



TEST LABORATORY

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SFI Spec 3.2A Test R&D

Company Name:	Molecule Laboratories	Report Number:	06-368
Address:	5458 Gateway Plaza Dr.	Date of Report:	10/02/06
City, State, Zip:	Benicia, CA 94510	Purchase Order No.:	Ck# 1154
Contact:	Tim Baker	Phone:	951-314-0600

Type of Test: **Thermal Protective Performance**
 Part Number/Name: Samples #1 - 7
 Specification/Revision: SFI Spec 3.2A Driver Suits/Effective: November 29, 2001
 Test Procedure: Paragraph 5.1
 Date of Test: 09/29/06

Requirements:

SFI Spec 3.2A requires the minimum TPP rating (cal/cm²) as shown below:

SFI 1 ≥ 6	SFI 15 ≥ 60
SFI 3 ≥ 14	SFI 20 ≥ 80
SFI 5 ≥ 19	SFI 25 ≥ 100
SFI 10 ≥ 38	SFI 30 ≥ 120

Results:

Sample	Test Number	Weight (ounces/yd ²)	Thickness (mils)	TPP
1	060929AA	13.62	93	25.9
2	060929AB	14.73	97	23.1
3	060929AC	14.94	101	23.4
4	060929AD	14.41	94	27.5
5	060929AE	13.82	94	23.9
6	060929AF	13.75	108	24.8
7	060929AG	13.63	95	26.7

This report applies only to the actual samples tested. SFI Laboratory does not certify, warrant or guarantee any products manufactured by others. Samples discarded within 1 year unless otherwise requested in writing by manufacturer.

