

()

/

.

20

165000-5000

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**Determination of heavy metals percentage in
kohl and compared with eye brew that are available in
locally markets**

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Abstract

The atomic absorption technique was used to determine heavy metal (Pb, Ni, Cr, Cd, Cu & Fe) in three types of kohl and non grinding kohl rock in addition of two types of commercials eye brew.

From this studying there are increase in the percentage of lead element (pb) in the samples of kohl, it reach from (5% - 16.5%) or (5000 -165000) ppm and it must not more than 20 ppm in all type of cosmetics, also there are increase in iron element (Fe) in eye brew because it made from organic matter & wax and pigment contain Fe element in its composition and there are also increase in the another elements like (Cd, Cr, Cu and Ni).

..()

.(2 1)

° (75-70)

%10

.(10)

(8)

417 20 .(2)
0.02 .(3)

(4) 0.003 417 (9)

0.02 417 (9)

%45 %15 %40

(4) 0.05 417 . .

(9).

417 . . .

(5)

(Talc)

0.3

$^2 / 1$ $^2 / 0.2$

(10).

-

(1)

(12).

(11).

:

. byan my fair

:

(Pb, Fe, Cd, Cr, Ni and Cu)

Accu Standard Inc

(1000)

10 8 6 4 2 1 0.5

0.5

(9) 500

4 : 1

50

H.C.L

$$\frac{\quad}{\quad} \times \quad = \left(\frac{\quad}{\quad} \right)$$

$$4^{-10} * \left(\frac{\quad}{\quad} \right) = \%$$

()

25

Myfair

Tween

525

165250

(1)

()

myfair

29 6

%16

20

(1):

<i>Fe</i>	<i>Fe</i>	<i>Pb</i>	<i>Pb</i>		
5.288	52883.2	0.00296	29 . 6	my fair	-1
1.0516	10516	0.00797	79.7	byan	-2
0.0448	448.5	16.525	165250.2		-3
0.0492	492.96	13.5814	135814.9		-4
0.03783	378.27	13.61	136144.4	()	-5
0.233	2332.4	0.5082	5082.3		-6

Cu , Cr ,Ni , Cd

(2):

<i>Cu ppm</i>	<i>Cr ppm</i>	<i>Ni ppm</i>	<i>Cd ppm</i>		
6.3		11.34		Myfair	-1
79.7		21.51		byan	-2
19.24		7.78	37.78		-3
35.2		24.15	24.15		-4
7.11	11.5	33.97	12.36	()	-5
105.6		79.8	13.039		-6

:(3)

	100	(/)	-1
	10	(/)	-2
		(/)	-3

my fair

:(4)

	100	(/)	-1
	10	(/)	-2
		(/)	-3

:

79.7-29,6

.1

%16.5-13.5

5082

20

.2

37.78-12.36

.3

11.5

21.5-11.34

.4

37.78-24.15

79.8

.5

%5.28-1.05

2332.4

493-378.3

105.6-6.3

.6

.7

.8

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