



الخلاصة:

Blowing Material

(0-25)%

Abstract:

The aim of this research to use extracted natural material from waste product of Okra as blowing material by simple method for production sponge rubber with good damping properties. The sample of rubber was prepared with adding different percent from extracted material of waste product of Okra (0-25)% to study the effect of this material on properties of natural rubber. When we added blowing material that extracted from plant of Okra ,we get productions of cells inside the sample due to release gases and get sponge rubber. This mean is extracted material of waste product of Okra is suitable to use as blowing material to get sponge rubber and this work exists with a good replacement for synthetics blowing materials avoiding their toxicity and their highly cost.

UV

[1,2]

[3]

[4]

:Sponge rubber

(Hydazides, Dinitrosopentamethylene tetramine and [5]
Azodicarbonamide)
(104, 192 and 202°C)

[6]

Closed Cell Sponge ()
expanded)

Rubber
(rubber

() [5]

Open Cell Sponge Rubber
sealing

[7]

pores

Cells

[8]

[9]

:(Blowing Material)

(Blowing Material C)C

40°C

.1

.2

Octagon 200 Test Sieve SHAKER))

.3

180

(C) .4

(Master Batch)

3%)SVR3
 (pphr) (1) . [10]
 . ((1)

Compounding ingredients	pphr
SVR3	100
	2
	5
MBTS	1
	2.75

(0, 5, 10, 15, 25)% (C)
 MBTS .(2) (1) SVR3
 . (C)% (2)

%	C%
100	0
95	5
90	10
85	15
75	25

(Mixing process)

(Mixing)

(Comerio Ercole Busto Avsizo)

(2-Roll Laboratory Mill)

(300 mm)

(150mm)

70C°

(1)

(6.5× 180 ×200) mm

150°C

.1

(3mm 45mm)

.2

(30 min.) 150°C 200psi

.3

(24hrs.)

.4

(Microscopically Test for Specimens Sections Surfaces)

/

(Nikon , Eclipse , ME 600 L , made in Japan)

(3-13)

(Nikon Digital Camera DXM 1200 F)

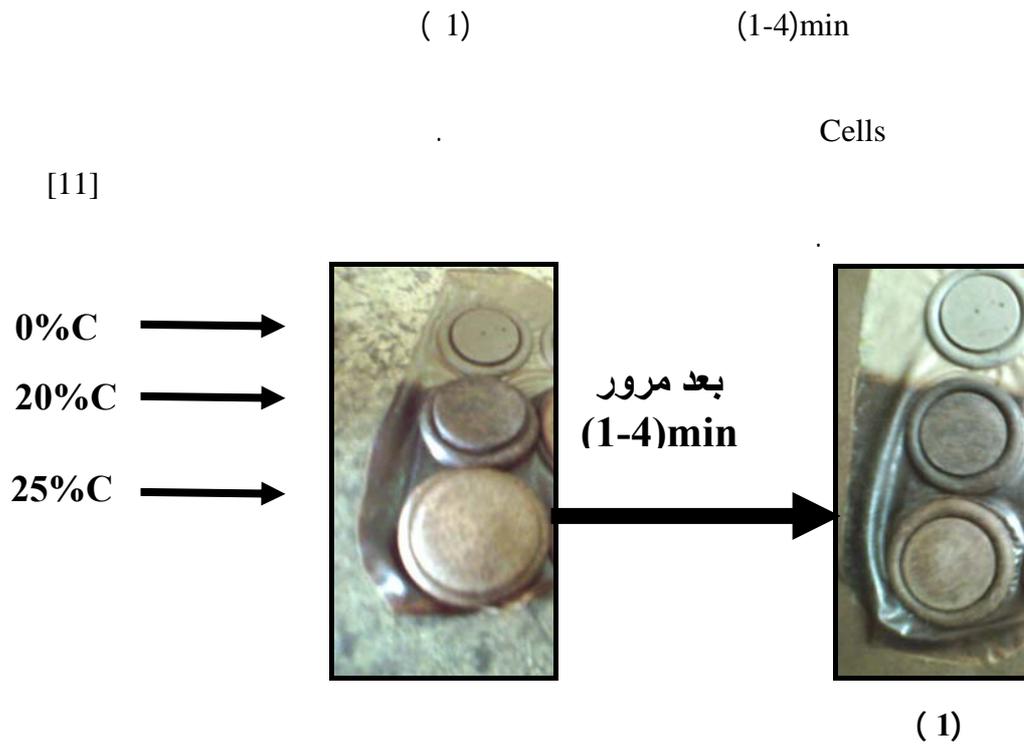
(50X)