SFI LABORATORY

Michael J. Sherbo
Laboratory Manager

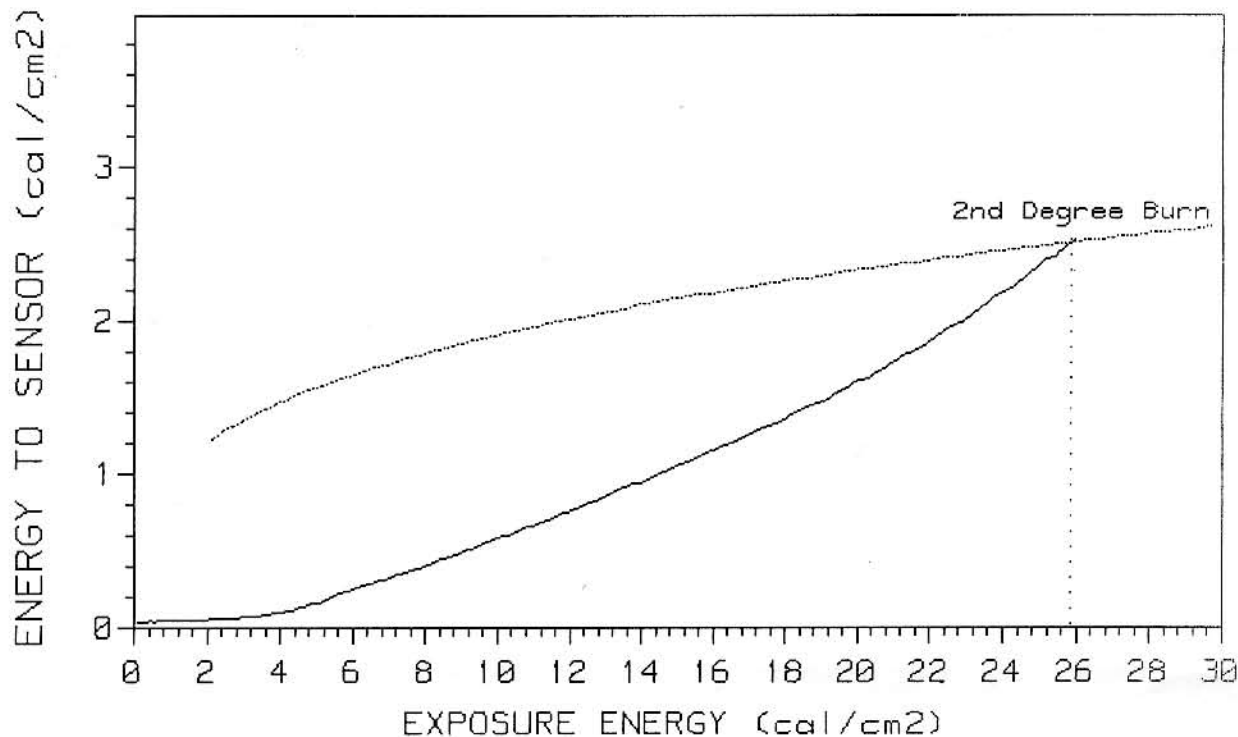
THERMAL PROTECTIVE PERFORMANCE REPORT

File name 060929AA
Test time Fri 29-Sep-06 11:32
Fabric type 2 Layer
Fabric weight 13.62 oz/yd²
Fabric thickness 93 mils
Heat flux 2.02 cal/(cm²*sec)
Avg scan interval .06 sec
Head distance 0 in
TPP time 12.8 sec
TPP value 25.9 cal/cm²
FFF value 1.9 (cal/cm²)/(oz/yd²)
Pain time 7.7 sec

Comments:

Molecule Labs
* Fabric Thickness mils
SFI Spec 3.2A
Test Report # 06-368 R&D

THERMAL PROTECTIVE PERFORMANCE



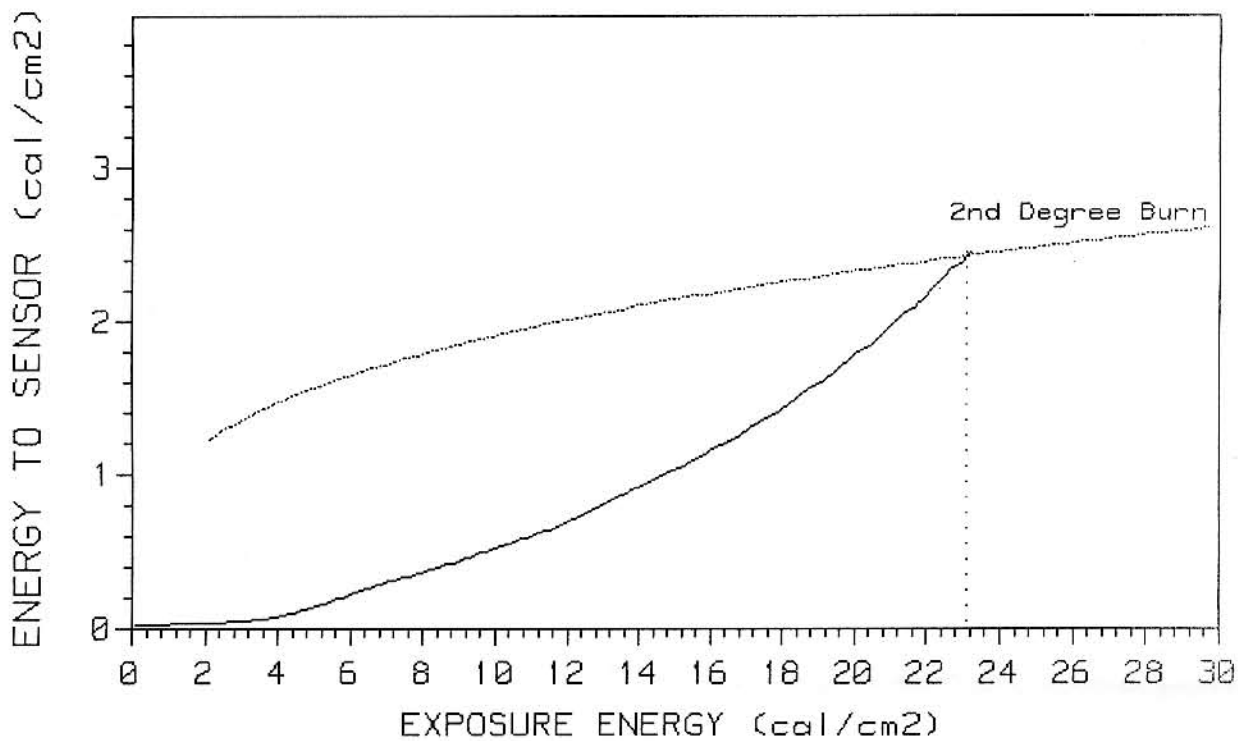
THERMAL PROTECTIVE PERFORMANCE REPORT

File name 060929AB
Test time Fri 29-Sep-06 11:36
Fabric type 2 Layer
Fabric weight 14.73 oz/yd²
Fabric thickness 97 mils
Heat flux 2.02 cal/(cm²*sec)
Avg scan interval .06 sec
Head distance 0 in
TPP time 11.4 sec
TPP value 23.1 cal/cm²
FFF value 1.6 (cal/cm²)/(oz/yd²)
Pain time 7.7 sec

Comments:

Molecule Labs
* Fabric Thickness mils
SFI Spec 3.2A
Test Report # 06-368 R&D

THERMAL PROTECTIVE PERFORMANCE



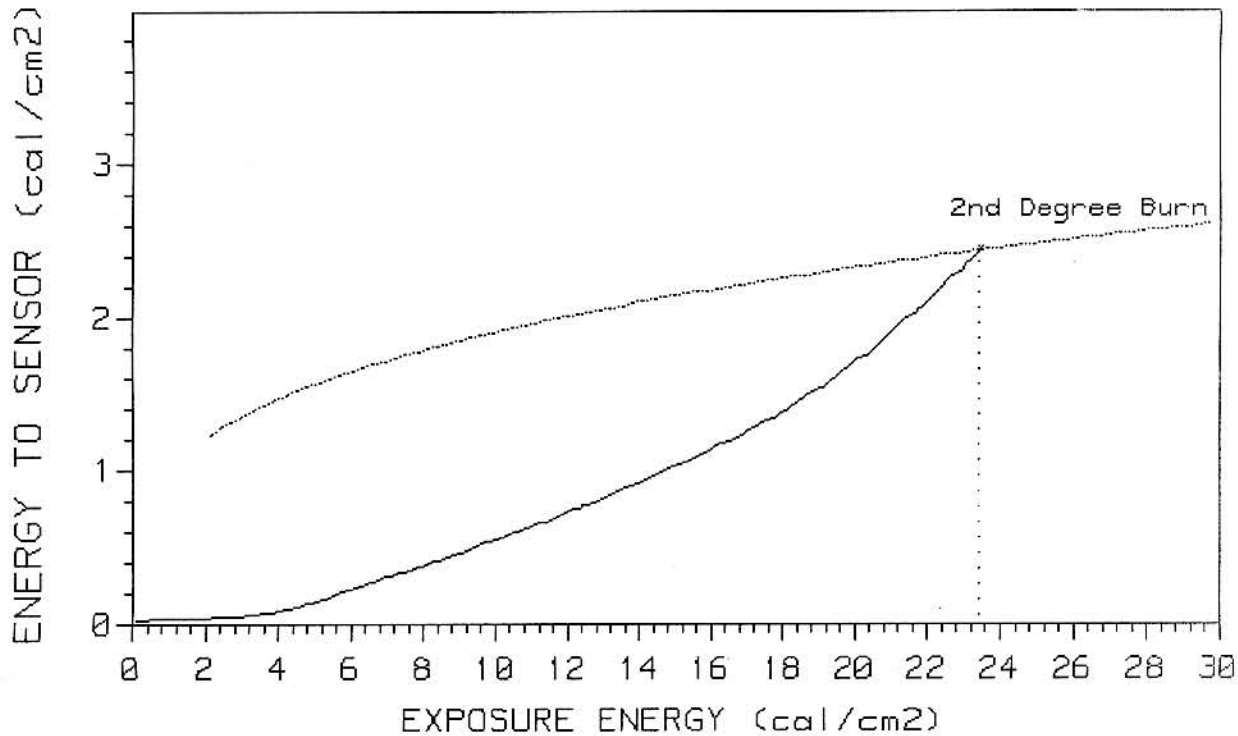
THERMAL PROTECTIVE PERFORMANCE REPORT

File name 060929AC
Test time Fri 29-Sep-06 11:38
Fabric type 2 Layer
Fabric weight 14.94 oz/yd²
Fabric thickness 101 mils
Heat flux 2.02 cal/(cm²*sec)
Avg scan interval .06 sec
Head distance 0 in
TPP time 11.6 sec
TPP value 23.4 cal/cm²
FFF value 1.6 (cal/cm²)/(oz/yd²)
Pain time 7.8 sec

