

PlotByBatchN.lst

LDEOC Hydrogenated Nitrile

08:57 Wednesday, June 20, 2012 48

All Valid Reference Data and All Valid Batch 8 Runs

Analyzed by Elastomer Batch

The GLM Procedure

Class Level Information

Class	Levels	Values
SPECIAL	8	1 2 3 4 5 6 7 8
Number of Observations Read		299
Number of Observations Used		299

PlotByBatchN.lst

LDEOC Hydrogenated Nitrile

08:57 Wednesday, June 20, 2012 49

All Valid Reference Data and All Valid Batch 8 Runs

Analyzed by Elastomer Batch

The GLM Procedure

Dependent Variable: VOLC

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	7	35.69064421	5.09866346	29.11	<.0001
Error	291	50.96302067	0.17513066		
Corrected Total	298	86.65366488			

R-Square	Coeff Var	Root MSE	VOLC Mean
0.411877	31.34296	0.418486	1.335184

Source	DF	Type I SS	Mean Square	F Value	Pr > F
SPECIAL	7	35.69064421	5.09866346	29.11	<.0001

Source	DF	Type III SS	Mean Square	F Value	Pr > F
SPECIAL	7	35.69064421	5.09866346	29.11	<.0001

PlotByBatchN.lst

LDEOC Hydrogenated Nitrile

08:57 Wednesday, June 20, 2012 50

All Valid Reference Data and All Valid Batch 8 Runs

Analyzed by Elastomer Batch

The GLM Procedure

Dependent Variable: HARD

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	7	10.2672225	1.4667461	1.92	0.0668
Error	291	222.7294331	0.7653932		
Corrected Total	298	232.9966555			

R-Square	Coeff Var	Root MSE	HARD Mean
0.044066	-87.19513	0.874868	-1.003344

Source	DF	Type I SS	Mean Square	F Value	Pr > F
SPECIAL	7	10.26722246	1.46674607	1.92	0.0668

Source	DF	Type III SS	Mean Square	F Value	Pr > F
SPECIAL	7	10.26722246	1.46674607	1.92	0.0668

PlotByBatchN.lst

LDEOC Hydrogenated Nitrile

08:57 Wednesday, June 20, 2012 51

All Valid Reference Data and All Valid Batch 8 Runs

Analyzed by Elastomer Batch

The GLM Procedure

Dependent Variable: TENS

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	7	1119.386224	159.912318	7.08	<.0001
Error	291	6573.669537	22.589930		
Corrected Total	298	7693.055761			

R-Square	Coeff Var	Root MSE	TENS Mean
0.145506	-115.3117	4.752886	-4.121773

Source	DF	Type I SS	Mean Square	F Value	Pr > F
SPECIAL	7	1119.386224	159.912318	7.08	<.0001

Source	DF	Type III SS	Mean Square	F Value	Pr > F
SPECIAL	7	1119.386224	159.912318	7.08	<.0001

PlotByBatchN.lst

LDEOC Hydrogenated Nitrile

08:57 Wednesday, June 20, 2012 52

All Valid Reference Data and All Valid Batch 8 Runs

Analyzed by Elastomer Batch

The GLM Procedure

Least Squares Means

SPECIAL	VOLC LSMEAN	LSMEAN Number
1	1.52625000	1
2	1.65235294	2
3	1.44000000	3
4	0.66660714	4
5	1.31520833	5
6	1.68531250	6
7	1.42658537	7
8	1.39727273	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		0.4827	0.7945	<.0001	0.1877	0.3116	0.5207	0.4560
2	0.4827		0.4978	<.0001	0.0046	0.7731	0.0438	0.0601
3	0.7945	0.4978		0.0107	0.6798	0.4150	0.9643	0.8901
4	<.0001	<.0001	0.0107		<.0001	<.0001	<.0001	<.0001
5	0.1877	0.0046	0.6798	<.0001		<.0001	0.1442	0.4469
6	0.3116	0.7731	0.4150	<.0001	<.0001		0.0003	0.0057
7	0.5207	0.0438	0.9643	<.0001	0.1442	0.0003		0.7707
8	0.4560	0.0601	0.8901	<.0001	0.4469	0.0057	0.7707	

SPECIAL	HARD LSMEAN	LSMEAN Number
1	-1.37500000	1
2	-1.05882353	2
3	-1.50000000	3
4	-1.23214286	4
5	-0.72916667	5
6	-1.07812500	6
7	-0.86585366	7
8	-1.09090909	8