(Lucia G)

—:—

: C

C

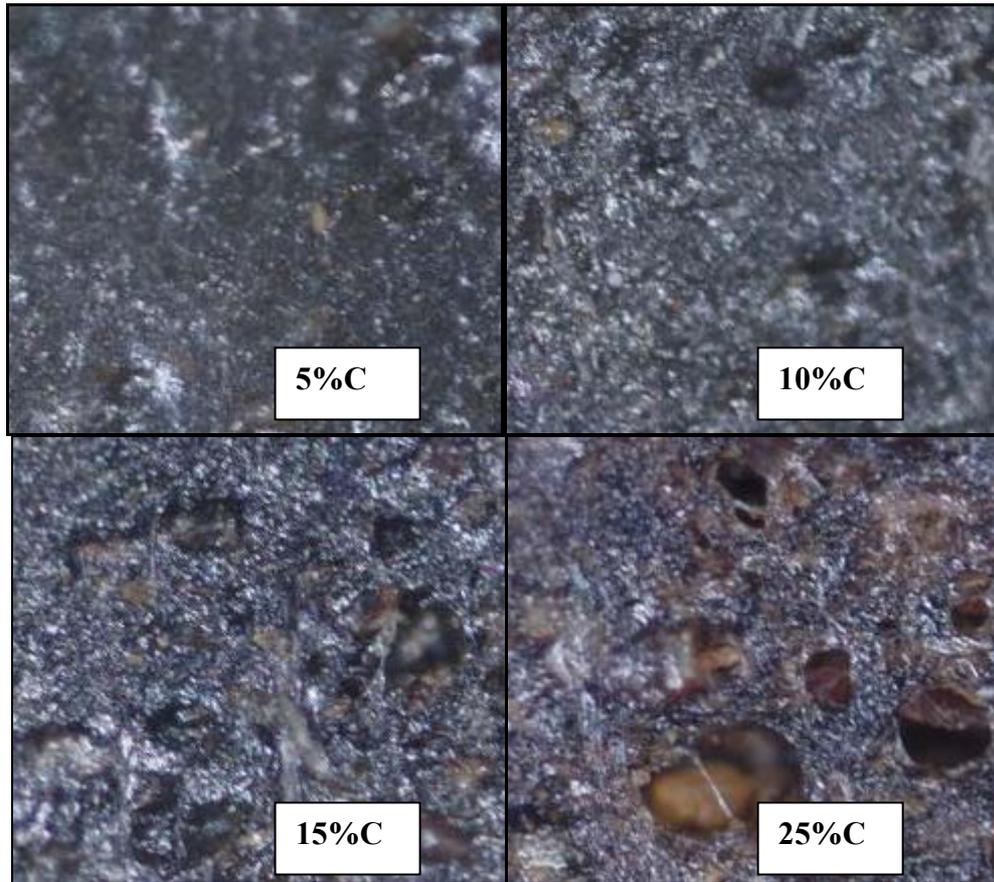


The Results of Microscopically Test for Section Surface of Specimen

(0,5,10,15,25)% C
C

(0%C) .(2)
(5%C)





C

(50x)

(2)

C

C

(0,5,10,15,25)%

(2)

C

(6) (2)