Comments:

Molecule Labs
* Fabric Thickness mils
SFI Spec 3.2A
Test Report # 06-368 R&D

THERMAL PROTECTIVE PERFORMANCE



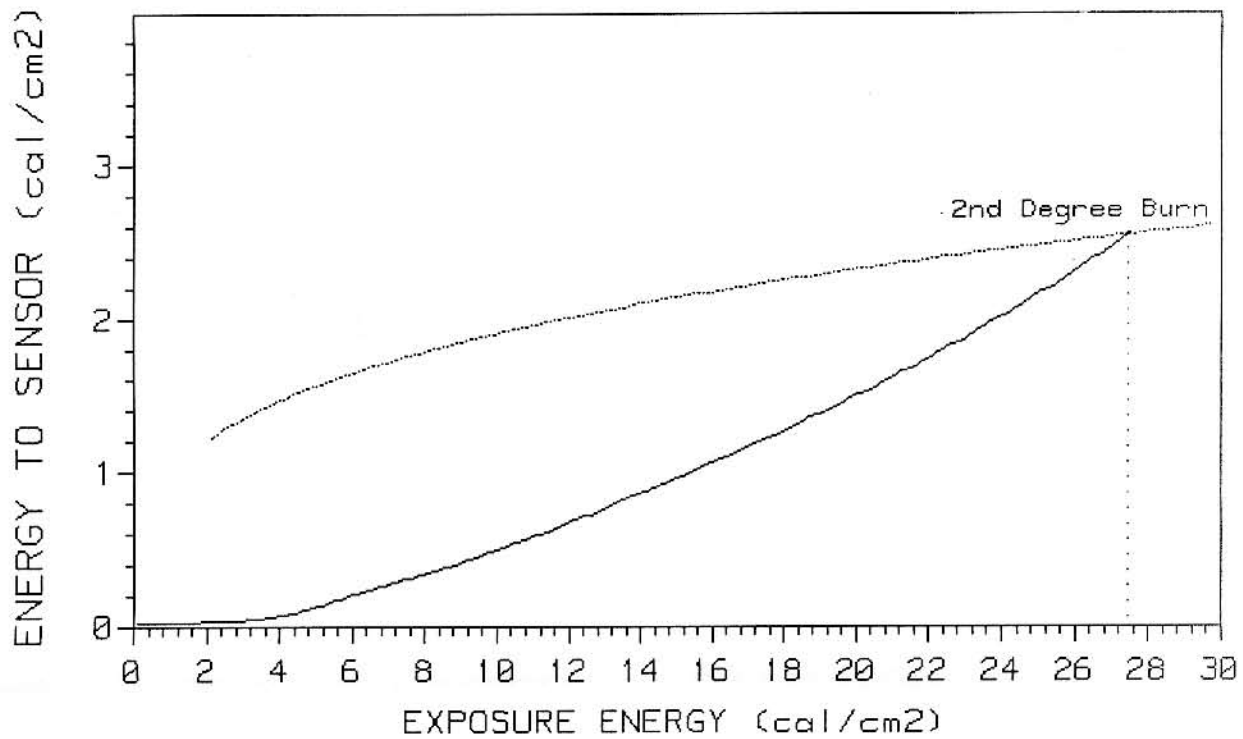
THERMAL PROTECTIVE PERFORMANCE REPORT

File name 060929AD
Test time Fri 29-Sep-06 11:41
Fabric type 2 Layer
Fabric weight 14.41 oz/yd²
Fabric thickness 94 mils
Heat flux 2.02 cal/(cm²*sec)
Avg scan interval .06 sec
Head distance 0 in
TPP time 13.6 sec
TPP value 27.5 cal/cm²
FFF value 1.9 (cal/cm²)/(oz/yd²)
Pain time 8.3 sec