LDEOC Hydrogenated Nitrile

08:57 Wednesday, June 20, 2012 53

All Valid Reference Data and All Valid Batch 8 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		0.4000	0.8567	0.6660	0.0542	0.3663	0.1172	0.4322
2	0.4000		0.5005	0.4749	0.1829	0.9356	0.4085	0.9097
3	0.8567	0.5005		0.6708	0.2231	0.5024	0.3120	0.5271
4	0.6660	0.4749	0.6708		0.0037	0.3368	0.0163	0.5216
5	0.0542	0.1829	0.2231	0.0037		0.0376	0.3907	0.1094
6	0.3663	0.9356	0.5024	0.3368	0.0376		0.1468	0.9529
7	0.1172	0.4085	0.3120	0.0163	0.3907	0.1468		0.2849
8	0.4322	0.9097	0.5271	0.5216	0.1094	0.9529	0.2849	

SPECIAL	TENS LSMEAN	LSMEAN Number
1	0.80000000	1
2	-2.07058824	2
3	-3.03000000	3
4	-1.75357143	4
5	-4.81645833	5
6	-4.60468750	6
7	-6.39073171	7
8	-2.24636364	8

LDEOC Hydrogenated Nitrile

08:57 Wednesday, June 20, 2012 54

All Valid Reference Data and All Valid Batch 8 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		0.1600	0.3089	0.1562	0.0022	0.0026	<.0001	0.1216
2	0.1600		0.7873	0.8098	0.0416	0.0517	0.0007	0.9089
3	0.3089	0.7873		0.7093	0.6029	0.6449	0.3240	0.8235
4	0.1562	0.8098	0.7093		0.0012	0.0012	<.0001	0.6806
5	0.0022	0.0416	0.6029	0.0012		0.8157	0.0694	0.0366
6	0.0026	0.0517	0.6449	0.0012	0.8157		0.0250	0.0456
7	<.0001	0.0007	0.3240	<.0001	0.0694	0.0250		0.0003
8	0.1216	0.9089	0.8235	0.6806	0.0366	0.0456	0.0003	

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

PlotByBatchN.lst

LDEOC Hydrogenated Nitrile
08:57 Wednesday, June 20, 2012 55
All Valid Reference Data and All Valid Batch 8 Runs
Analyzed by Lab

The GLM Procedure

Class Level Information

Class	Levels	Values
LTMSLAB	5	A B E G I

Number of Observations Read	299
Number of Observations Used	299

PlotByBatchN.lst

LDEOC Hydrogenated Nitrile

08:57 Wednesday, June 20, 2012 56

All Valid Reference Data and All Valid Batch 8 Runs

Analyzed by Lab

The GLM Procedure

Dependent Variable: VOLC

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	4	2.26185912	0.56546478	1.97	0.0991
Error	294	84.39180576	0.28704696		
Corrected Total	298	86.65366488			

R-Square	Coeff Var	Root MSE	VOLC Mean
0.026102	40.12688	0.535768	1.335184

Source	DF	Type I SS	Mean Square	F Value	Pr > F
LTMSLAB	4	2.26185912	0.56546478	1.97	0.0991

Source	DF	Type III SS	Mean Square	F Value	Pr > F
LTMSLAB	4	2.26185912	0.56546478	1.97	0.0991

PlotByBatchN.lst

LDEOC Hydrogenated Nitrile

08:57 Wednesday, June 20, 2012 57

All Valid Reference Data and All Valid Batch 8 Runs

Analyzed by Lab

The GLM Procedure

Dependent Variable: HARD

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	4	18.4339317	4.6084829	6.31	<.0001
Error	294	214.5627238	0.7298052		
Corrected Total	298	232.9966555			

R-Square	Coeff Var	Root MSE	HARD Mean
0.079117	-85.14387	0.854286	-1.003344

Source	DF	Type I SS	Mean Square	F Value	Pr > F
LTMSLAB	4	18.43393173	4.60848293	6.31	<.0001

Source	DF	Type III SS	Mean Square	F Value	Pr > F
LTMSLAB	4	18.43393173	4.60848293	6.31	<.0001

PlotByBatchN.lst

LDEOC Hydrogenated Nitrile

08:57 Wednesday, June 20, 2012 58

All Valid Reference Data and All Valid Batch 8 Runs

Analyzed by Lab

The GLM Procedure

Dependent Variable: TENS

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	4	156.204468	39.051117	1.52	0.1953
Error	294	7536.851292	25.635549		
Corrected Total	298	7693.055761			

R-Square	Coeff Var	Root MSE	TENS Mean
0.020305	-122.8393	5.063156	-4.121773

Source	DF	Type I SS	Mean Square	F Value	Pr > F
LTMSLAB	4	156.2044682	39.0511170	1.52	0.1953

Source	DF	Type III SS	Mean Square	F Value	Pr > F
LTMSLAB	4	156.2044682	39.0511170	1.52	0.1953

