

PlotByBatchA.lst

LDEOC Ethylene Acrylate

08:57 Wednesday, June 20, 2012 42

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		280
Number of Observations Used		280

PlotByBatchA.lst

LDEOC Ethylene Acrylate

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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	29.1880333	4.1697190	5.89	<.0001
Error	272	192.6179253	0.7081541		
Corrected Total	279	221.8059586			

R-Square	Coeff Var	Root MSE	VOLC Mean
0.131593	3.367163	0.841519	24.99193

Source	DF	Type I SS	Mean Square	F Value	Pr > F
SPECIAL	7	29.18803331	4.16971904	5.89	<.0001

Source	DF	Type III SS	Mean Square	F Value	Pr > F
SPECIAL	7	29.18803331	4.16971904	5.89	<.0001

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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	121.4984683	17.3569240	13.01	<.0001
Error	272	362.7729603	1.3337241		
Corrected Total	279	484.2714286			

R-Square	Coeff Var	Root MSE	HARD Mean
0.250889	-8.937632	1.154870	-12.92143

Source	DF	Type I SS	Mean Square	F Value	Pr > F
SPECIAL	7	121.4984683	17.3569240	13.01	<.0001

Source	DF	Type III SS	Mean Square	F Value	Pr > F
SPECIAL	7	121.4984683	17.3569240	13.01	<.0001

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 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	167.165504	23.880786	1.76	0.0954
Error	272	3689.912153	13.565854		
Corrected Total	279	3857.077657			

R-Square	Coeff Var	Root MSE	TENS Mean
0.043340	-23.76139	3.683185	-15.50071

Source	DF	Type I SS	Mean Square	F Value	Pr > F
SPECIAL	7	167.1655044	23.8807863	1.76	0.0954

Source	DF	Type III SS	Mean Square	F Value	Pr > F
SPECIAL	7	167.1655044	23.8807863	1.76	0.0954

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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	24.1944444	1
2	24.5350000	2
3	25.0990909	3
4	24.6516279	4
5	24.9032500	5
6	24.8769512	6
7	25.4626923	7
8	25.4976471	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		0.5012	0.0046	0.1395	0.0232	0.0217	<.0001	0.0002
2	0.5012		0.2066	0.7911	0.4047	0.4281	0.0345	0.0405
3	0.0046	0.2066		0.0223	0.3232	0.2015	0.0532	0.1138
4	0.1395	0.7911	0.0223		0.1746	0.1561	<.0001	0.0005
5	0.0232	0.4047	0.3232	0.1746		0.8714	0.0017	0.0153
6	0.0217	0.4281	0.2015	0.1561	0.8714		0.0001	0.0060
7	<.0001	0.0345	0.0532	<.0001	0.0017	0.0001		0.8819
8	0.0002	0.0405	0.1138	0.0005	0.0153	0.0060	0.8819	

SPECIAL	HARD LSMEAN	LSMEAN Number
1	-12.5555556	1
2	-12.5000000	2
3	-12.3636364	3
4	-12.8604651	4
5	-11.8500000	5
6	-13.0000000	6
7	-13.6538462	7
8	-14.3529412	8

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 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		0.9363	0.6589	0.4720	0.0989	0.2741	0.0089	0.0002
2	0.9363		0.8237	0.5509	0.2841	0.3986	0.0552	0.0042
3	0.6589	0.8237		0.0641	0.0597	0.0080	<.0001	<.0001
4	0.4720	0.5509	0.0641		<.0001	0.5216	0.0010	<.0001
5	0.0989	0.2841	0.0597	<.0001		<.0001	<.0001	<.0001
6	0.2741	0.3986	0.0080	0.5216	<.0001		0.0016	<.0001
7	0.0089	0.0552	<.0001	0.0010	<.0001	0.0016		0.0311
8	0.0002	0.0042	<.0001	<.0001	<.0001	<.0001	0.0311	

SPECIAL	TENS LSMEAN	LSMEAN Number
1	-16.2333333	1
2	-14.5250000	2
3	-14.9142424	3
4	-15.0488372	4
5	-14.3082500	5
6	-16.1029268	6
7	-15.5944231	7
8	-17.2382353	8

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 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		0.4409	0.3418	0.3811	0.1577	0.9198	0.6313	0.5086
2	0.4409		0.8419	0.7858	0.9107	0.4035	0.5762	0.1861
3	0.3418	0.8419		0.8747	0.4848	0.1186	0.4074	0.0355
4	0.3811	0.7858	0.8747		0.3608	0.1297	0.4730	0.0389
5	0.1577	0.9107	0.4848	0.3608		0.0121	0.0980	0.0064
6	0.9198	0.4035	0.1186	0.1297	0.0121		0.4368	0.2484
7	0.6313	0.5762	0.4074	0.4730	0.0980	0.4368		0.1113
8	0.5086	0.1861	0.0355	0.0389	0.0064	0.2484	0.1113	

