

PlotByBatchF.lst

LDEOC Fluoroelastomer

09:27 Wednesday, August 1, 2012 46

All Valid Reference Data and All Valid Batch 8 & 9 Runs

Analyzed by Elastomer Batch

The GLM Procedure

Class Level Information

Class	Levels	Values
SPECIAL	8	1 2 3 5 6 7 8 9
Number of Observations Read		308
Number of Observations Used		307

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All Valid Reference Data and All Valid Batch 8 & 9 Runs

Analyzed by Elastomer Batch

The GLM Procedure

Dependent Variable: VOLC

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	7	0.60044321	0.08577760	2.54	0.0148
Error	299	10.08106428	0.03371593		
Corrected Total	306	10.68150749			

R-Square	Coeff Var	Root MSE	VOLC Mean
0.056213	28.54663	0.183619	0.643225

Source	DF	Type I SS	Mean Square	F Value	Pr > F
SPECIAL	7	0.60044321	0.08577760	2.54	0.0148

Source	DF	Type III SS	Mean Square	F Value	Pr > F
SPECIAL	7	0.60044321	0.08577760	2.54	0.0148

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All Valid Reference Data and All Valid Batch 8 & 9 Runs

Analyzed by Elastomer Batch

The GLM Procedure

Dependent Variable: HARD

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	7	8.1497855	1.1642551	0.82	0.5688
Error	299	422.9902797	1.4146832		
Corrected Total	306	431.1400651			

R-Square	Coeff Var	Root MSE	HARD Mean
0.018903	32.71928	1.189405	3.635179

Source	DF	Type I SS	Mean Square	F Value	Pr > F
SPECIAL	7	8.14978545	1.16425506	0.82	0.5688

Source	DF	Type III SS	Mean Square	F Value	Pr > F
SPECIAL	7	8.14978545	1.16425506	0.82	0.5688

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All Valid Reference Data and All Valid Batch 8 & 9 Runs

Analyzed by Elastomer Batch

The GLM Procedure

Dependent Variable: TENS

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	7	697.657061	99.665294	5.19	<.0001
Error	299	5744.302039	19.211713		
Corrected Total	306	6441.959100			

R-Square	Coeff Var	Root MSE	TENS Mean
0.108299	-8.310796	4.383117	-52.74003

Source	DF	Type I SS	Mean Square	F Value	Pr > F
SPECIAL	7	697.6570607	99.6652944	5.19	<.0001

Source	DF	Type III SS	Mean Square	F Value	Pr > F
SPECIAL	7	697.6570607	99.6652944	5.19	<.0001

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All Valid Reference Data and All Valid Batch 8 & 9 Runs

Analyzed by Elastomer Batch

The GLM Procedure

Least Squares Means

SPECIAL	VOLC LSMEAN	LSMEAN Number
1	0.58100000	1
2	0.59481481	2
3	0.69062500	3
5	0.63000000	4
6	0.68014925	5
7	0.64882353	6
8	0.52952381	7
9	0.59285714	8

Least Squares Means for effect SPECIAL

Pr > |t| for H0: LSMean(i)=LSMean(j)

Dependent Variable: VOLC

i/j	1	2	3	4	5	6	7	8
1		0.8391	0.0869	0.4488	0.1123	0.2701	0.4662	0.8958
2	0.8391		0.0309	0.4379	0.0424	0.1841	0.2226	0.9800
3	0.0869	0.0309		0.1192	0.7631	0.2083	0.0009	0.1892
4	0.4488	0.4379	0.1192		0.1663	0.5872	0.0415	0.6206
5	0.1123	0.0424	0.7631	0.1663		0.2972	0.0012	0.2323
6	0.2701	0.1841	0.2083	0.5872	0.2972		0.0081	0.4389
7	0.4662	0.2226	0.0009	0.0415	0.0012	0.0081		0.4300
8	0.8958	0.9800	0.1892	0.6206	0.2323	0.4389	0.4300	

SPECIAL	HARD LSMEAN	LSMEAN Number
1	4.00000000	1
2	3.55555556	2
3	3.41666667	3
5	3.78571429	4
6	3.61194030	5
7	3.76470588	6
8	3.33333333	7
9	3.57142857	8

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All Valid Reference Data and All Valid Batch 8 & 9 Runs

Analyzed by Elastomer Batch

The GLM Procedure

Least Squares Means

Least Squares Means for effect SPECIAL

Pr > |t| for H0: LSMean(i)=LSMean(j)