C

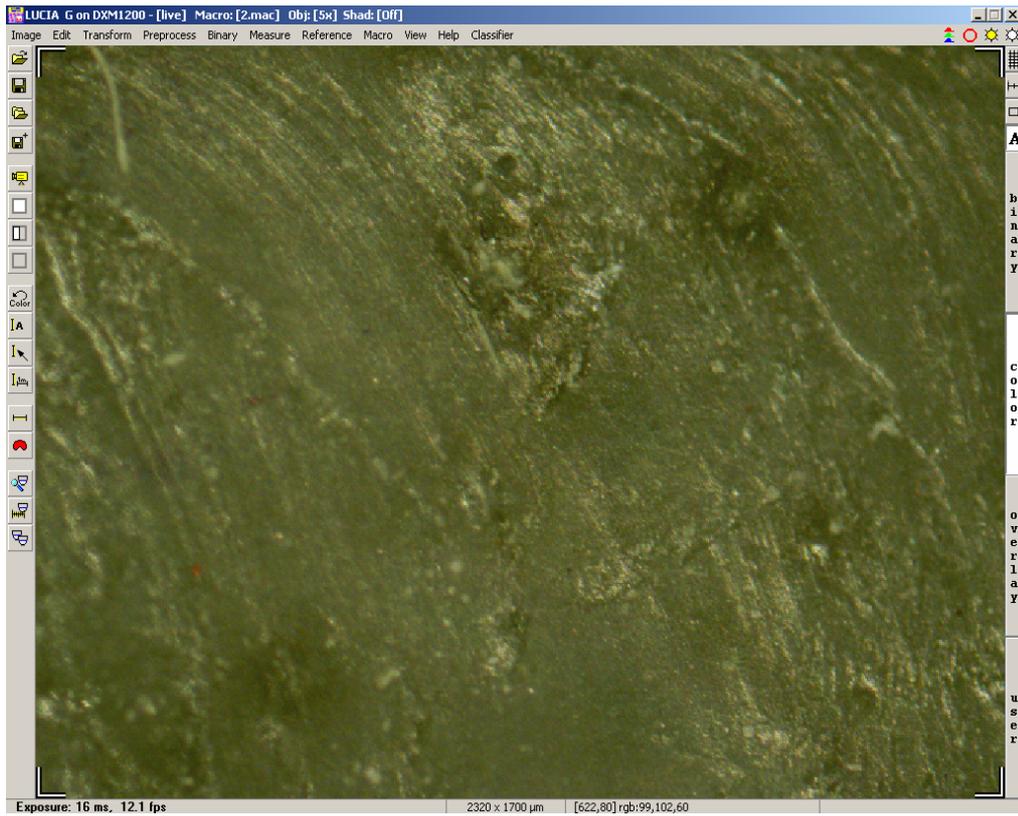
C

(3)

C

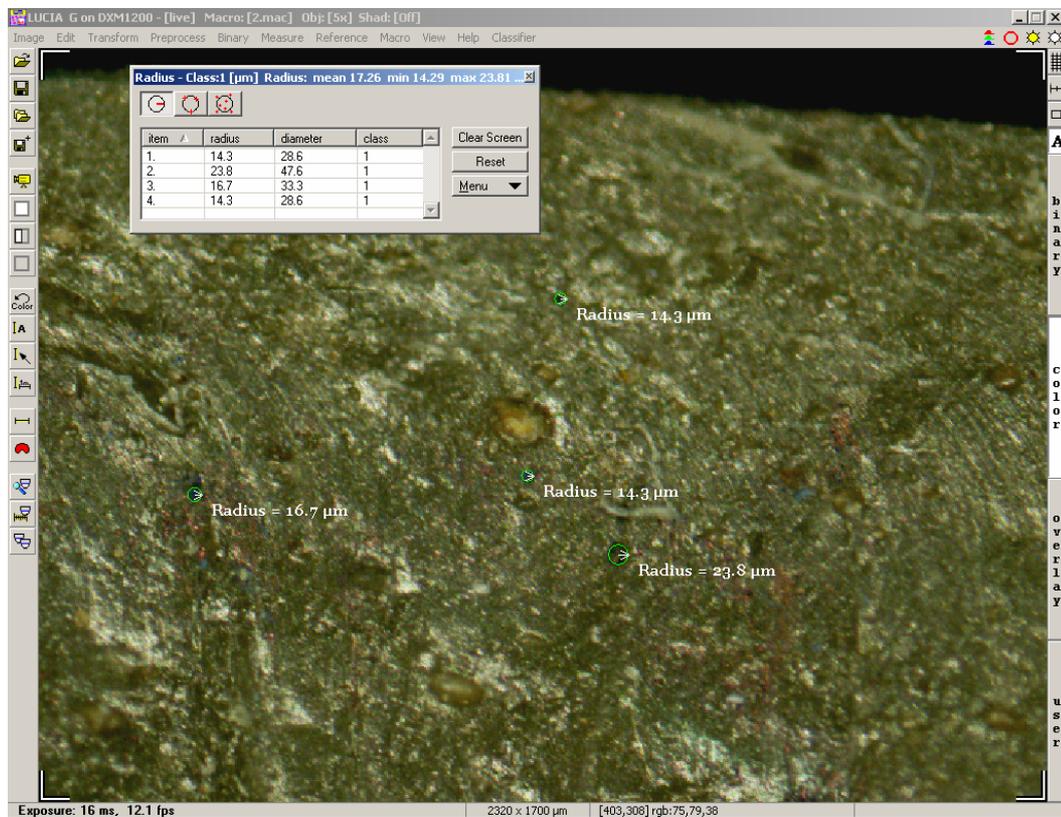
(3)