PlotByBatchN.lst

LDEOC Hydrogenated Nitrile

08:57 Wednesday, June 20, 2012 59

All Valid Reference Data and All Valid Batch 8 Runs

Analyzed by Lab

The GLM Procedure

Least Squares Means

LTMSLAB	VOLC LSMEAN	LSMEAN Number
A	1.40304348	1
B	1.25296875	2
E	1.37500000	3
G	1.24800000	4
I	1.45740000	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		0.0863	0.8872	0.0554	0.5641
2	0.0863		0.5441	0.9554	0.0441
3	0.8872	0.5441		0.5220	0.6866
4	0.0554	0.9554	0.5220		0.0291
5	0.5641	0.0441	0.6866	0.0291	

LTMSLAB	HARD LSMEAN	LSMEAN Number
A	-1.36956522	1
B	-0.87500000	2
E	-0.87500000	3
G	-0.77647059	4
I	-0.90000000	5

PlotByBatchN.lst

LDEOC Hydrogenated Nitrile

08:57 Wednesday, June 20, 2012 60

All Valid Reference Data and All Valid Batch 8 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		0.0004	0.1174	<.0001	0.0019
2	0.0004		1.0000	0.4864	0.8769
3	0.1174	1.0000		0.7554	0.9388
4	<.0001	0.4864	0.7554		0.4178
5	0.0019	0.8769	0.9388	0.4178	

LTMSLAB	TENS LSMEAN	LSMEAN Number
A	-4.24130435	1
B	-3.11406250	2
E	-7.31375000	3
G	-4.43529412	4
I	-4.14800000	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		0.1724	0.1008	0.7992	0.9165
2	0.1724		0.0277	0.1159	0.2802
3	0.1008	0.0277		0.1253	0.1017
4	0.7992	0.1159	0.1253		0.7504
5	0.9165	0.2802	0.1017	0.7504	

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

PlotByBatchN.lst

LDEOC Hydrogenated Nitrile

08:57 Wednesday, June 20, 2012 61

All Valid Reference Data and All Valid Batch 8 Runs

Analyzed by Elastomer Batch & Lab

The GLM Procedure

Class Level Information

Class	Levels	Values
SPECIAL	8	1 2 3 4 5 6 7 8
LTMSLAB	5	A B E G I

Number of Observations Read	299
Number of Observations Used	299

LDEOC Hydrogenated Nitrile

08:57 Wednesday, June 20, 2012 62

All Valid Reference Data and All Valid Batch 8 Runs

Analyzed by Elastomer Batch & Lab

The GLM Procedure

Dependent Variable: VOLC

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	28	41.60290902	1.48581818	8.90	<.0001
Error	270	45.05075586	0.16685465		
Corrected Total	298	86.65366488			

R-Square	Coeff Var	Root MSE	VOLC Mean
0.480106	30.59342	0.408478	1.335184

Source	DF	Type I SS	Mean Square	F Value	Pr > F
SPECIAL	7	35.69064421	5.09866346	30.56	<.0001
LTMSLAB	4	0.34622133	0.08655533	0.52	0.7220
SPECIAL*LTMSLAB	17	5.56604348	0.32741432	1.96	0.0138

Source	DF	Type III SS	Mean Square	F Value	Pr > F
SPECIAL	7	26.21835726	3.74547961	22.45	<.0001
LTMSLAB	4	1.45037568	0.36259392	2.17	0.0723
SPECIAL*LTMSLAB	17	5.56604348	0.32741432	1.96	0.0138

PlotByBatchN.lst

LDEOC Hydrogenated Nitrile

08:57 Wednesday, June 20, 2012 63

All Valid Reference Data and All Valid Batch 8 Runs

Analyzed by Elastomer Batch & Lab

The GLM Procedure

Dependent Variable: HARD

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	28	41.6722657	1.4882952	2.10	0.0014
Error	270	191.3243899	0.7086089		
Corrected Total	298	232.9966555			

R-Square	Coeff Var	Root MSE	HARD Mean
0.178853	-83.89831	0.841789	-1.003344

Source	DF	Type I SS	Mean Square	F Value	Pr > F
SPECIAL	7	10.26722246	1.46674607	2.07	0.0470
LTMSLAB	4	22.02910792	5.50727698	7.77	<.0001
SPECIAL*LTMSLAB	17	9.37593527	0.55152560	0.78	0.7177

Source	DF	Type III SS	Mean Square	F Value	Pr > F
SPECIAL	7	12.89930573	1.84275796	2.60	0.0130
LTMSLAB	4	14.35854145	3.58963536	5.07	0.0006
SPECIAL*LTMSLAB	17	9.37593527	0.55152560	0.78	0.7177

PlotByBatchN.lst

LDEOC Hydrogenated Nitrile

08:57 Wednesday, June 20, 2012 64

All Valid Reference Data and All Valid Batch 8 Runs

Analyzed by Elastomer Batch & Lab

The GLM Procedure

Dependent Variable: TENS

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	28	2214.975714	79.106276	3.90	<.0001
Error	270	5478.080046	20.289185		
Corrected Total	298	7693.055761			

