

Technical Information

Art Marker Ink

● General Information

Blend your own colour shades using our alcohol-based PCM colour bases. 80 colours can be achieved by mixing the 9 colour base inks to the ratios supplied. Additional colours can be produced by using alternative colour mix ratios.

- Low odour cap-off formulation
- Easily blended from 9 colour bases
- Lightfast colours available
- Perfect for Arts & Crafts
- Suitable for use with traditional or brush nibs*
- Also available ready-blended
- Xylene, toluene and benzene free

Suitable for artwork and design on a wide range of surfaces including paper and card.

**brush nibs can be used with this ink. A brush nib changes shape in accordance with the pressure applied during use. This allows a range of line widths to be achieved, similar to that of a conventional brush.*

● Available Colours

Bases	
○ Clear Base	● Orange Base
● Red Base	● Aqua Base
● Pink Base	● Blue Base
● Bright Yellow Base	● Black Base
● Yellow Base	

● 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)
○ Clear Base	3.30	0.94	26	4.65	15
● Red Base	3.41	0.93	26	6.17	15
● Pink Base	3.01	0.93	26	6.01	15
● Bright Yellow Base	3.11	0.94	26	4.82	15
● Yellow Base	3.12	0.94	26	4.26	15
● Orange Base	3.28	0.93	26	5.54	15
● Aqua Base	3.16	0.93	26	4.01	15
● Blue Base	4.00	0.94	26	4.89	15
● Black Base	4.28	0.96	27	4.95	15

cP = centipoise

g.cm⁻³ = grams per cubic centimetre

mNm/m = milli Newton metre per metre

● **Mixing Ratio Information**

PCM Number	Clear Base	Red Base	Pink Base	Bright Yellow Base	Yellow Base	Orange Base	Aqua Base	Blue Base	Black Base
061/R	14.09	70.42			14.08			1.41	
062/P			97.09	2.91					
070/P	33.22		66.45	0.33					
071/PY	96.04		1.48		2.48				
063/R			90.91	9.09					
066/PY	94.34		0.63		5.03				
048/Y					100.00				
049/Y	16.67				83.33				
050/Y	21.74			43.48	34.78				
051/Y	90.09				9.01	0.90			
086/G	18.19			36.36			45.45		
094/GY	18.75				62.50		18.75		
095/GY	64.51				32.26		3.23		
096/YG	88.69				11.09		0.22		
087/GB					35.72	3.57	50.00	10.71	
076/B	50.00						50.00		
082/B	71.43						28.57		
083/B	90.91						9.09		
084/B	90.81			0.11			9.08		
077/B						11.77	29.41	58.82	
075/BP	94.74		2.10				3.16		
073/P	88.69		11.09	0.22					
067/Bn					16.13	80.65		3.22	
068/Bn					16.39	81.97		1.64	
058/BnY					75.76	22.73		1.51	
021/BGr	99.78								0.22
020/BGr	98.36			0.04			0.60		1.00
019/BGr	91.62			0.08			4.15		4.15
018/BGr	79.80			0.20			10.00		10.00
017/BGr	66.45			0.33			16.61		16.61
036/Gr	99.86						0.01		0.13
035/Gr	99.44						0.04		0.52
034/Gr	99.18						0.06		0.76
033/Gr	98.69						0.09		1.22
032/Gr	97.59						0.18		2.23
046/BnGr	99.44				0.08	0.22	0.04		0.22
045/BnGr	98.83				0.30	0.46	0.03		0.38
044/BnGr	97.70				0.62	0.78	0.12		0.78
043/BnGr	95.58				1.20	1.49	0.24		1.49
042/BnGr	94.58				1.47	1.83	0.29		1.83