Dependent Variable: HARD

i/j	1	2	3	4	5	6	7	8
1		0.3136	0.1593	0.6090	0.3366	0.5545	0.1457	0.4652
2	0.3136		0.6277	0.4334	0.8354	0.4267	0.5213	0.9749
3	0.1593	0.6277		0.1430	0.3860	0.1061	0.7890	0.7480
4	0.6090	0.4334	0.1430		0.4585	0.9255	0.1557	0.6593
5	0.3366	0.8354	0.3860	0.4585		0.4324	0.3497	0.9317
6	0.5545	0.4267	0.1061	0.9255	0.4324		0.1377	0.6797
7	0.1457	0.5213	0.7890	0.1557	0.3497	0.1377		0.6468
8	0.4652	0.9749	0.7480	0.6593	0.9317	0.6797	0.6468	

SPECIAL	TENS LSMEAN	LSMEAN Number
1	-56.4600000	1
2	-52.5037037	2
3	-51.7966667	3
5	-51.7385714	4
6	-52.7402985	5
7	-54.3465882	6
8	-49.3390476	7
9	-51.5071429	8

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All Valid Reference Data and All Valid Batch 8 & 9 Runs

Analyzed by Elastomer Batch

The GLM Procedure

Least Squares Means

Least Squares Means for effect SPECIAL

Pr > |t| for H0: LSMean(i)=LSMean(j)

Dependent Variable: TENS

i/j	1	2	3	4	5	6	7	8
1		0.0153	0.0024	0.0024	0.0128	0.1503	<.0001	0.0225
2	0.0153		0.5030	0.4797	0.8130	0.0580	0.0136	0.5923
3	0.0024	0.5030		0.9500	0.2558	0.0014	0.0329	0.8704
4	0.0024	0.4797	0.9500		0.2465	0.0018	0.0414	0.8972
5	0.0128	0.8130	0.2558	0.2465		0.0256	0.0021	0.4793
6	0.1503	0.0580	0.0014	0.0018	0.0256		<.0001	0.1005
7	<.0001	0.0136	0.0329	0.0414	0.0021	<.0001		0.2580
8	0.0225	0.5923	0.8704	0.8972	0.4793	0.1005	0.2580	

NOTE: To ensure overall protection level, only probabilities associated with pre-planned comparisons should be used.

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All Valid Reference Data and All Valid Batch 8 & 9 Runs

Analyzed by Lab

The GLM Procedure

Class Level Information

Class	Levels	Values
LTMSLAB	5	A B E G I

Number of Observations Read 308

Number of Observations Used 307

PlotByBatchF.lst

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All Valid Reference Data and All Valid Batch 8 & 9 Runs

Analyzed by Lab

The GLM Procedure

Dependent Variable: VOLC

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	4	1.52412086	0.38103021	12.57	<.0001
Error	302	9.15738664	0.03032247		
Corrected Total	306	10.68150749			

R-Square	Coeff Var	Root MSE	VOLC Mean
0.142688	27.07195	0.174133	0.643225

Source	DF	Type I SS	Mean Square	F Value	Pr > F
LTMSLAB	4	1.52412086	0.38103021	12.57	<.0001

Source	DF	Type III SS	Mean Square	F Value	Pr > F
LTMSLAB	4	1.52412086	0.38103021	12.57	<.0001

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All Valid Reference Data and All Valid Batch 8 & 9 Runs

Analyzed by Lab

The GLM Procedure

Dependent Variable: HARD

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	4	135.2092870	33.8023218	34.50	<.0001
Error	302	295.9307781	0.9799032		
Corrected Total	306	431.1400651			

R-Square	Coeff Var	Root MSE	HARD Mean
0.313609	27.23114	0.989901	3.635179

Source	DF	Type I SS	Mean Square	F Value	Pr > F
LTMSLAB	4	135.2092870	33.8023218	34.50	<.0001

Source	DF	Type III SS	Mean Square	F Value	Pr > F
LTMSLAB	4	135.2092870	33.8023218	34.50	<.0001

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All Valid Reference Data and All Valid Batch 8 & 9 Runs

Analyzed by Lab

The GLM Procedure

Dependent Variable: TENS

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	4	3560.117019	890.029255	93.27	<.0001
Error	302	2881.842080	9.542523		
Corrected Total	306	6441.959100			