R-Square	Coeff Var	Root MSE	TENS Mean
0.287919	-109.2819	4.504352	-4.121773

Source	DF	Type I SS	Mean Square	F Value	Pr > F
SPECIAL	7	1119.386224	159.912318	7.88	<.0001
LTMSLAB	4	129.375816	32.343954	1.59	0.1761
SPECIAL*LTMSLAB	17	966.213675	56.836099	2.80	0.0002

Source	DF	Type III SS	Mean Square	F Value	Pr > F
SPECIAL	7	1072.014224	153.144889	7.55	<.0001
LTMSLAB	4	90.046708	22.511677	1.11	0.3523
SPECIAL*LTMSLAB	17	966.213675	56.836099	2.80	0.0002

PlotByBatchN.lst

LDEOC Hydrogenated Nitrile

08:57 Wednesday, June 20, 2012 65

All Valid Reference Data and All Valid Batch 8 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	Non-est	3
4	Non-est	4
5	1.29376629	5
6	Non-est	6
7	1.39133799	7
8	1.37160000	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
4	<.0001	.	.
5	0.3883	0.5937
6	.	.	.	<.0001	.		.	.
7	0.3883	.		0.8725
8	0.5937	.	0.8725	

SPECIAL	HARD LSMEAN	LSMEAN Number
1	Non-est	1
2	Non-est	2
3	Non-est	3
4	Non-est	4
5	-0.55946115	5
6	Non-est	6
7	-0.78548701	7
8	-1.29333333	8

LDEOC Hydrogenated Nitrile

08:57 Wednesday, June 20, 2012 66

All Valid Reference Data and All Valid Batch 8 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	0.0773	.	.
5	0.3322	0.0152
6	.	.	.	0.0773
7	0.3322	.	.	0.0459
8	0.0152	.	0.0459	.

SPECIAL	TENS LSMEAN	LSMEAN Number
1	Non-est	1
2	Non-est	2
3	Non-est	3
4	Non-est	4
5	-4.76548747	5
6	Non-est	6
7	-7.06700000	7
8	-1.02600000	8

LDEOC Hydrogenated Nitrile

08:57 Wednesday, June 20, 2012 67

All Valid Reference Data and All Valid Batch 8 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
4	0.0018	.	.
5	0.0656	0.0207
6	.	.	.	0.0018
7	0.0656	.	.	<.0001
8	0.0207	.	<.0001	.

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

LTMSLAB	VOLC LSMEAN	HARD LSMEAN	TENS LSMEAN
A	Non-est	Non-est	Non-est
B	Non-est	Non-est	Non-est
E	Non-est	Non-est	Non-est
G	Non-est	Non-est	Non-est
I	Non-est	Non-est	Non-est

LDEOC Hydrogenated Nitrile
 08:57 Wednesday, June 20, 2012 68
 All Valid Reference Data and All Valid Batch 8 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	4	5	6	7	8	
A	7	0	0	14	14	20	35	2	92
	2.34	0.00	0.00	4.68	4.68	6.69	11.71	0.67	30.77
	7.61	0.00	0.00	15.22	15.22	21.74	38.04	2.17	
	87.50	0.00	0.00	25.00	29.17	31.25	42.68	9.09	
B	0	12	0	16	8	6	16	6	64
	0.00	4.01	0.00	5.35	2.68	2.01	5.35	2.01	21.40
	0.00	18.75	0.00	25.00	12.50	9.38	25.00	9.38	
	0.00	70.59	0.00	28.57	16.67	9.38	19.51	27.27	
E	0	0	1	0	1	0	4	2	8
	0.00	0.00	0.33	0.00	0.33	0.00	1.34	0.67	2.68
	0.00	0.00	12.50	0.00	12.50	0.00	50.00	25.00	
	0.00	0.00	50.00	0.00	2.08	0.00	4.88	9.09	
G	1	5	0	21	19	13	16	10	85
	0.33	1.67	0.00	7.02	6.35	4.35	5.35	3.34	28.43
	1.18	5.88	0.00	24.71	22.35	15.29	18.82	11.76	
	12.50	29.41	0.00	37.50	39.58	20.31	19.51	45.45	
I	0	0	1	5	6	25	11	2	50
	0.00	0.00	0.33	1.67	2.01	8.36	3.68	0.67	16.72
	0.00	0.00	2.00	10.00	12.00	50.00	22.00	4.00	
	0.00	0.00	50.00	8.93	12.50	39.06	13.41	9.09	
Total	8	17	2	56	48	64	82	22	299
	2.68	5.69	0.67	18.73	16.05	21.40	27.42	7.36	100.00