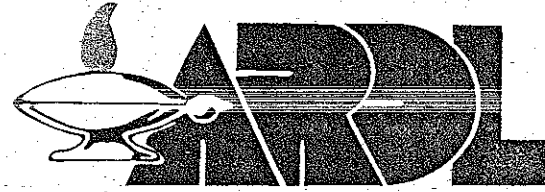


**"Progress Through Innovation, Technology
and Customer Satisfaction"**



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October 20, 2005

- TEST REPORT -

**PN# 64298B
PO# Wire Transfer**

Prepared for:

Shamini Shanmugam
GB Industries Sdn. Bhd.
44-1 Jalan USJ 10/1b
47620 Subang Jaya Selangor Malaysia

Approved By: _____

Jim Drummond

Approved By: _____

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AN A2LA ACCREDITED LABORATORY
MEMBER OF ACIL: THE ASSOCIATION OF INDEPENDENT SCIENTIFIC,
ENGINEERING AND TESTING FIRMS

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SUBJECT: Physical testing on material submitted by the above company to ASTM D 120-02a test specification.
PO# Wire Transfer

RECEIVED: Twelve pairs of orange gloves identified as Novax Class OO Type I.

POLYMER IDENTIFICATION, ASTM D 3677-90(95)

Instrument: Perkin-Elmer Spectrum BX Spectrometer
Resolution: 4.0
Number of Scans: 6
Method of Preparation: Film

RESULTS

Polyisoprene

DIMENSIONS, PARA. 17.1 - 17.3.1

Three gloves tested.
Average of four readings reported.

REQUIREMENTS: Thickness Crotch, mm = 0.46 - 1.02
Thickness Palm & Back, mm = 0.51 - 1.02

	<u>LENGTH, mm</u>	<u>WIDTH, mm</u>	<u>PALM, mm</u>	<u>CROTCH, mm</u>	<u>BACK, mm</u>
Glove 1	285	230	0.496	0.496	0.488
Glove 2	287	230	0.483	0.457	0.484
Glove 3	292	230	0.452	0.444	0.432

ORIGINAL PHYSICAL PROPERTIES, ASTM D 412-98a(02)e1, D 2240-03, D 624-00e1

Die C dumbbells tested at 20 in/min.

	<u>RESULTS</u>	<u>REQUIREMENTS</u>	<u>PASS/FAIL</u>
Shore A Durometer, points	37	47 max.	Pass
Tensile Strength, MPa	26.8	17.2 min.	Pass
Ultimate Elongation, %	675	600 min.	Pass
100% Modulus, MPa	0.889	-	-
200% Modulus, MPa	1.25	2.1 max.	Pass
300% Modulus, MPa	1.76	-	-
Tear Strength Die C, kN/m	48.6	21 min.	Pass

October 20, 2005

Shamini Shanmugam
GB Industries Sdn. Bhd.

PUNCTURE RESISTANCE, ASTM D 120-02a

Palm area punctured at 20 in/min.

	<u>RESULTS</u>	<u>REQUIREMENTS</u>	<u>PASS/FAIL</u>
Puncture Resistance, kN/m	36.9	18 min.	Pass

OZONE RESISTANCE, ASTM D 1149-99

Test specimens per ASTM D 518-99, Method A

Specimens exposed 3 hrs. @ 50 pphm @ 40°C, 20% elongation.

Observations made at 7x magnification.

	<u>RESULTS</u>	<u>REQUIREMENTS</u>	<u>PASS/FAIL</u>
	No cracks	No cracks	Pass

HEAT-AGED PROPERTIES, ASTM D 573-04

Specimens aged 168 hrs. @ 70°C in a forced air oven.

	<u>RESULTS</u>	<u>REQUIREMENTS</u>	<u>PASS/FAIL</u>
Durometer, point change	0	-	-
Tensile Strength, % of original	100	80 min	Pass
Elongation, % of original	114	80 min.	Pass

A-C PROOF TEST ASTM D120-95, SECTION 18.4.2

The glove was filled with tap water and immersed in water to a depth about 1 ½ inches from the cuff. A metal rod was lowered inside the glove as one electrode and a metal rod placed in the water tank outside the glove as the other electrode. A voltage was applied to the electrodes at an increasing rate of 1000 V/s until specified voltage for each class of glove was reached. For Class 00 gloves a maximum voltage of 2500 V and a maximum current of 8 mA were used. For Class 0 gloves a maximum voltage of 5000 V and a maximum current of 12 mA were used. The specified voltage was applied for a period of 3 minutes after which the voltage was lowered to 0 V.

	<u>Pass/Fail</u>	<u>Measured Current</u>
1	Passed	3 mA
2	Passed	3 mA

October 20, 2005

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A-C MOISTURE ABSORPTION/PROOF TEST ASTM D120-95, SECTION 18.4.4

The glove was filled with tap water and immersed in water to a depth about 1 ½ inches from the cuff. The glove was soaked for a period of 16 hours. A metal rod was lowered inside the glove as one electrode and a metal rod placed in the water tank outside the glove as the other electrode. A voltage was applied to the electrodes at an increasing rate of 1000 V/s until specified voltage for each class of glove was reached. For Class 00 gloves a maximum voltage of 2500 V and a maximum current of 8 mA were used. For Class 0 gloves a maximum voltage of 5000 V and a maximum current of 12 mA were used. The specified voltage was applied for a period of 3 minutes after which the voltage was lowered to 0 V.

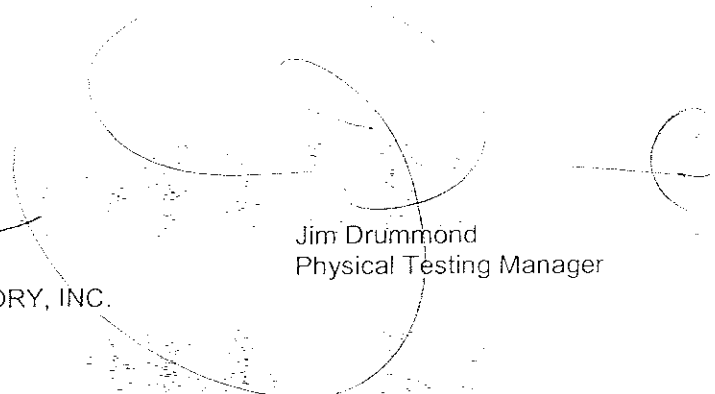
	<u>Pass/Fail</u>	<u>Measured Current</u>
1	Passed	5 mA
2	Passed	5 mA

A-C BREAKDOWN TEST ASTM D120-95, SECTION 18.4.3

The glove was filled with tap water and immersed in water to a depth about 1 ½ inches from the cuff. A metal rod was lowered inside the glove as one electrode and a metal rod placed in the water tank outside the glove as the other electrode. A voltage was applied to the electrodes at an increasing rate of 1000 V/s until specified voltage for each class of glove was reached. For Class 00 gloves a maximum voltage of 4000 V was used. For Class 0 gloves a maximum voltage of 6000 V was used.

	<u>Pass/Fail</u>	<u>Measured Current</u>
1	Passed	5 mA
2	Passed	6 mA


Sandy Jones
Project Technician
AKRON RUBBER DEVELOPMENT LABORATORY, INC.


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Physical Testing Manager