R-Square	Coeff Var	Root MSE	TENS Mean
0.552645	-5.857216	3.089098	-52.74003

Source	DF	Type I SS	Mean Square	F Value	Pr > F
LTMSLAB	4	3560.117019	890.029255	93.27	<.0001

Source	DF	Type III SS	Mean Square	F Value	Pr > F
LTMSLAB	4	3560.117019	890.029255	93.27	<.0001

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All Valid Reference Data and All Valid Batch 8 & 9 Runs

Analyzed by Lab

The GLM Procedure

Least Squares Means

LTMSLAB	VOLC LSMEAN	LSMEAN Number
A	0.66309278	1
B	0.51432836	2
E	0.64818182	3
G	0.70712500	4
I	0.67288462	5

Least Squares Means for effect LTMSLAB

Pr > |t| for H0: LSMean(i)=LSMean(j)

Dependent Variable: VOLC

i/j	1	2	3	4	5
1		<.0001	0.7880	0.0951	0.7438
2	<.0001		0.0188	<.0001	<.0001
3	0.7880	0.0188		0.2934	0.6694
4	0.0951	<.0001	0.2934		0.2705
5	0.7438	<.0001	0.6694	0.2705	

LTMSLAB	HARD LSMEAN	LSMEAN Number
A	4.36082474	1
B	3.74626866	2
E	3.00000000	3
G	2.65000000	4
I	3.78846154	5

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All Valid Reference Data and All Valid Batch 8 & 9 Runs

Analyzed by Lab

The GLM Procedure

Least Squares Means

Least Squares Means for effect LTMSLAB

Pr > |t| for H0: LSMean(i)=LSMean(j)

Dependent Variable: HARD

i/j	1	2	3	4	5
1		0.0001	<.0001	<.0001	0.0009
2	0.0001		0.0212	<.0001	0.8178
3	<.0001	0.0212		0.2724	0.0170
4	<.0001	<.0001	0.2724		<.0001
5	0.0009	0.8178	0.0170	<.0001	

LTMSLAB	TENS LSMEAN	LSMEAN Number
A	-57.1412371	1
B	-52.9970149	2
E	-54.6172727	3
G	-49.1350000	4
I	-49.3480769	5

Least Squares Means for effect LTMSLAB

Pr > |t| for H0: LSMean(i)=LSMean(j)

Dependent Variable: TENS

i/j	1	2	3	4	5
1		<.0001	0.0107	<.0001	<.0001
2	<.0001		0.1079	<.0001	<.0001
3	0.0107	0.1079		<.0001	<.0001
4	<.0001	<.0001	<.0001		0.6989
5	<.0001	<.0001	<.0001	0.6989	

NOTE: To ensure overall protection level, only probabilities associated with pre-planned comparisons should be used.

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All Valid Reference Data and All Valid Batch 8 & 9 Runs

Analyzed by Elastomer Batch & Lab

The GLM Procedure

Class Level Information

Class	Levels	Values
SPECIAL	8	1 2 3 5 6 7 8 9
LTMSLAB	5	A B E G I

Number of Observations Read	308
Number of Observations Used	307

PlotByBatchF.lst

LDEOC Fluoroelastomer

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All Valid Reference Data and All Valid Batch 8 & 9 Runs

Analyzed by Elastomer Batch & Lab

The GLM Procedure

Dependent Variable: VOLC

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	32	2.53594050	0.07924814	2.67	<.0001
Error	274	8.14556700	0.02972835		
Corrected Total	306	10.68150749			

R-Square	Coeff Var	Root MSE	VOLC Mean
0.237414	26.80542	0.172419	0.643225

Source	DF	Type I SS	Mean Square	F Value	Pr > F
SPECIAL	7	0.60044321	0.08577760	2.89	0.0063
LTMSLAB	4	1.40753268	0.35188317	11.84	<.0001
SPECIAL*LTMSLAB	21	0.52796460	0.02514117	0.85	0.6618

Source	DF	Type III SS	Mean Square	F Value	Pr > F
SPECIAL	7	0.30138824	0.04305546	1.45	0.1860
LTMSLAB	4	1.25988742	0.31497186	10.60	<.0001
SPECIAL*LTMSLAB	21	0.52796460	0.02514117	0.85	0.6618

PlotByBatchF.lst

LDEOC Fluoroelastomer

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All Valid Reference Data and All Valid Batch 8 & 9 Runs

Analyzed by Elastomer Batch & Lab

The GLM Procedure

Dependent Variable: HARD

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	32	182.1388326	5.6918385	6.26	<.0001
Error	274	249.0012326	0.9087636		
Corrected Total	306	431.1400651			