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

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LDEOC Ethylene Acrylate

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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 280

Number of Observations Used 280

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LDEOC Ethylene Acrylate

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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	45.7912991	11.4478248	17.89	<.0001
Error	275	176.0146595	0.6400533		
Corrected Total	279	221.8059586			

R-Square	Coeff Var	Root MSE	VOLC Mean
0.206448	3.201167	0.800033	24.99193

Source	DF	Type I SS	Mean Square	F Value	Pr > F
LTMSLAB	4	45.79129907	11.44782477	17.89	<.0001

Source	DF	Type III SS	Mean Square	F Value	Pr > F
LTMSLAB	4	45.79129907	11.44782477	17.89	<.0001

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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	93.3576541	23.3394135	16.42	<.0001
Error	275	390.9137744	1.4215046		
Corrected Total	279	484.2714286			

R-Square	Coeff Var	Root MSE	HARD Mean
0.192780	-9.227066	1.192269	-12.92143

Source	DF	Type I SS	Mean Square	F Value	Pr > F
LTMSLAB	4	93.35765414	23.33941353	16.42	<.0001

Source	DF	Type III SS	Mean Square	F Value	Pr > F
LTMSLAB	4	93.35765414	23.33941353	16.42	<.0001

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LDEOC Ethylene Acrylate

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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	32.894923	8.223731	0.59	0.6692
Error	275	3824.182734	13.906119		
Corrected Total	279	3857.077657			

R-Square	Coeff Var	Root MSE	TENS Mean
0.008528	-24.05754	3.729091	-15.50071

Source	DF	Type I SS	Mean Square	F Value	Pr > F
LTMSLAB	4	32.89492312	8.22373078	0.59	0.6692

Source	DF	Type III SS	Mean Square	F Value	Pr > F
LTMSLAB	4	32.89492312	8.22373078	0.59	0.6692

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 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	24.5954762	1
B	25.1335593	2
E	23.7009091	3
G	25.3692308	4
I	25.1943750	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	0.0006	<.0001	<.0001
2	<.0001		<.0001	0.0889	0.6960
3	0.0006	<.0001		<.0001	<.0001
4	<.0001	0.0889	<.0001		0.2345
5	<.0001	0.6960	<.0001	0.2345	

LTMSLAB	HARD LSMEAN	LSMEAN Number
A	-13.1190476	1
B	-13.0677966	2
E	-14.9090909	3
G	-12.1794872	4
I	-13.1458333	5

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 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		0.8004	<.0001	<.0001	0.9013
2	0.8004		<.0001	<.0001	0.7366
3	<.0001	<.0001		<.0001	<.0001
4	<.0001	<.0001	<.0001		<.0001
5	0.9013	0.7366	<.0001	<.0001	

LTMSLAB	TENS LSMEAN	LSMEAN Number
A	-15.7666667	1
B	-15.3220339	2
E	-16.3909091	3
G	-15.0807692	4
I	-15.7333333	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		0.4833	0.6020	0.2431	0.9606
2	0.4833		0.3836	0.7080	0.5709
3	0.6020	0.3836		0.2763	0.5983
4	0.2431	0.7080	0.2763		0.3410
5	0.9606	0.5709	0.5983	0.3410	

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

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LDEOC Ethylene Acrylate

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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	280
Number of Observations Used	280

PlotByBatchA.lst

LDEOC Ethylene Acrylate
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 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	30	108.1087281	3.6036243	7.89	<.0001
Error	249	113.6972305	0.4566154		
Corrected Total	279	221.8059586			

R-Square	Coeff Var	Root MSE	VOLC Mean
0.487402	2.703806	0.675733	24.99193

Source	DF	Type I SS	Mean Square	F Value	Pr > F
SPECIAL	7	29.18803331	4.16971904	9.13	<.0001
LTMSLAB	4	49.67442181	12.41860545	27.20	<.0001
SPECIAL*LTMSLAB	19	29.24627296	1.53927752	3.37	<.0001

Source	DF	Type III SS	Mean Square	F Value	Pr > F
SPECIAL	7	35.26429703	5.03775672	11.03	<.0001
LTMSLAB	4	37.62229226	9.40557307	20.60	<.0001
SPECIAL*LTMSLAB	19	29.24627296	1.53927752	3.37	<.0001

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 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	30	267.9829926	8.9327664	10.28	<.0001
Error	249	216.2884360	0.8686283		
Corrected Total	279	484.2714286			