● **Mixing Ratio Information**

PCM Number	Clear Base	Red Base	Pink Base	Bright Yellow Base	Yellow Base	Orange Base	Aqua Base	Bleu Base	Black Base
064/R			55.56		44.44				
072/P	99.01		0.99						
065/O	35.72		28.57	35.71					
056/O	68.18		9.09	22.73					
057/YO	47.62				47.62	4.76			
052/Y	71.43			9.52	19.05				
053/YG					97.09	0.97	1.94		
093/GY				41.66		29.17	29.17		
085/GY	14.60				72.99	1.46		10.95	
054/Y	80.00				20.00				
088/GB	26.32				21.05		52.63		
089/GB	52.63				21.05		26.32		
092/GB	82.51			0.99			16.50		
090/G	85.10				10.64		4.26		
091/GB	31.25				6.25		62.50		
078/B		2.78					27.78	69.44	
079/BP	97.80	0.49	0.49					1.22	
080/B	97.08	0.49						2.43	
081/BP	98.91	0.24	0.24					0.61	
074/BP	83.34		8.33				8.33		
059/BnY	74.63				14.93	9.95		0.49	
069/Bn		3.29			32.97	54.95		8.79	
060/BnY	14.29				71.43	10.71	3.57		
055/BnY	78.81				17.51	2.63	1.05		
047/Bl	33.33								66.67
026/GGr	99.56				0.11		0.11		0.22
025/GGr	97.89				0.53		0.53		1.05
024/GGr	92.67				1.83		1.83		3.67
023/GGr	77.77				5.56		5.56		11.11
022/GGr	55.56				11.11		11.11		22.22
031/Gr	92.78						0.53		6.69
030/Gr	90.97						0.67		8.36
029/Gr	85.56						1.07		13.37
028/Gr	70.87				2.65				26.48
027/Gr	67.96				2.91				29.13
041/BnGr	89.64				3.79	3.16	0.25		3.16
040/BnGr	69.69				7.87	11.81	0.79		9.84
039/BnGr	71.75				4.50	10.75	2.25		10.75
038/BnGr	62.34				5.83	14.50	2.83		14.50
037/BnGr	43.48				8.69	21.74	4.35		21.74

● Light Fastness

Ink	Light Fastness (8 hours exposure to mercury vapour source)
○ Clear Base	-
● Red Base	4
● Pink Base	2
● Bright Yellow Base	2
● Yellow Base	3
● Orange Base	3
● Aqua Base	4
● Blue Base	2
● Black Base	5

5 = Excellent

4 = Very good

3 = Good

2 = Poor

1 = Very Poor

0 = Failure

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

● Light Fastness

PCM Number	Light Fastness (8 hours exposure to mercury vapour light source)
061/R	4
062/P	2
070/P	2
071/PY	1
063/R	2
066/PY	1
048/Y	5
049/Y	5
050/Y	5
051/Y	5
086/G	4
094/GY	4
095/GY	4
096/YG	4
087/GB	3
076/B	4
082/B	3
083/B	2
084/B	2
077/B	2
075/BP	1
073/P	1
067/Bn	3
068/Bn	3
058/BnY	2
021/BGr	5
020/BGr	5
019/BGr	5
018/BGr	5
017/BGr	5
036/Gr	5
035/Gr	5
034/Gr	5
033/Gr	5
032/Gr	5
046/BnGr	5
045/BnGr	5
044/BnGr	5
043/BnGr	5
042/BnGr	5

5 = Excellent

4 = Very good

3 = Good

2 = Poor

1 = Very Poor

0 = Failure

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

● Light Fastness

PCM Number	Light Fastness (8 hours exposure to mercury vapour source)
064/R	3
072/P	1
065/O	2
056/O	1
057/YO	3
052/Y	5
053/YG	5
093/GY	4
085/GY	2
054/Y	3
088/GB	4
089/GB	3
092/GB	2
090/G	3
091/GB	4
078/B	2
079/BP	1
080/B	1
081/BP	1
074/BP	2
059/BnY	2
069/Bn	2
060/BnY	3
055/BnY	3
047/Bl	5
026/GGr	5
025/GGr	5
024/GGr	5
023/GGr	5
022/GGr	5
031/Gr	5
030/Gr	5
029/Gr	5
028/Gr	5
027/Gr	5
041/BnGr	5
040/BnGr	5
039/BnGr	5
038/BnGr	5
037/BnGr	5

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

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

● **Approvals**

US	European
ASTM D-4236	EN71-9:2005
16 CFR 1500.3 (max reservoir capacity is 20ml)	EN71-3:1994
TSCA	TRA
Proposition 65	Annex XVII EU Regulation 1907/2006 (Phthalates)
CPSIA Total Lead in Substrates	
CPSIA Total Phthalates Content	

NB: our inks are suitable for use in marker pens intended for children of 3 years and above, however it is the pen manufacturer's responsibility to establish the overall safety and fitness for purpose of the product incorporating Multichem inks.

● **Marker Storage Advice**

For optimum performance, markers should ideally be stored capped securely.

● **Component Selection Advice**

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