R-Square	Coeff Var	Root MSE	HARD Mean
0.422459	26.22404	0.953291	3.635179

Source	DF	Type I SS	Mean Square	F Value	Pr > F
SPECIAL	7	8.1497855	1.1642551	1.28	0.2596
LTMSLAB	4	132.3035992	33.0758998	36.40	<.0001
SPECIAL*LTMSLAB	21	41.6854479	1.9850213	2.18	0.0024

Source	DF	Type III SS	Mean Square	F Value	Pr > F
SPECIAL	7	4.43162694	0.63308956	0.70	0.6749
LTMSLAB	4	49.29020248	12.32255062	13.56	<.0001
SPECIAL*LTMSLAB	21	41.68544792	1.98502133	2.18	0.0024

PlotByBatchF.lst

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All Valid Reference Data and All Valid Batch 8 & 9 Runs

Analyzed by Elastomer Batch & Lab

The GLM Procedure

Dependent Variable: TENS

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	32	4163.838103	130.119941	15.65	<.0001
Error	274	2278.120996	8.314310		
Corrected Total	306	6441.959100			

R-Square	Coeff Var	Root MSE	TENS Mean
0.646362	-5.467298	2.883455	-52.74003

Source	DF	Type I SS	Mean Square	F Value	Pr > F
SPECIAL	7	697.657061	99.665294	11.99	<.0001
LTMSLAB	4	3112.319873	778.079968	93.58	<.0001
SPECIAL*LTMSLAB	21	353.861170	16.850532	2.03	0.0058

Source	DF	Type III SS	Mean Square	F Value	Pr > F
SPECIAL	7	184.274798	26.324971	3.17	0.0031
LTMSLAB	4	1443.890542	360.972635	43.42	<.0001
SPECIAL*LTMSLAB	21	353.861170	16.850532	2.03	0.0058

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All Valid Reference Data and All Valid Batch 8 & 9 Runs

Analyzed by Elastomer Batch & Lab

The GLM Procedure

Least Squares Means

SPECIAL	VOLC LSMEAN	LSMEAN Number
1	Non-est	1
2	Non-est	2
3	0.68746364	3
5	0.60882684	4
6	0.69067231	5
7	0.63759660	6
8	0.55814286	7
9	Non-est	8

Least Squares Means for effect SPECIAL
Pr > |t| for H0: LSMean(i)=LSMean(j)

Dependent Variable: VOLC

i/j	1	2	3	4	5	6	7	8
1
2
3	.	.	.	0.1746	0.9545	0.3030	0.0276	.
4	.	.	0.1746	.	0.1483	0.5546	0.3882	.
5	.	.	0.9545	0.1483	.	0.2572	0.0210	.
6	.	.	0.3030	0.5546	0.2572	.	0.1086	.
7	.	.	0.0276	0.3882	0.0210	0.1086	.	.
8

SPECIAL	HARD LSMEAN	LSMEAN Number
1	Non-est	1
2	Non-est	2
3	3.49318182	3
5	3.77532468	4
6	3.28722506	5
7	3.55229133	6
8	3.38571429	7
9	Non-est	8

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All Valid Reference Data and All Valid Batch 8 & 9 Runs

Analyzed by Elastomer Batch & Lab

The GLM Procedure

Least Squares Means

Least Squares Means for effect SPECIAL

Pr > |t| for H0: LSMean(i)=LSMean(j)

Dependent Variable: HARD

i/j	1	2	3	4	5	6	7	8
1
2
3
4	.	.	0.3779	0.3779	0.5080	0.8251	0.7395	.
5	.	.	0.5080	0.1191	0.1191	0.4076	0.2306	.
6	.	.	0.8251	0.4076	0.3060	0.3060	0.7553	.
7	.	.	0.7395	0.2306	0.7553	0.5421	.	.
8

SPECIAL	TENS LSMEAN	LSMEAN Number
1	Non-est	1
2	Non-est	2
3	-52.8091818	3
5	-52.7521674	4
6	-53.6040607	5
7	-53.5035800	6
8	-50.1341905	7
9	Non-est	8

PlotByBatchF.lst

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All Valid Reference Data and All Valid Batch 8 & 9 Runs

Analyzed by Elastomer Batch & Lab

The GLM Procedure

Least Squares Means

Least Squares Means for effect SPECIAL

Pr > |t| for H0: LSMean(i)=LSMean(j)

Dependent Variable: TENS

i/j	1	2	3	4	5	6	7	8
1
2
3	.	.	.	0.9530	0.3984	0.3909	0.0066	.
4	.	.	0.9530	.	0.3678	0.3564	0.0081	.
5	.	.	0.3984	0.3678	.	0.8978	0.0003	.
6	.	.	0.3909	0.3564	0.8978	.	<.0001	.
7	.	.	0.0066	0.0081	0.0003	<.0001	.	.
8

NOTE: To ensure overall protection level, only probabilities associated with pre-planned comparisons should be used.

