8EHQ-0903-15427

LYONDELL

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One Houston Center, Suite 1600
1221 McKinney Street
Houston, Texas 77010
Phone: 713.309.2136
Fax: 713.951.1574
Patrick.gibson@lyondell.com

VIA CERTIFIED MAIL

September 15, 2003

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TSCA Document Processing Center (7407M)
Office of Pollution Prevention and Toxics
United States Environmental Protection Agency
1200 Pennsylvania Avenue, NW
Washington, DC 20460-0001

Attention: TSCA 8(e) Coordinator

RE: Tertiary-Butanol – Rat Reproductive/Developmental Screening Study

Dear Sir or Madam:

Lyondell Chemical Company (Lyondell) has received preliminary results from a reproductive and developmental toxicity screening test (OECD Guideline 421) that was conducted on tertiary-butanol (t-butanol, CASRN 75-65-0). We are submitting attached the results of this study in accordance to Section 8(e) of the Toxic Substances Control Act (TSCA) because it includes findings that EPA may consider to be 8(e) reportable. Lyondell has not made a determination as to whether a significant risk of injury to health or the environment is actually presented by these findings.

t-Butanol was tested pursuant to the Propylene Carbonate/t-Butyl Alcohol HPV Committee testing plan for the High Production Volume Chemical Challenge Program. The study experimental design consisted of groups of male and female Sprague-Dawley rats that were administered t-butanol by oral gavage at daily dosages of 0, 64, 160, 400, and 1000 mg/kg (Groups 1 through 5, respectively) for 4 weeks prior to mating and to females throughout gestation and lactation. Results currently reported include dam gestation and lactation body weights, gestation length, and pup viability and body weights. Statistical analyses of the results have not yet been performed.

The dams in the 1000 mg/kg group exhibited an apparent increase in gestation length compared to the vehicle control dams. In addition the pups of the 1000 mg/kg dams exhibited decreased pup viability, as indicated by a lower percent survival at birth and postnatal day 4, and a decrease in pup body weights at postnatal day 0, 4, and 7. Maternal toxicity was also observed in the 1000 mg/kg dams as evident by a decrease in the dam gestation and lactation body weights. Attached are the unaudited tables of the study data that have been received from the laboratory. We will forward the final report for this study when it is completed.

Specific questions regarding this submission should be directed to my attention at 713-309-2136. Thank you for your assistance in this regulatory matter.

Sincerely,

Patrick Gibson
Product Safety Specialist – Regulatory
Corporate TSCA Coordinator
Lyondell Chemical Company

Enclosure

269818

Responsible Care®
A Public Commitment

03-4254: Summary of Peri-Post-natal Mortality

	PND0	PND1	PND4	PND7
GROUP 1				
Pup deaths	5	0	4	0
Litters affected	5	0	3	0
GROUP 2				
Pup deaths	2	0	1	0
Litters affected	1	0	1	0
GROUP 3				
Pup deaths	4	3	0	0
Litters affected	2	3	0	0
GROUP 4				
Pup deaths	1	1	0	0
Litters affected	1	1	0	0
GROUP 5				
Pup deaths	16	25	3	0
Litters affected	6	7	3	0

	Total born	Perinatal deaths	%	Born alive	Deaths PND 0-4	%	Total born	Overall PPN death	%
GROUP 1	172	5	3	167	4	2	172	9	5
GROUP 2	154	2	1	152	1	1	154	3	2
GROUP 3	154	4	3	150	3	2	154	7	5
GROUP 4	171	1	1	170	1	1	171	2	1
GROUP 5	153	16	10	137	28	20	153	44	29

Group Viability Index: 97.6

Group Viability Index: 99.3

Group Viability Index: 98.3

Group Viability Index: 99.5

Group Viability Index: 78.4

Two rats (#5563 and #5573) contributed 11 of these deaths

One rat (#5571) contributed 15 deaths

Length of Gestation (Days)	Frequency Gp 1	Gp 2	Gp 3	Gp 4	Gp 5
21	1	2	0	1	0
22	9	7	9	6	5
23	0	1	1	5	6
24	0	0	1	0	0

