

## SHEETFED

# Ultraking<sup>®</sup> 4500 LM PREMIUM

THE SERIES FOR SHEETFED OFFSET FOOD PACKAGING PRINTING  
UV PROCESS INKS FOR SHEETFED OFFSET

### Ultraking<sup>®</sup> 4500 LM PREMIUM

Ultraking<sup>®</sup> 4500 LM PREMIUM is a low-odor, low-migration process ink series for sheetfed offset packaging printing. It has been developed especially for food packaging applications where there is no direct contact between the printed image and the contents of the package.

### Suitable Applications

- Coated papers
- Uncoated papers
- Board

Ultraking<sup>®</sup> 4500 LM PREMIUM is particularly suited for the production of packaging that complies with the requirements of EU regulation 1935/2004 and 2023/2006 as well as with the Swiss Ordinance 817.023.21. The series also meets the requirements of the EuPIA Guideline "Printing inks applied to the non-food contact surface of food packaging materials and articles."

Attributes	Benefits
• Low-migration and low-odor	• Lowest level of extractables (properly cured ink film)
• Fast curing speed	• Optimum curing at highest press speeds
• High colour strength	• Low dot gain
• Excellent ink/water stability	• Great press performance and stability
• Low misting	• Suitable for high speed web applications
• Good flow in the ink fountain	• Consistent colour density on long runs
• 100 % solid – no VOC emissions (cured ink film)	• Reduced VOC emissions required to report

### Availability

- Available in four colour process only

### Colour Matching

- ISO 2846-1 compliant
- Suitable for printing to ISO 12647-1

# Ultraking® 4500 LM PREMIUM

		Fastness Properties				
	Article Number	Light Fastness	Alcohol	Solvent Mixture	Alkali	Soap
<b>Ultraking® 4500 LM PREMIUM</b>						
Ultraking® 4500 LM PREMIUM Process Yellow	VW17-105I	5	+	+	+	+
Ultraking® 4500 LM PREMIUM Process Magenta	VW17-305I	5	+	+	-	-
Ultraking® 4500 LM PREMIUM Process Cyan	VW17-505I	8	+	+	+	+
Ultraking® 4500 LM PREMIUM Process Black	VW37-905I	8	+	+	+	+

Fastness properties according to ISO 2836:  
 + = Resistance provided  
 - = Resistance not provided

Light fastness properties according to ISO 12040:  
 from 1 (low) to 8 (high)

## Substrates

Ideally suited for coated and uncoated papers and board. In view of the wide variety of substrates offered by various manufacturers and in order to check the suitability for the printing of food packaging, we recommend carrying out your own tests before starting a print run.

## Additives / Varnish / Fount

Your Flint Group representative will help you select the optimal additives, varnish and fountain solution to preserve low-odor and low-migration properties.

## Shelf Life and Storage

Proper storage conditions include keeping at room temperatures (60°F to 80°F) and minimizing exposure to light. Meeting the recommended storage conditions, Ultraking® 4500 LM PREMIUM will remain stable for a minimum of 18 months from the date of manufacture.

## Special Notes

Ultraking® 4500 LM PREMIUM has extremely low-odor and low-migration characteristics. A migration test according to DIN EN 14338 has shown that, under the conditions of the test, no migration was observed.

A food packaging suitability certificate is available upon request.

In case the printing press was previously running with conventional inks, it should be thoroughly cleaned and all ink residues removed before printing with low-migration ink.

We recommend an accurate control of the polymerization process under the UV lamps.

For more details on Ultraking® 4500 LM PREMIUM, call your nearest Flint Group office or dealer.

Flint Group  
 15500 28th Avenue North,  
 Plymouth, MN 55447, USA  
[www.flintgrp.com](http://www.flintgrp.com)

T +1 763 559 5911  
 Toll Free in the U.S. (800) 328 7838  
 F +1 763 559 3725  
[info.packaginginks@flintgrp.com](mailto:info.packaginginks@flintgrp.com)

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