LIGHFASTNESS EVALUATION

METHOD

The lightfastness range for inks is based upon the blue wool scale which ranges from 1 to 8. In this test a standard dyed wool cloth is exposed to a UV-rich (mercury vapour) light source under standardised conditions until it shows perceptible signs of fading. An ink which perceptibly changes colour at the same exposure time is rated with this BWS number.

In this test a rating of 1 is poor and 8 is excellent. The expected service life doubles for each increase in value. The following table illustrates the relationship between BSW value and service life

LIGHTFASTNESS	BWS	TIME TO FADE IN THE SUN	COMMENT
Very Poor	1	1-2 Weeks	Short Service Life
Poor	2	2-3 Weeks	Short Service Life
Poor	3	1-2 Months	Fair Service Life
Fair	4	2-3 Months	Medium Service Life
Fair	5	4-6 Months	Good Service Life
Very Good	6	9-12 Months	Very Good Service Life
Excellent	7	18-24 Months	
Excellent	8	3+Years	Excellent Service Life

Note: The values given here are indicative only – there are a number of factors which influence service life – see below.

FACTORS INFLUENCING SERVICE LIFE

1. Geographical Location

2. Relative position to the sun

3. Time of year

4. Internal/external (e.g. behind glass?)

5. exposure to the elements e.g. water, salt-spray

6. Exposure to Chemicals e.g. solvents, acids, alkalies

7. **Ink Film Weight**

8. **Substrate and adhesion** to the substrate

9. **Ink tint strength** i.e. a 100% ink will be much more fade-resistant than a 10% mix in transparent white
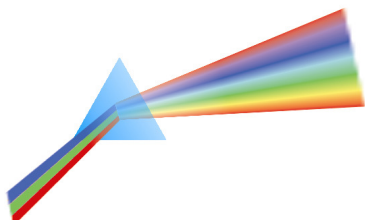
It is important that the printer recognise the importance of factors 7, 8 and 9 when making recommendations or offering warranties in respect of lightfastness.

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The Problem Solvers

www.prismaticinks.com.au

UVIMAX O/S INK
Lightfastness Table
Effective Date April 2009

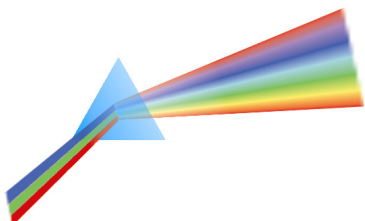| Product	Code	BWS
Basic Colours		
Opaque Yellow	12001	2-3
Warm Red	12002	2-3
Rubine Red	12003	4-5
Rhodamine Red	12004	3-4
Purple	12005	3-4
Reflex Blue	12006	4-5
Process Blue	12007	7-8
Green	12008	7-8
Untoned Black	12009	8-8
Trans. White	12010	-
Opaque White	12011	-
Process Yellow	12016	3-4
Process magenta	12017	4-5
Process Cyan	12018	7-8
Dense Black	12019	6-7
Violet	12041	4-5
012 Yellow	120012	2-3
021 Orange	120021	4-5
032 Red	120032	2-3
072 Blue	120072	4-5
Rich Gold One Pot	121871	-
Pale Gold One Pot	121875	-
Silver One Pot	121877	-
Lightfast Colours (Non-Bleeding)		
Yellow L/F	13001	6-7
Warm Red L/F	13002	6-7
Rubine L/F	13003	6-7
Rhodamine L/F	13004	7-8
Purple L/F	13005	7-8
Reflex Blue L/F	13006	7-8
Pro Yellow L/F	13016	6-7
Pro. Magenta L/F	13017	8-8
Jet Black L/F	13020	8-8
Orange L/F	130021	7-7
032 Red L/F	130032	7-7
072 Blue L/F	130072	7-8
Violet L/F	13041	6-7
Mid Red	13055	5-6
Deep Red	13057	5-6
165 Orange	130165	5-6

Note: Lower BWS values refer to 10% tint strength inks
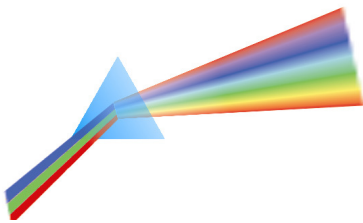
UV FLEXO INK
Lightfastness Table
Effective Date January 2004

Product	Code	BWS
Basic Colours		
Opaque Yellow	12601	2-3
Warm Red	12602	2-3
Rubine Red	12603	4-5
Rhodamine Red	12604	3-4
Purple	12605	3-4
Reflex Blue	12606	4-5
Process Blue	12607	7-8
Green	12608	7-8
Untoned Black	12609	8-8
Trans. White	12610	-
Opaque White	12011	-
Process Yellow	12616	3-4
Process magenta	12617	4-5
Process Cyan	12618	7-8
Dense Black	12619	6-7
Violet	12641	4-5
012 Yellow	126012	2-3
021 Orange	126021	4-5
032 Red	126032	2-3
072 Blue	126072	4-5
Rich Gold One Pot	121871	-
Pale Gold One Pot	121875	-
Silver One Pot	121877	-
Lightfast Colours (Non-Bleeding)		
Yellow L/F	13601	6-7
Warm Red L/F	13602	6-7
Rubine L/F	13603	6-7
Rhodamine L/F	13604	7-8
Purple L/F	13605	7-8
Reflex Blue L/F	13606	7-8
Pro Yellow L/F	13616	6-7
Pro. Magenta L/F	13617	8-8
Jet Black L/F	13620	8-8
Orange L/F	136021	7-7
032 Red L/F	136032	7-7
072 Blue L/F	136072	7-8
Violet L/F	13641	6-7

Note: Lower BWS values refer to 10% tint strength inks

UV SCREEN INK
Lightfastness Table
Effective Date January 2004

Product	Code	BWS
Process Colours		
Process Yellow	12416	6-7
Process magenta	12417	7-6
Process Cyan	12418	7-7
Dense Black	12419	7-8
Mixing System Colours		
System Yellow	12401	7-7
Golden Yellow	12453	5-6
Orange	12454	5-6
Mid Red	12455	5-6
Deep Red	12457	5-6
Rhodamine Red	12404	7-8
Violet	12441	7-8
Basic Blue	12407	7-7
Basic Green	12808	7-8
System Black	12429	7-8
Clear Extender	12410	-
Opaque White	12411	-
Popular Colours		
Brilliant Yellow	12450	5-6
Basic Yellow	12852	5-6
Burnt Orange	128745	5-6
Brilliant Red	12856	6-7
Purple	12805	7-8
Reflex Blue	12806	7-8
032 Red	128032	7-7

Note: Lower BWS values refer to 10% tint strength inks