R-Square	Coeff Var	Root MSE	HARD Mean
0.553374	-7.212842	0.932002	-12.92143

Source	DF	Type I SS	Mean Square	F Value	Pr > F
SPECIAL	7	121.4984683	17.3569240	19.98	<.0001
LTMSLAB	4	73.2363108	18.3090777	21.08	<.0001
SPECIAL*LTMSLAB	19	73.2482135	3.8551691	4.44	<.0001

Source	DF	Type III SS	Mean Square	F Value	Pr > F
SPECIAL	7	69.00499668	9.85785667	11.35	<.0001
LTMSLAB	4	34.48668811	8.62167203	9.93	<.0001
SPECIAL*LTMSLAB	19	73.24821348	3.85516913	4.44	<.0001

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 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	30	722.772470	24.092416	1.91	0.0040
Error	249	3134.305188	12.587571		
Corrected Total	279	3857.077657			

R-Square	Coeff Var	Root MSE	TENS Mean
0.187389	-22.88860	3.547897	-15.50071

Source	DF	Type I SS	Mean Square	F Value	Pr > F
SPECIAL	7	167.1655044	23.8807863	1.90	0.0705
LTMSLAB	4	15.9227054	3.9806764	0.32	0.8670
SPECIAL*LTMSLAB	19	539.6842597	28.4044347	2.26	0.0025

Source	DF	Type III SS	Mean Square	F Value	Pr > F
SPECIAL	7	84.9428502	12.1346929	0.96	0.4581
LTMSLAB	4	72.0915842	18.0228961	1.43	0.2239
SPECIAL*LTMSLAB	19	539.6842597	28.4044347	2.26	0.0025

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 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	24.5874995	5
6	24.2002058	6
7	25.2865778	7
8	25.4415000	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
5	0.0528	0.0005	0.0004
6	0.0528	<.0001	<.0001	<.0001
7	0.0005	<.0001	.	0.4586
8	0.0004	<.0001	0.4586	.

SPECIAL	HARD LSMEAN	LSMEAN Number
1	Non-est	1
2	Non-est	2
3	Non-est	3
4	Non-est	4
5	-12.0341658	5
6	-13.2762923	6
7	-13.9958333	7
8	-14.3500000	8

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 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
5	<.0001	<.0001	<.0001
6	<.0001	<.0001	0.0013	0.0003
7	<.0001	0.0013	0.0013	0.2197
8	<.0001	0.0003	0.2197	0.2197

SPECIAL	TENS LSMEAN	LSMEAN Number
1	Non-est	1
2	Non-est	2
3	Non-est	3
4	Non-est	4
5	-14.7372363	5
6	-16.1922475	6
7	-15.8961111	7
8	-17.0815000	8

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 All Valid Reference Data and All Valid Batch 8 Runs
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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	
5	0.1650	0.2631	0.0633	
6	0.1650	.	0.7262	0.4225	
7	0.2631	0.7262	.	0.2804	
8	0.0633	0.4225	0.2804	.	

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

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

The FREQ Procedure

Table of LTMSLAB by SPECIAL

LTMSLAB SPECIAL

Frequency, Percent Row Pct Col Pct	1	2	3	4	5	6	7	8	Total
A	8	2	0	13	11	33	15	2	84
	2.86	0.71	0.00	4.64	3.93	11.79	5.36	0.71	30.00
	9.52	2.38	0.00	15.48	13.10	39.29	17.86	2.38	
	88.89	50.00	0.00	30.23	27.50	40.24	28.85	11.76	
B	0	2	20	6	7	11	9	4	59
	0.00	0.71	7.14	2.14	2.50	3.93	3.21	1.43	21.07
	0.00	3.39	33.90	10.17	11.86	18.64	15.25	6.78	
	0.00	50.00	60.61	13.95	17.50	13.41	17.31	23.53	
E	0	0	1	0	1	2	3	4	11
	0.00	0.00	0.36	0.00	0.36	0.71	1.07	1.43	3.93
	0.00	0.00	9.09	0.00	9.09	18.18	27.27	36.36	
	0.00	0.00	3.03	0.00	2.50	2.44	5.77	23.53	
G	1	0	12	12	13	19	16	5	78
	0.36	0.00	4.29	4.29	4.64	6.79	5.71	1.79	27.86
	1.28	0.00	15.38	15.38	16.67	24.36	20.51	6.41	
	11.11	0.00	36.36	27.91	32.50	23.17	30.77	29.41	
I	0	0	0	12	8	17	9	2	48
	0.00	0.00	0.00	4.29	2.86	6.07	3.21	0.71	17.14
	0.00	0.00	0.00	25.00	16.67	35.42	18.75	4.17	
	0.00	0.00	0.00	27.91	20.00	20.73	17.31	11.76	
Total	9	4	33	43	40	82	52	17	280
	3.21	1.43	11.79	15.36	14.29	29.29	18.57	6.07	100.00