(μm)	C
0	0%
17.275	5%
28.1	10%
55.22	15%
69.54	25%



(50x)

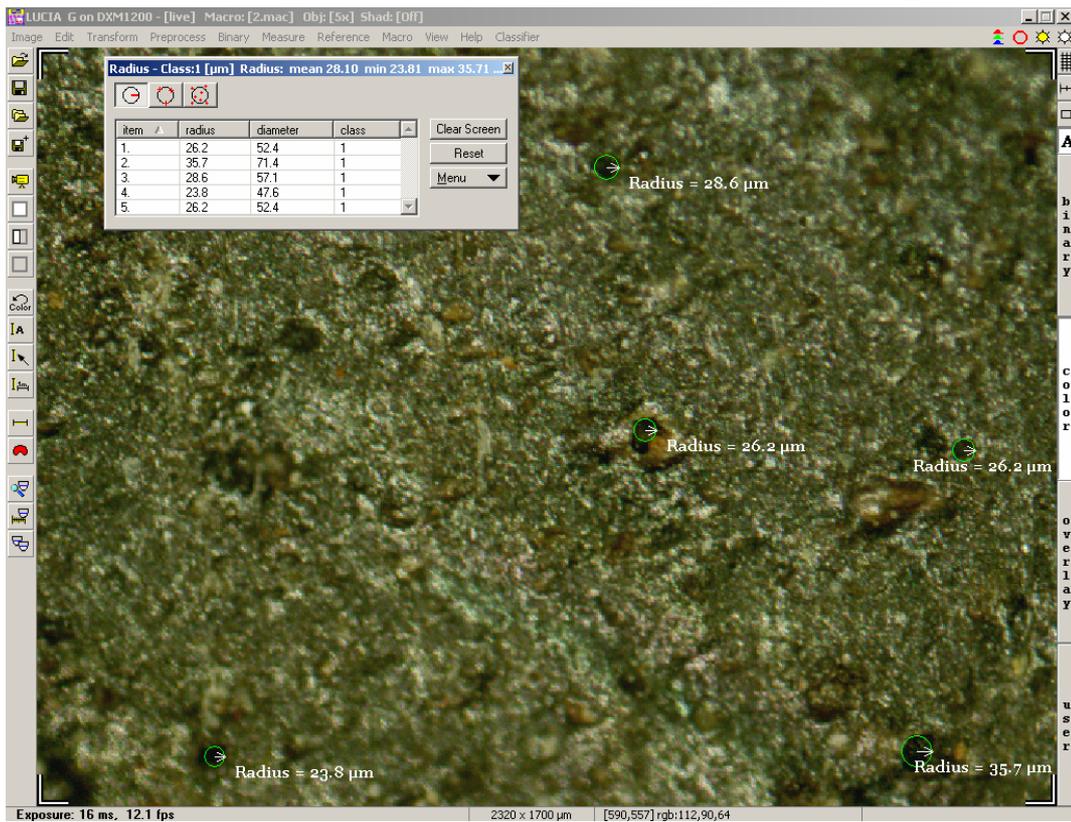
(2)



(5% C)

(50x)

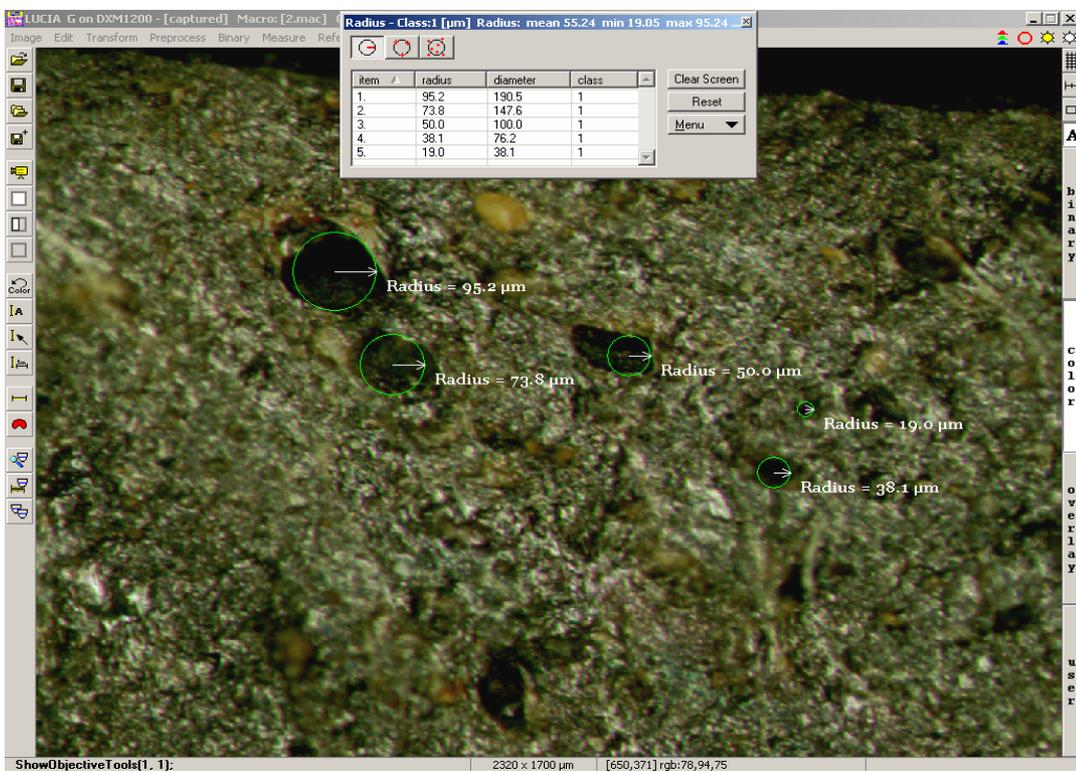
(3)