GROUP 1	Vehicle			Postnatal days									
	LIVE	DEAD	TOTAL	1	1	4	4	4p	4p	7	7	14	21
Rat ID	N	N	N	T	d	T	d	T	C	T	d	T	T
1563	14	0	14	14	0	14	0	10	4	10	0	-	-
1564	16	1	17	16	0	15	1	10	5	-	-	-	-
1565	16	0	16	16	0	15	1	10	5	10	0	-	-
1566	18	1	19	18	0	18	0	10	8	-	-	-	-
1567					-		-		-		-		
1568	14	0	14	14	0	14	0	10	4	10	0	-	-
1569	15	1	16	15	0	15	0	10	5	10	0	-	-
1570	16	0	16	16	0	16	0	10	6	10	0	-	-
1571	15	1	16	15	0	15	0	10	5	-	-	-	-
1572	15	0	15	15	0	15	0	10	5	-	-	-	-
1573	14	1	15	14	0	14	0	10	4	10	0	-	-
1574	14	0	14	14	0	12	2	10	2	-	-	-	-

Gestation days	Viability Index PND0 to PND4	
N		
22	0	100
22	1	94
21	1	94
22	0	100
	not pregnant	
22	0	100
22	0	100
22	0	100
22	0	100
assigned GD0	0	100
22	0	100
22	2	86

GROUP 1	PND0	PND1	PND4	PND7	TOTAL
Deaths	5	0	4	0	9
Litters	5	0	3	0	

21	1	
22	9	4
23	0	
24	0	

GROUP 1													
MEAN	15.2	0.5	15.6	15.2	14.8	10.0	10.0	-	-	21.9	0.4	97.6
S.D.	1.3	0.5	1.5	1.3	1.5	0.0	0.0	-	-	0.3	0.7	4.7
N	11	11	11	11	11	11	6	-	-	10	11	11

GROUP 2	TBA 64 mg/kg/day			Postnatal days										Gestation days	Viability Index PND0 to PND4	
	LIVE	DEAD	TOTAL	1	1	4	4	4p	4p	7	7	14	21			
Rat ID	N	N	N	T	d	T	d	T	d	T	d	T	T	N		
2563	16	0	16	16	0	16	0	10	6	10	0	-	-	22	0	100
2564	13	0	13	13	0	13	0	10	3	-	-	-	-	22	0	100
2565	15	0	15	15	0	15	0	10	5	10	0	-	-	22	0	100
2566	13	0	13	13	0	13	0	10	3	10	0	-	-	21	0	100
2567	13	0	13	13	0	12	1	10	2	-	-	-	-	22	1	92
2568	13	2	15	13	0	13	0	10	3	-	-	-	-	22	0	100
2569	15	0	15	15	0	15	0	10	5	-	-	-	-	assigned GD0	0	100
2570	14	0	14	14	0	14	0	10	4	10	0	-	-	21	0	100
2571	16	0	16	16	0	16	0	10	6	-	-	-	-	23	0	100
2572xNP					-		-		-		-				Not pregnant	
2573	15	0	15	15	0	15	0	10	5	10	0	-	-	22	0	100
2574	9	0	9	9	0	9	0	9	0	-	-	-	-	22	0	100

GROUP 2	PND0	PND1	PND4	PND7	TOTAL
Deaths	2	0	1	0	3
Litters	1	0	1	0	

21	2	
22	7	1
23	1	
24	0	

GROUP 2															
MEAN	13.8	0.2	14.0	13.8	13.7	9.9	10.0	-	-	21.9	0.1	99.3
S.D.	2.0	0.6	2.0	2.0	2.1	0.3	0.0	-	-	0.6	0.3	2.3
N	11	11	11	11	11	11	5	-	-	10	11.0	11.0

GROUP 3	TBA 160 mg/kg/day			Postnatal days									
	LIVE	DEAD	TOTAL	1	1	4	4	4p	4p	7	7	14	21
Rat ID	N	N	N	T	d	T	d	T	d	T	d	T	T
3563	19	0	19	18	1	18	0	10	8	10	0		
3564	15	0	15	15	0	15	0	10	5	10	0		
3566	14	0	14	14	0	14	0	10	4	-	-		
3567	16	0	16	16	0	16	0	10	6	10	0		
3568	14	0	14	14	0	14	0	10	4	10	0		
3569	2	3	5	2	0	2	0	2	0	-	-		
3570	11	0	11	11	0	11	0	10	1	-	-		
3571	14	1	15	14	0	14	0	10	4	-	-		
3572	15	0	15	15	0	15	0	10	5	10	0		
3573	16	0	16	15	1	15	0	10	5	-	-		
3574	14	0	14	13	1	13	0	10	3	10	0		

