

## SHRIRAM INSTITUTE FOR INDUSTRIAL RESEARCH

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## TEST CERTIFICATE

000134071

Issued to:

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J.O.No. Reg.No. 906-111-1297 1190005

Date

04-07-2009

GC-01 (REV-04)

Your Ref. No.

Kind Attn: MR. SANJAY MATHUR, SR. MANAGER

Sample Particulars:

ONE SAMPLE OF A-FLAX ELASTROMATIC NITRILE RUBBER INSULATIONS MATARIAL WAS RECEIVED.

## TEST RESULTS

PROTOCOL

As per guidelines of JIS – Z 2801-2000

TEST

Evaluation of Antimicrobial activity of the rubber samples.

- 1) Antimicrobial Activity against Escherichia coli ATCC 8739
- 2) Sample Size : 50 mm × 50 mm x 8mm

S. No.	Control Sample (marked as untreated)	Count per piece, (in cfu/piece)	Conc. of Inoculum {Average count , (in cfu/piece)}
1.0	Number of bacteria inoculated per piece at 0 Hrs. (A)	$3.1 \times 10^{5}$ $3.5 \times 10^{5}$ $3.0 \times 10^{5}$	3.2 × 10 <sup>5</sup>
2.0	Number of bacteria inoculated per piece after 24 Hrs incubation. (B)	$3.0 \times 10^{2}$ $4.0 \times 10^{2}$ $5.0 \times 10^{2}$	$4.0 \times 10^2$

S. No.	Sample (marked as treated)	Count per piece, (in cfu/piece)	Conc. of Inoculum {Average count (C), (in cfu/piece)}	Antimicrobial Activity after 24hrs {log (B/C}
	Number of bacteria inoculated	10		
3.0	per piece after 24 Hrs	10	10	1.60
	incubation. (C)	10		1100

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TEST: Evaluation of Antimicrobial activity of the rubber samples.

1) Antimicrobial Activity against Staphylococcus aureus ATCC 6538

2) Sample Size :  $50 \text{ mm} \times 50 \text{ mm} \times 8 \text{mm}$ 

S. No.	Control Sample (marked as untreated)	Count per piece, (in cfu/piece)	Conc. of Inoculum {Average count , (in cfu/piece)}
4.0	Number of bacteria inoculated per piece at 0 Hrs. (A)	$2.2 \times 10^{5}$ $2.4 \times 10^{5}$ $2.8 \times 10^{5}$	2.5 × 10 <sup>5</sup>
5.0	Number of bacteria inoculated per piece after 24Hrs incubation. (B)	$3.0 \times 10^{2}$ $8.0 \times 10^{2}$ $5.0 \times 10^{2}$	5.3× 10 <sup>2</sup>

S. No.	Sample (marked as treated)	Count per piece, (in cfu/piece)	Conc. of Inoculum {Average count (C), (in cfu/piece)}	Antimicrobial Activity after 24hr {log (B/C}
6.0	Number of bacteria inoculated per piece after 24 Hrs incubation. (C)	10	10	1.72
		10		

DOR: 15-06-09 DOC: 04-07-09

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