(10%C)

(50x)

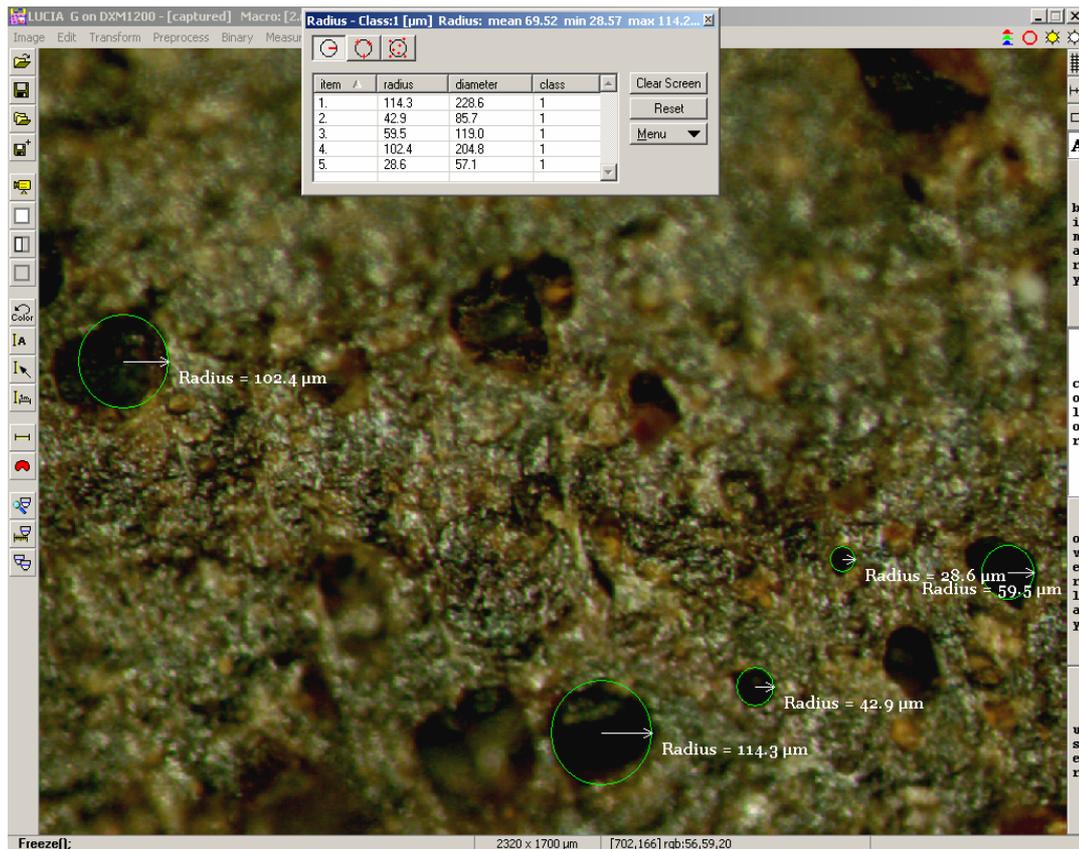
(4)



(15%C)

(50x)

(5)



(25%C)

(50x)

(6)

-:

(C)

.1

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