	Gestation days	Viability Index PND0 to PND4	
	N		
	22	1	95
	22	0	100
	22	0	100
	22	0	100
	22	0	100
	24	0	100
	22	0	100
	23	0	100
	22	0	100
	22	1	94
	22	1	93

GROUP 3	PND0	PND1	PND4	PND7	TOTAL
Deaths	4	3	0	0	7
Litters	2	3	0	0	

21	0		
22	9	3	
23	1		
24	1		

GROUP 3

MEAN	13.6	0.4	14.0	13.4		13.4		9.3	10.0		22.3	0.5	98.3
S.D.	4.3	0.9	3.5	4.2		4.2		2.4	0.0		0.6	0.9	2.9
N	11	11	11	11		11		11	6		11	12.0	11.0

GROUP 4	TBA 400 mg/kg/day			Postnatal days									
	LIVE	DEAD	TOTAL	1	1	4	4	4p	4p	7	7	14	21
Rat ID	N	N	N	T	d	T	d	T	d	T	d	T	T
4563	13	0	13	13	0	13	0	10	3	10	0		
4564	15	0	15	15	0	15	0	10	5	-	-		
4565	18	0	18	17	1	17	0	10	7	-	-		
4566	14	0	14	14	0	14	0	10	4	-	-		
4567	15	0	15	15	0	15	0	10	5	-	-		
4568	16	0	16	16	0	16	0	10	6	-	-		
4569	11	0	11	11	0	11	0	10	1	10	0		
4570	18	0	18	18	0	18	0	10	8	-	-		
4571	10	0	10	10	0	10	0	10	0	-	-		
4572	13	0	13	13	0	13	0	10	3	-	-		
4573	15	0	15	15	0	15	0	10	5	-	-		
4574	12	1	13	12	0	12	0	10	2	-	-		

	Gestation days	Viability Index PND0 to PND4	
	N		
	21	0	100
	22	0	100
	22	1	94
	23	0	100
	23	0	100
	22	0	100
	22	0	100
	23	0	100
	23	0	100
	22	0	100
	23	0	100
	22	0	100

GROUP 4	PND0	PND1	PND4	PND7	TOTAL
Deaths	1	1	0	0	2
Litters	1	1	0	0	

21	1		
22	6	1	
23	5		
24	0		

GROUP 4													
MEAN	14.2	0.1	14.3	14.1	14.1	10.0	10.0	22.3	0.1	99.5
S.D.	2.5	0.3	2.5	2.4	2.4	0.0	0.0	0.7	0.3	1.6
N	12	12	12	12	12	12	2	12	12.0	12.0

GROUP 5	TBA 1000 mg/kg/day			Postnatal days									
	LIVE	DEAD	TOTAL	1	1	4	4	4p	4p	7	7	14	21
Rat ID	N	N	N	T	d	T	d	T	d	T	d	T	T
5563	9	5	14	6	3	5	1	5	0	-	-		
5564	13	1	14	13	0	13	0	10	3	10	-		
5565	17	0	17	17	0	16	1	10	6	-	-		
5566	14	0	14	14	0	14	0	10	4	-	-		
5567	16	0	16	16	0	16	0	10	6	-	-		
5568	14	0	14	13	1	13	0	10	3	-	-		
5569	13	0	13	12	1	12	0	10	2	-	-		
5570	10	2	12	9	1	9	0	9	0	9	0		
5571	15	1	16	1	14	0	1	-	-	-	-		
5572					-		-		-		-		
5573	9	6	15	6	3	6	0	6	0	-	-		
5574	7	1	8	5	2	5	0	5	0	5	-		

	Gestation days	Viability Index PND0 to PND4	
	N		
	23	4	56
	22	0	100
	22	1	94
	23	0	100
	22	0	100
	23	1	93
	23	1	92
	22	1	90
	23	15	0
		not pregnant	
	22	3	67
	23	2	71

GROUP 5	PND0	PND1	PND4	PND7	TOTAL
Deaths	16	25	3	0	44
Litters	6	7	3	0	

21	0	
22	5	28
23	6	
24	0	

GROUP 5															
MEAN	12.5	1.5	13.9	10.2	9.9	8.5	8.0	22.5	2.5	78.4
S.D.	3.2	2.1	2.4	5.1	5.3	2.2	2.6	0.5	4.3	30.1
N	11	11	11	11	11	10	3	11	11.0	11.0

