	EXC20962	4	-	-	-	150 °C
Reflex blue fast*	EXC20963	7	+	+	+	220 °C
Blue 072	EXC20964	3	-	-	-	150 °C
Blue 072 fast*	EXC20965	7	+	+	+	220 °C
Cyan	EXC20970	8	+	+	+	220 °C
Green	EXC20980	8	+	+	+	220 °C
Black	EXC20990	8	+	+	+	220 °C

\*These inks should not be used for mixings, as they are already built up out of other base inks.

## REMARKS

- ★ *To improve scuff resistance of non-laminated surfaces, UV-overprint varnishing is recommended.*
- ★ *Cleaning: it is not necessary to wash the press immediately after printing. The Excure 20000 series will not cure in the press and is therefore ready to use for the next day's printing. However, the ink may start to cure in the press if sunlight or UV-light from the bulbs / UV-lamp is allowed to shine on the ink.*
- ★ *Shelf life: the Excure 20000 series has a 12-month shelf life guarantee. This guarantee covers 12 months from the date of manufacture (which is mentioned on the label). In order to give this guarantee, certain recommendations must be followed: the Excure 20000 series should be kept on stock at temperatures between 15 – 20°C and they should not be exposed to direct sunlight or heat. If possible, store the ink in a dark room*
- ★ *Rollers: the following roller material is recommended: EPDM (Ethylene-Propylene-Diene-Monomers). EPDM rollers show excellent performance with UV-inks. They are not suitable for conventional inks, since they will swell considerably in contact with aliphatic hydrocarbons, which are used in traditional offset inks*
- ★ *Certain Metallic UV-inks may cause swelling of EPDM rollers*
- ★ *Nitril rubber: nitril rubber rollers show minimal swelling with UV-inks and conventional inks. Solvents such as glycol and acetates do have a tendency to make this rubber swell. Nitril rubber is recommended when using two component metallic inks.*
- ★ *Letterpress plates: the Excure 20000 series can be used together with the majority of the marketed letterpress plate materials. The best results are achieved by using soft plates for solids and harder plates for line, text and process work.*
- ★ *As wet offset series with improved curing and scratch resistance, we recommend EXC20051-54.*

## PACKAGING

- *1 kg plastics*  
*packed in card board boxes of 10 or 20 kg*  
*packed in palbox of 140 kg*  
*palletbox of 225 kg*  
*palletboxx of 360 kg*
- *3 kg plastics*  
*packed in card board boxes of 12 or 24 kg*  
*packed in palbox of 180 kg*  
*palletbox of 270 kg*  
*palletboxx of 504 kg*
- *10 kg pails*
- *200 kg barrels*
- *300 kg containers*

## ADDITIVES

◆ Fountain additive	pH 5	EXC10900
	pH 4.8	EXC10910
◆ Wash-up solution	for manual washing	EXC10810
	for automatic washing	EXC10800
	labelling and reg. free	EXC10820
◆ Antitack paste*		EXC10001
◆ Photoinitiator	liquid*	EXC10704
◆ Thinner		EXC10705

\* Ask for advice in case of food packaging.

## RECOMMENDED TREATMENT LEVELS (DYNES / CM)

		PE	PP	PVC	PET	PS	PVDC	PU	ABS	PTFE	Silicone
<b>Litho</b>	<b>Min.:</b>	40	40	36	44	42	42	38	42	38	38
	<b>Max.:</b>	50	50	52	56	50	52	52	52	52	52
<b>Letterpress</b>	<b>Min.:</b>	42	40	40	46	42	42	42	45	42	40
	<b>Max.:</b>	54	54	52	60	58	54	56	52	60	56

## PRODUCT SAFETY

This varnish (or these inks) is (are) **NOT** suitable for **FOOD applications** unless a proper risk assessment proves that its use is safe (e.g. if the process rules out the possibility of set-off in the reel or stack AND if the design of the final printed article ensures reliable functional barrier properties to migration). For further information please contact our local sales team or [www.toyoink.eu](http://www.toyoink.eu).