LTMSLAB	VOLC LSMEAN	LSMEAN Number
A	0.63454256	1
B	Non-est	2
E	Non-est	3
G	Non-est	4
I	Non-est	5

Least Squares Means for effect LTMSLAB

Pr > |t| for H0: LSMean(i)=LSMean(j)

Dependent Variable: VOLC

i/j	1	2	3	4	5
1
2
3	0.8722
4
5	.	.	0.8722	.	.

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All Valid Reference Data and All Valid Batch 8 & 9 Runs

Analyzed by Elastomer Batch & Lab

The GLM Procedure

Least Squares Means

LTMSLAB	HARD LSMEAN	LSMEAN Number
A	4.36630500	1
B	Non-est	2
E	Non-est	3
G	Non-est	4
I	Non-est	5

Least Squares Means for effect LTMSLAB

Pr > |t| for H0: LSMean(i)=LSMean(j)

Dependent Variable: HARD

i/j	1	2	3	4	5
1	
2
3	.	.		.	0.0301
4
5	.	.	0.0301	.	

LTMSLAB	TENS LSMEAN	LSMEAN Number
A	-56.5844540	1
B	Non-est	2
E	Non-est	3
G	Non-est	4
I	Non-est	5

PlotByBatchF.lst

LDEOC Fluoroelastomer

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All Valid Reference Data and All Valid Batch 8 & 9 Runs

Analyzed by Elastomer Batch & Lab

The GLM Procedure

Least Squares Means

Least Squares Means for effect LTMSLAB

Pr > |t| for H0: LSMean(i)=LSMean(j)

Dependent Variable: TENS

i/j	1	2	3	4	5
1	
2
3	.	.		.	<.0001
4
5	.	.	<.0001	.	

NOTE: To ensure overall protection level, only probabilities associated with pre-planned comparisons should be used.

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All Valid Reference Data and All Valid Batch 8 & 9 Runs
Distribution of Data Set

The FREQ Procedure

Table of LTMSLAB by SPECIAL

LTMSLAB	SPECIAL									Total
Frequency, Percent Row Pct Col Pct	1	2	3	5	6	7	8	9		
A	10	3	8	11	23	38	2	2		97
	3.26	0.98	2.61	3.58	7.49	12.38	0.65	0.65		31.60
	10.31	3.09	8.25	11.34	23.71	39.18	2.06	2.06		
	100.00	11.11	16.67	26.19	34.33	44.71	9.52	28.57		
B	0	20	8	7	10	15	7	0		67
	0.00	6.51	2.61	2.28	3.26	4.89	2.28	0.00		21.82
	0.00	29.85	11.94	10.45	14.93	22.39	10.45	0.00		
	0.00	74.07	16.67	16.67	14.93	17.65	33.33	0.00		
E	0	0	1	1	1	3	3	2		11
	0.00	0.00	0.33	0.33	0.33	0.98	0.98	0.65		3.58
	0.00	0.00	9.09	9.09	9.09	27.27	27.27	18.18		
	0.00	0.00	2.08	2.38	1.49	3.53	14.29	28.57		
G	0	4	20	14	16	18	6	2		80
	0.00	1.30	6.51	4.56	5.21	5.86	1.95	0.65		26.06
	0.00	5.00	25.00	17.50	20.00	22.50	7.50	2.50		
	0.00	14.81	41.67	33.33	23.88	21.18	28.57	28.57		
I	0	0	11	9	17	11	3	1		52
	0.00	0.00	3.58	2.93	5.54	3.58	0.98	0.33		16.94
	0.00	0.00	21.15	17.31	32.69	21.15	5.77	1.92		
	0.00	0.00	22.92	21.43	25.37	12.94	14.29	14.29		
Total	10	27	48	42	67	85	21	7		307
	3.26	8.79	15.64	13.68	21.82	27.69	6.84	2.28		100.00

Frequency Missing = 1