18-AUG-2003 11:20

Huntingdon Life Sciences 03-4254

AVERAGE PUP BODY WEIGHT / LITTER (GRAMS)

FEMALE#	DAY 1 MALE	DAY 1 FEMALE	DAY 1 BOTH	DAY 4 MALE	DAY 4 FEMALE	DAY 4 BOTH	DAY 4 MALE	DAY 4 FEMALE	DAY 4 BOTH	DAY 7 MALE	DAY 7 FEMALE	DAY 7 BOTH	DAY 14 MALE	DAY 14 FEMALE	DAY 14 BOTH	DAY 21 MALE	DAY 21 FEMALE	DAY 21 BOTH
1564	6.9	6.6	6.8	9.4	9.2	9.3	9.4	9.0	9.2									
1565	6.4	6.0	6.2	9.4	8.8	9.0	9.4	8.6	9.0	15.6	14.5	15.1						
1566	7.3	7.1	7.2	10.2	9.9	10.1	10.0	9.9	9.9	16.1	15.8	15.9						
1567x NP																		
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]						
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]						
1571	7.6	7.2	7.5	10.5	9.9	10.3	10.3	9.9	10.1	16.7	16.2	16.5						
1572	7.0	6.7	6.8	10.0	9.7	9.8	10.1	9.6	9.8	16.2	15.5	15.9						
MEAN	7.3	6.9	7.1	10.6	10.1	10.4	10.5	10.0	10.3	17.2	16.4	16.8	0.0	0.0	0.0	0.0	0.0	0.0

DAY 4 COLUMNS = PRE- AND POSTCULLING RESPECTIVELY

18-AUG-2003 11:20

Huntingdon Life Sciences 03-4254

AVERAGE PUP BODY WEIGHT / LITTER (GRAMS)

FEMALE#	DAY 1			DAY 4			DAY 4			DAY 7			DAY 14			DAY 21		
	MALE	FEMALE	BOTH	MALE	FEMALE	BOTH	MALE	FEMALE	BOTH	MALE	FEMALE	BOTH	MALE	FEMALE	BOTH	MALE	FEMALE	BOTH
2564	8.7	8.0	8.2	12.2	11.3	11.6	12.2	11.4	11.7									
2565	7.6	7.2	7.4	10.5	10.3	10.4	10.7	10.3	10.5	16.9	16.1	16.5						
2566	6.7	6.5	6.6	9.6	9.6	9.6	9.8	9.6	9.7	15.0	14.6	14.8						
2567	7.5	7.2	7.4	11.0	10.8	11.0	11.1	10.8	11.0	16.5	16.4	16.4						
2568	7.7	7.3	7.6	11.3	10.7	11.0	11.3	10.7	11.0	17.0	16.0	17.5						
[illegible]	---	---	---	---	---	---	---	---	---	----	----	----						
2571	8.5	8.3	8.4	11.9	11.5	11.7	11.7	11.7	11.7	20.0	19.5	19.8						
2572x NP																		
MEAN	7.7	7.3	7.5	10.9	10.5	10.7	11.0	10.5	10.8	17.3	16.5	16.9	0.0	0.0	0.0	0.0	0.0	0.0

DAY 4 COLUMNS = PRE- AND POSTCULLING RESPECTIVELY

18-AUG-2003 11:20

Huntingdon Life Sciences 03-4254

AVERAGE PUP BODY WEIGHT / LITTER (GRAMS)

FEMALE#	DAY 1 MALE	DAY 1 FEMALE	DAY 1 BOTH	DAY 4 MALE	DAY 4 FEMALE	DAY 4 BOTH	DAY 4 MALE	DAY 4 FEMALE	DAY 4 BOTH	DAY 7 MALE	DAY 7 FEMALE	DAY 7 BOTH	DAY 14 MALE	DAY 14 FEMALE	DAY 14 BOTH	DAY 21 MALE	DAY 21 FEMALE	DAY 21 BOTH
3564	7.5	7.0	7.2	10.4	9.6	9.9	10.5	9.9	10.2	16.5	15.6	16.0						
3565	6.6	6.0	6.2															
3566	7.4	6.7	7.2	11.0	10.3	10.9	11.1	10.3	10.9	17.6	16.4	17.2						
3567	6.4	6.4	6.4	9.4	9.3	9.4	9.4	9.2	9.3	15.1	14.9	15.0						
3569	8.0	7.5	7.8	10.6	10.0	10.3	10.5	10.0	10.3	16.4	16.1	16.3						
---	---	---	---	---	---	---	---	---	---	---	---	---						
3571	8.7	8.4	8.5	12.9	12.5	12.7	12.8	12.7	12.7	20.6	20.3	20.4						
3572	7.7	7.1	7.5	10.5	10.1	10.3	10.3	10.2	10.2	17.2	16.7	17.0						
MEAN	7.4	7.1	7.4	10.7	10.4	10.7	10.7	10.5	10.7	16.9	16.6	16.9	0.0	0.0	0.0	0.0	0.0	0.0

