

:

1 φ **(NJC)**

(2005 /11/ 27)

(2004/ 9 /12)

.(Chemical Labeling)

0.013

.()

Abstract

Due to the serious disadvantages arisen from the illegality of food processing by unlicensed soft drink manufactures, a new method has been developed to avoid this problem using chemical labeling. The results indicate that D-xylose monosaccharide is suitable for this specific purpose with optimum concentration equal to 0.013M with no affect upon refractive index, density and viscosity. This substance can be detected using Bial's test. Due to the interference between the colour of Bial's test with coloured soft drinks, this test has been modified which can be detected through precipitate instead of solution colour. The last modification has been applied for seven different kinds of soft drinks indicating the successful of presented idea.

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-1

-2

-3

-4

-5

-6

-7

-8

-9

-10

-11

(Bial's Test)

[1]

[2]

()

100
%1
(M=0.066608mol./l)
[2]
:
1.0 1.0
(100 °C)
[4,3]
[6,5]
100 67
[6] 69
:
:
)
(Fluka BDH
:
1.0
1.0
1.0
1.0
:(Bial's Reagent)
[2]
:
1.0 1.0
1.0

)
(
:
(1)

(1)

) (()	()	() (0.066608M)	No.
-----	+ve	1	1	3	1
-----	+ve	1	1	2	2
	+ve	1	1	1.5	3
-----	+ve	1	1	1	4
	+ve	1	1	0.5	5
-----	+ve	1	2	1	6
-----	+ve	1	2	0.5	7
		1	2	0.25	8
	+ve	0.5	2	0.5	9

0.5
2.0

100
0.2 0.19999
0.2 100
2.5 150.13
0.5 (C₅H₁₀O₅)
(100 1)
0.5 0.066608
[7] 2.0

0.01332

67

:

[6] 100

(Panel Test)

100

0.2)

(

[9,8]

(100 0.2)

.2

(100 0.2)

(2)

(100 0.2)

		(gm/cm ³)	(Poise)
	1.3480	1.036182	1.04912
	1.3475	1.037686	1.07285

:

15

. 0.3

()

(3)

0.5

0.3

(3)

+ve	-ve	
+ve	=	
-ve	=	

:

2.5

0.01332

0.3

)

15 100 °C

(

0.5

[6]

15

()

()

()

:

-5

5

[6]

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