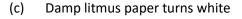


Allow **1** mark for the correct meanings linked to context but incorrect way around



(d) Iron(III)

2

1

1

1

1

1

[6]

	The water le	evel was above the spots	1
(b)	3		1
(c)	A		1
(d)	(distance m	oved by dye A) 38 (mm) allow values in range 36-40	1
	(distance fro 102 (mm)	om start line to solvent front) allow values in range 101-103	1
	<u>38</u> 102	allow ecf from Table 1	1
	0.37254	allow values in range 0.35 – 0.39	1

accept 0.37 with no working shown for **5** marks

[9]

M3.(a) additive

(b) colour 3 is a mixture of colours 1 and 2

any **two** from:

accept E-number or additive instead of colour ignore comments about height / level

- colour 1 is made up of only one colour / dye
- colour 2 is made up of only one colour / dye
- colour 3 is made up of two colours / dyes
 or
 more colours (than colours 1 and 2)

2

1

(ii) 3 / three

- (iii) the colour / E104 is not on the same level as any of the colours in the food accept E104 does not match

 (b) (i) to improve the appearance of the food ignore adds yellow / colour ignore taste / flavour

> (ii) further / or different tests (for harmful effects) or obtain more evidence (that it is harmful)
> allow do a survey / study

[5]

1

1

1

1

M5.		(a)	to improve the appearance of the drink	1
		bec	ause they are permitted colours	1
	(b)	(i)	chromatography	1
		(ii)	three / 3	1
		(iii)	because one colour / spot / E102 <u>matched</u>	1
			because the other / two colours / spots / E104 and E110 did <u>not match</u> if no other mark awarded allow because the drink did not contain E104 and E110 or because the drink contained E102 for 1 mark accept <u>only E102 matched</u> for 2 marks	1

[6]

- **M6.** (i) any **two** from:
 - A has four colours(*)
 - B has three colours(*)
 (*) if first two bullets not stated
 accept A has more colours (than B) or B has less colours (than A)
 for 1 mark only
 - **A / B** have two colours the same
 - **B** has one different colour
 - (ii) chromatography

M7. drinks / colours B and C are safe

drinks / colours A and D are not safe

accept a <u>pair</u> of one safe colour **and** one not safe colour identified for **1** mark accept A, B, C and D all contain one safe colour for **1** mark ignore references to shading

[2]

[3]

2

1

1