DAY 4 COLUMNS = PRE- AND POSTCULLING RESPECTIVELY

18-AUG-2003 11:20

Huntingdon Life Sciences 03-4254

AVERAGE PUP BODY WEIGHT / LITTER (GRAMS)

FEMALE#	DAY 1 MALE	DAY 1 FEMALE	DAY 1 BOTH	DAY 4 MALE	DAY 4 FEMALE	DAY 4 BOTH	DAY 4 MALE	DAY 4 FEMALE	DAY 4 BOTH	DAY 7 MALE	DAY 7 FEMALE	DAY 7 BOTH	DAY 14 MALE	DAY 14 FEMALE	DAY 14 BOTH	DAY 21 MALE	DAY 21 FEMALE	DAY 21 BOTH
4564	7.0	6.6	6.8	8.2	7.8	8.0	8.1	7.9	8.0	12.8	12.5	12.7						
4565	6.2	6.1	6.2	8.7	8.5	8.6	8.3	8.4	8.3	13.6	13.8	13.7						
4566	8.3	8.2	8.2	11.7	11.5	11.6	11.6	11.3	11.4	18.0	17.5	17.7						
4567	7.4	7.4	7.4	10.7	10.4	10.6	10.9	10.2	10.6	16.6	16.3	16.4						
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]						
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]						
4571	9.3	8.7	9.0	13.8	13.1	13.5	13.8	13.1	13.5	19.1	18.2	18.8						
4572	7.4	7.2	7.3	11.0	11.1	11.0	11.0	11.1	11.1	17.5	17.7	17.6						
MEAN	7.7	7.4	7.6	10.8	10.5	10.7	10.7	10.4	10.6	16.8	16.4	16.6	0.0	0.0	0.0	0.0	0.0	0.0

DAY 4 COLUMNS = PRE- AND POSTCULLING RESPECTIVELY

18-AUG-2003 11:20

Huntingdon Life Sciences 03-4254

AVERAGE PUP BODY WEIGHT / LITTER (GRAMS)

FEMALE#	DAY 1 MALE	DAY 1 FEMALE	DAY 1 BOTH	DAY 4 MALE	DAY 4 FEMALE	DAY 4 BOTH	DAY 4 MALE	DAY 4 FEMALE	DAY 4 BOTH	DAY 7 MALE	DAY 7 FEMALE	DAY 7 BOTH	DAY 14 MALE	DAY 14 FEMALE	DAY 14 BOTH	DAY 21 MALE	DAY 21 FEMALE	DAY 21 BOTH
5564	6.7	6.6	6.7	9.3	9.1	9.2	9.3	9.0	9.1	13.8	13.7	13.7						
5565	7.0	6.6	6.8	8.4	7.8	8.1	8.3	8.0	8.1	11.8	11.3	11.5						
5566	6.7	6.1	6.4	9.3	8.6	8.9	9.3	8.4	8.9									
5567	6.0	6.1	6.1	8.2	8.2	8.2	8.1	8.2	8.2	13.2	13.3	13.3						
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]						
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]						
5571	5.2		5.2															
5572x NP																		
MEAN	6.5	6.3	6.4	9.4	9.2	9.1	9.4	9.2	9.1	14.4	14.3	14.1	0.0	0.0	0.0	0.0	0.0	0.0

DAY 4 COLUMNS = PRE- AND POSTCULLING RESPECTIVELY

15-AUG-2003 19:53

Huntingdon Life Sciences 03-4254

TBA: REPRODUCTION/DEVELOPMENTAL TOXICITY SCREENING TEST IN RATS

	DAY OF GESTATION				
1563	245	291	330	361	405
1564	272	308	349	373	426
1565	241	283	329	365	410
1566	279	312	357	389	443
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1569	255	289	310	341	393
1570	256	302	334	367	421
1571	268	293	333	357	407
MEAN	253	291	327	356	402