Comments:

Molecule Labs
* Fabric Thickness mils
SFI Spec 3.2A
Test Report # 06-368 R&D

THERMAL PROTECTIVE PERFORMANCE



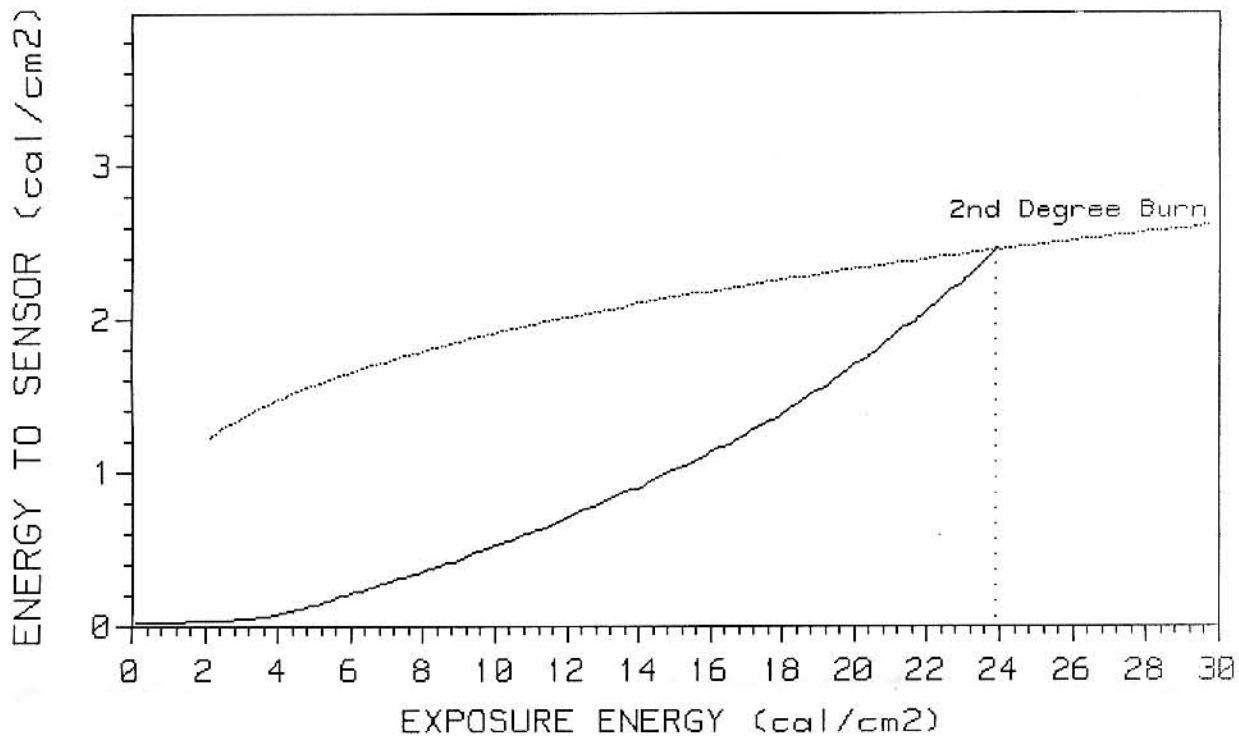
THERMAL PROTECTIVE PERFORMANCE REPORT

File name 060929AE
Test time Fri 29-Sep-06 11:44
Fabric type 2 Layer
Fabric weight 13.82 oz/yd²
Fabric thickness 94 mils
Heat flux 2.02 cal/(cm²*sec)
Avg scan interval .06 sec
Head distance 0 in
TPP time 11.8 sec
TPP value 23.9 cal/cm²
FFF value 1.7 (cal/cm²)/(oz/yd²)
Pain time 7.9 sec

Comments:

Molecule Labs
* Fabric Thickness mils
SFI Spec 3.2A
Test Report # 06-368 R&D

THERMAL PROTECTIVE PERFORMANCE



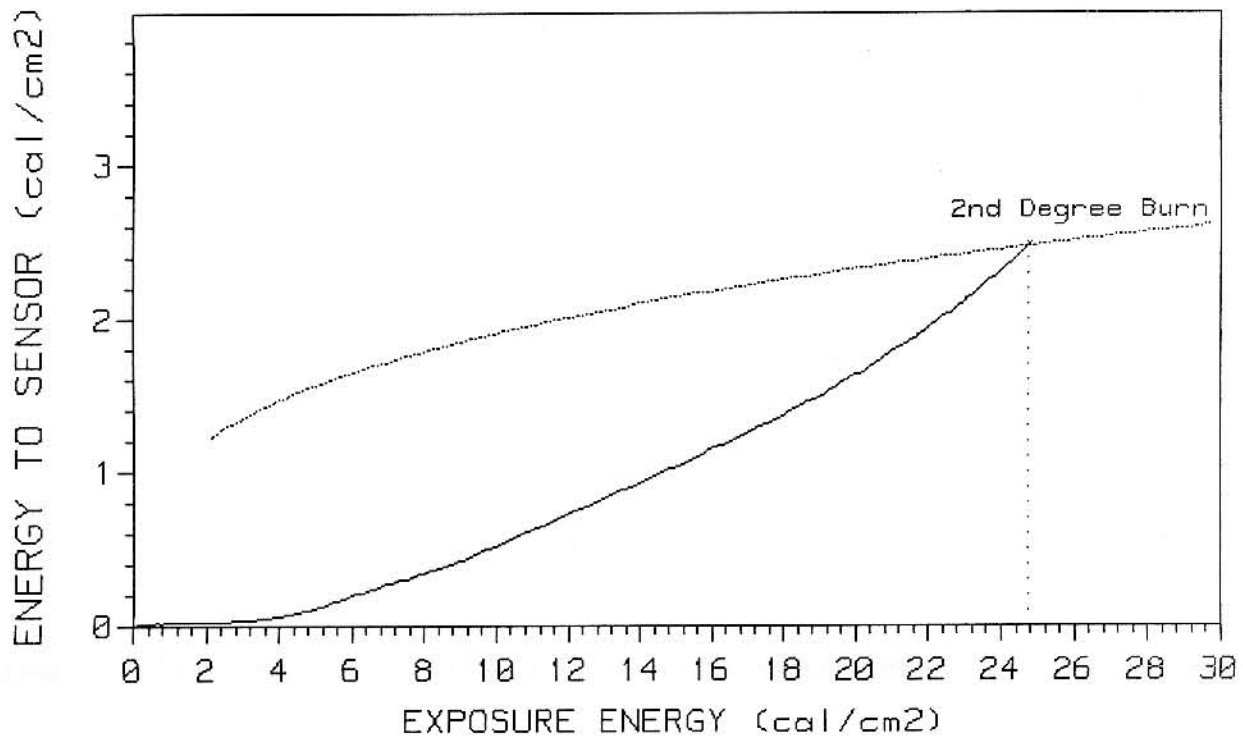
THERMAL PROTECTIVE PERFORMANCE REPORT

File name 060929AF
Test time Fri 29-Sep-06 11:47
Fabric type 2 Layer
Fabric weight 13.75 oz/yd²
Fabric thickness 108 mils
Heat flux 2.02 cal/(cm²*sec)
Avg scan interval .06 sec
Head distance 0 in
TPP time 12.3 sec
TPP value 24.8 cal/cm²
FFF value 1.8 (cal/cm²)/(oz/yd²)
Pain time 7.7 sec

Comments:

Molecule Labs
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THERMAL PROTECTIVE PERFORMANCE



THERMAL PROTECTIVE PERFORMANCE REPORT

File name 060929AG
Test time Fri 29-Sep-06 11:50
Fabric type 2 Layer
Fabric weight 13.63 oz/yd²
Fabric thickness 95 mils
Heat flux 2.02 cal/(cm²*sec)
Avg scan interval .06 sec
Head distance 0 in
TPP time 13.2 sec
TPP value 26.7 cal/cm²
FFF value 2.0 (cal/cm²)/(oz/yd²)
Pain time 8.0 sec

Comments:

Molecule Labs
* Fabric Thickness mils
SFI Spec 3.2A
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