

Technical Information – Wood Shade Ink

● General Information

Designed as a touch-up to cover minor scratches or superficial damage to any interior wood surface such as furniture, doors and flooring, our wood shade marker ink is available in a range of popular wood finishes.

- Cap-off protection
- Matches most wood types
- Low odour alcohol formulation
- Penetrates wood to give good adhesion
- Fast drying
- Easy to apply
- Xylene, toluene and benzene free

● Available Colours and Pantone References*

Standard			
● Ebony	408C	● Chestnut	4715C
● Pine	7401C	● Walnut	7530C
● Natural	726C	● Oak	4735C
● Cherry	722C	<i>Colour matching service available</i>	
● Mahogany	484C		

*Pantone references quoted are approximate to give an indication of colour shade

● Typical Physical Properties

Ink	Viscosity (20°C) (cP)	Density (20°C) (g.cm ⁻³)	Surface Tension (mNm/m)	pH	Drying Time (23°C/50% RH) (secs)
● Ebony	3.30	0.91	27	5.20	15
● Pine	3.04	0.91	26	4.65	15
● Natural	3.03	0.92	27	4.82	15
● Cherry	3.26	0.91	27	4.26	15
● Mahogany	3.73	0.92	27	5.02	15
● Chestnut	3.63	0.91	26	4.11	15
● Oak	3.11	0.91	27	4.39	15
● Walnut	3.12	0.91	27	4.48	15

cP = centipoise

g.cm⁻³ = grams per cubic centimetre

mNm/m = milli Newton metre per metre

Disclaimer: It is your responsibility as the writing instrument manufacturer to establish the overall safety and fitness for purpose of the marker components incorporating our inks and to establish overall compliance to regulations and legislation related to the industry. All marker pen components should be thoroughly tested by you for compatibility with our inks. Multichem makes no guarantees (either express or implied) with respect to this technical data or our advice regarding component selection. Multichem will not accept any liability for any loss arising in connection with this technical data or the recommendations expressed within (other than that resulting from our gross negligence). Please contact your component suppliers for more specific advice regarding component suitability and selection. The information contained within this technical data sheet is not exhaustive and you should verify the performance of your final product

● **Light Fastness**

Ink	Light Fastness (8 hours exposure to mercury vapour source)
● Ebony	5
● Pine	5
● Natural	4
● Cherry	3
● Mahogany	5
● Chestnut	4
● Oak	2
● Walnut	2

5 = Excellent 4 = Very good 3 = Good 2 = Poor 1 = Very Poor 0 = Failure

Test Method Summary – The light fastness is assessed visually after exposure to a mercury vapour light source for 8 hours

● **Approvals***

US	European
ASTM D-4236 US TRA	Annex XVII EU Regulation 1907/2006 (Phthalates)
16 CFR 1500.3 (max reservoir capacity is 12ml)	
EPA TSCA	
Proposition 65	
CPSIA Total Lead in Substrates	
CPSIA Total Phthalates Content	

**the final marker pens may need separate approval*

● **Marker Storage Advice**

For optimum performance, markers should ideally be stored in the horizontal orientation and should be capped securely.

● **Component Selection Advice**

Component	Details
Nib	Polyester or acrylic
Reservoir	Polyester (with polypropylene wrapping)
Barrel	Polypropylene (PP)
Head/Tail Caps	Polypropylene (PP)

**this advice is given in good faith based on our current knowledge and does not dismiss the need to test thoroughly in your own components*

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Declaration of Conformity – Wood Shade Ink

ASTM D-4236 - Labelling Art Materials for Chronic Health Hazards, Labelling of Hazardous Art Materials Act (LHAMA) (US TRA)

Wood shade ink conforms to the requirements of ASTM D-4236 (*the Chronic Health Hazard Labelling Practice*).

The products have been evaluated, and established as conforming to the requirements of the standard by:

Dr. Woodhall Stopford
Duke University Medical Center
Division of Occupational and Environmental Medicine
Box 2914, Durham
NC 27710
USA

In order to fully comply with the requirements of the Labelling of Hazardous Art Materials Act (LHAMA), details or a sample of the finished product of which our ink is a component are required for evaluation.

Assuming a maximum marker reservoir size of 12 ml, the inks are not a toxic or hazardous substance as defined by 16 CFR 1500.3 of the Federal Hazardous Substances Act or its regulations under FHSA (16 CFR 1500.14(B)(8)) nor do they contain components that would require special labelling under 16 CFR 1500.14. They require no labelling under California's Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65).

EPA TSCA Inventory

All ingredients used in the production of **wood shade ink** are listed in the EPA TSCA inventory.

The formulations were reviewed by Duke University Medical Center to verify the listing in the EPA TSCA inventory of all ingredients used in their production.

Total Phthalates Content according to CPSIA Requirements and Annex XVII of EU Regulation 1907/2006 (REACH)*

Permanent inks were tested by following the method of EN 14372 and the results have been evaluated, according to the requirements of Annex XVII of EU Regulation 1907/2006 (REACH) and the CPSIA.

The inks were deemed to **PASS** according to Annex XVII of EU Regulation 1907/2006 (REACH).

The inks were deemed to **PASS** according to CPSIA requirements when tested in accordance with a reasonable testing procedure.


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Total Lead in Substrates according to CPSIA Requirements*

Permanent inks were tested by inductively coupled argon plasma spectrometry and the results have been evaluated, according to the requirements of CPSIA.

The inks were deemed to **PASS** according to CPSIA requirements.

Signed on behalf of Multichem Ltd:

Signed	Position	Date
	Senior Chemist	28/09/2012

*** This information is based on the results of tests and measurements performed by an independent certified testing service.**

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