NP=NOT PREGNANT x=EXCLUDED FROM MEAN

15-AUG-2003 19:53

Huntingdon Life Sciences 03-4254

TBA: REPRODUCTION/DEVELOPMENTAL TOXICITY SCREENING TEST IN RATS

	DAY OF GESTATION				
2563	275	307	357	380	427
2564	274	323	359	388	425
2565	256	293	328	350	399
2566	209	243	274	298	332
2567	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
2571	268	309	352	382	430
2572x NP	269	301	311	301	294
MEAN	259	296	334	359	402

NP=NOT PREGNANT x=EXCLUDED FROM MEAN

15-AUG-2003 19:53

Huntingdon Life Sciences 03-4254

TBA: REPRODUCTION/DEVELOPMENTAL TOXICITY SCREENING TEST IN RATS

	DAY OF GESTATION				
3563	258	300	339	372	425
3564	255	292	332	362	412
3565	250	291	312	341	388
3566	258	305	342	375	416
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
3570	209	239	267	291	314
3571	278	325	362	394	445
3574	289	318	358	391	432
N	12	12	12	12	12

15-AUG-2003 19:53

Huntingdon Life Sciences 03-4254

TBA: REPRODUCTION/DEVELOPMENTAL TOXICITY SCREENING TEST IN RATS

	DAY OF GESTATION				
4563	247	290	332	362	399
4564	235	270	306	328	363
4565	258	292	327	359	417
4566	232	274	320	350	388
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
4570	258	298	348	377	435
4571	204	238	276	301	333
4574	286	314	351	372	411
N	12	12	12	12	12

15-AUG-2003 19:53

Huntingdon Life Sciences 03-4254

TBA: REPRODUCTION/DEVELOPMENTAL TOXICITY SCREENING TEST IN RATS

	DAY OF GESTATION				
5563	242	276	309	338	375
5564	253	286	320	355	381
5565	273	307	340	372	406
5566	262	300	322	346	368
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
5569	229	280	299	321	365
5570	258	295	330	353	384
5571	234	268	288	319	363
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
5574	240	270	302	318	337
N	11	11	11	11	11

15-AUG-2003 19:54

Huntingdon Life Sciences 03-4254

TBA: REPRODUCTION/DEVELOPMENTAL TOXICITY SCREENING TEST IN RATS

	DAY OF GESTATION		
1563	25	27	27
1564	24	25	24
1565	22	26	24
1566	24	25	26
[illegible]	[illegible]	[illegible]	[illegible]
1569	21	22	23
1570	24	24	25
1571	22	24	24
[illegible]	--	--	--
MEAN	23	24	24

NP=NOT PREGNANT x=EXCLUDED FROM MEAN

15-AUG-2003 19:54

Huntingdon Life Sciences 03-4254

TBA: REPRODUCTION/DEVELOPMENTAL TOXICITY SCREENING TEST IN RATS

	DAY OF GESTATION		
2563	25	28	CF
2564	23	26	26
2565	23	23	23
2566	20	21	22
---		--	--
2570	27	27	29
2571	25	25	28
2572x NP	26	24	18
---	--	--	--
MEAN	24	25	25

NP=NOT PREGNANT x=EXCLUDED FROM MEAN

15-AUG-2003 19:54

Huntingdon Life Sciences 03-4254

TBA: REPRODUCTION/DEVELOPMENTAL TOXICITY SCREENING TEST IN RATS

	DAY OF GESTATION		
3563	25	27	26
3564	25	26	28
3565	21	23	23
3566	24	25	27
[illegible]	[illegible]	[illegible]	[illegible]
3569	21	23	24
3570	18	21	19
3571	25	27	26
3574	24	27	27
N	12	11	12

CF=Contaminated Feeder

15-AUG-2003 19:54

Huntingdon Life Sciences 03-4254

TBA: REPRODUCTION/DEVELOPMENTAL TOXICITY SCREENING TEST IN RATS

	DAY OF GESTATION		
4563	23	26	24
4564	22	23	22
4565	23	24	26
4566	23	25	CF
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
4570	22	24	CF
4571	20	21	23
4574		26	26
N	11	12	10

CF=Contaminated Feeder TE=Technician Error: No weight recorded

15-AUG-2003 19:54

Huntingdon Life Sciences 03-4254

TBA: REPRODUCTION/DEVELOPMENTAL TOXICITY SCREENING TEST IN RATS

	DAY OF GESTATION		
5563	CF	CF	CF
5564	23	24	24
5565		25	25
5566	24	20	24
5567		24	24
[illegible]	[illegible]	[illegible]	[illegible]
5570	22	23	24
5571	19	21	20
5574	23	23	24
N	8	10	9

TBA: REPRODUCTION/DEVELOPMENTAL TOXICITY SCREENING TEST IN RATS

	DAY OF LACTATION			
1563	318	303	311	336
1564	312	316		
1565		315	318	331
[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1569	280	289	315	330
1570	315	320	339	352
1573	279	277	308	313
1574		311	320	
S.D.	26.7	20.2	21.8	28.0
N	9	11	10	6

NP=NOT PREGNANT X=EXCLUDED FROM MEAN

TBA: REPRODUCTION/DEVELOPMENTAL TOXICITY SCREENING TEST IN RATS

	DAY OF LACTATION			
2563	319	327	341	340
2564	343	333		
2565	314	290	299	312
2566		242	261	268
[illegible]	[illegible]	[illegible]	[illegible]	
2569	293	278	292	
2570		332	344	364
2573	331	320	319	345
2574	313	300	309	
S.D.	19.0	28.7	24.9	37.4
N	9	11	10	5

NP=NOT PREGNANT X=EXCLUDED FROM MEAN

TBA: REPRODUCTION/DEVELOPMENTAL TOXICITY SCREENING TEST IN RATS

	DAY OF LACTATION			
3563	301	312	324	329
3564	300	303	302	319
3566	336	334	348	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	
3570	242	245	251	
3571	323	326	351	
3574	328	327	333	350
N	11	11	11	6

TBA: REPRODUCTION/DEVELOPMENTAL TOXICITY SCREENING TEST IN RATS

	DAY OF LACTATION			
4563	320	312	317	329
4564	266	258	254	
4565	301	308	324	
4566	[illegible]	[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	
4569		303	317	328
4570	318	317	333	
4573	329	344	355	
4574	326	310	327	
S.D.	27.4	25.4	31.5	1.1
N	11	12	12	2

TBA: REPRODUCTION/DEVELOPMENTAL TOXICITY SCREENING TEST IN RATS

	DAY OF LACTATION			
5563	271	266	270	
5564		281	288	303
5565		299	316	
[illegible]	[illegible]	[illegible]		
[illegible]	[illegible]	[illegible]	[illegible]	
5569	258	265	284	
5570		272	291	316
5573		290	291	
5574	268	267	277	284
S.D.	30.1	22.6	25.9	15.8
N	7	11	9	3

NP=NOT PREGNANT X=EXCLUDED FROM MEAN

TBA: REPRODUCTION/DEVELOPMENTAL TOXICITY SCREENING TEST IN RATS

	DAY OF LACTATION	
1563	37	48
1565	32	44
1566	38	
1567x NP		
[illegible]	[illegible]	[illegible]
1570	47	55
1571	39	
1572	27	
[illegible]	[illegible]	
MEAN	38	48

NP=NOT PREGNANT x=EXCLUDED FROM MEAN

TBA: REPRODUCTION/DEVELOPMENTAL TOXICITY SCREENING TEST IN RATS

	DAY OF LACTATION	
2563	41	51
2565	32	47
2566	31	37
2567	33	
[illegible]	[illegible]	
2570	35	40
2571	40	
2572x NP		
MEAN	34	46

NP=NOT PREGNANT x=EXCLUDED FROM MEAN

TBA: REPRODUCTION/DEVELOPMENTAL TOXICITY SCREENING TEST IN RATS

	DAY OF LACTATION	
3563	42	48
3564	35	47
3566	39	
3567	42	45
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	
3571	42	
3572	36	50
MEAN	35	48

TBA: REPRODUCTION/DEVELOPMENTAL TOXICITY SCREENING TEST IN RATS

GROUP 4 400 MG/KG/DAY

4563	34	45
4566	36	
4567	39	
4570	38	
4571	30	
4574	34	
MEAN	[illegible]	[illegible]
SD	12	4

TBA: REPRODUCTION/DEVELOPMENTAL TOXICITY SCREENING TEST IN RATS

	DAY OF LACTATION	
5563	16	
5564	37	58
5565	27	
5567	31	
5568	38	
5572x NP		
5573	20	
MEAN	29	46
S.D.	7.5	11.4

NP=NOT PREGNANT X=EXCLUDED FROM MEAN