

Appendix A:

Test Sample Re-analysis [performed by **3M]**

Appendix A1: 1st Test Sample Re-analysis

Internal Correspondence



TO: John Butenhoff November 14, 2000

FROM: Fred L. DeRoos; 201-1W-29; 6-0665
Corporate Analytical Technology Center

REGARDING: **GID-4242 Determination of Fluorochemical Residuals in Products and Product Treated Webs**

Introduction

Four fluorochemical based products and product treated webs were submitted for analysis to determine the concentrations of fluorochemical residuals. The samples had been previously submitted for analysis by Mike McNamara under CATC request No. A-151095. The current analyses were carried out using the same methods as described in the report for Request A-151095.

Results

The results from the analyses, and a comparison to the original analyses, are summarized in Tables 1 - 6. Only analytes that were detected are reported.

Table 1. Concentrations of N-Methyl FOSE (ppm)

Sample Identification	N-Methyl FOSE (original)	N-Methyl FOSE (current)	Difference
4101W Product	720 ppm	735	+15 (+2 %)
4101 Treated Web	740 ppm	1,270	+ 530 (+72 %)
FC-1395 Product	930 ppm	770	- 160 (-17 %)
FC-1395 Treated Web	ND	180	+180
European Fabric Protector Product	60	ND	-60
European Fabric Protector Treated Web	ND	ND	0
SG Carpet Protector Product	ND	ND	0
SG Carpet Protector Treated Web	ND	ND	0

Memo
November 14, 2000
Page 2

Table 2. Concentrations of N-Methyl FOS Amide (ppm)

Sample Identification	N-Methyl FOS Amide (original)	N-Methyl FOS Amide (current)	Difference
4101W Product	ND	ND	0
4101 Treated Web	ND	ND	0
FC-1395 Product	140 ppm	150 ppm	+10 ppm (+7 %)
FC-1395 Treated Web	ND	ND	0
European Fabric Protector Product	ND	ND	0
European Fabric Protector Treated Web	ND	ND	0
SG Carpet Protector Product	ND	ND	0
SG Carpet Protector Treated Web	ND	ND	0

Table 3. Concentrations of N,N-Dimethyl FOS Amide (ppm)

Sample Identification	N,N-Dimethyl FOS Amide (original)	N,N-Dimethyl FOS Amide (current)	Difference
4101W Product	32	ND	-32 ppm
4101 Treated Web	ND	ND	0
FC-1395 Product	770 ppm	560 ppm	-210 ppm (-27 %)
FC-1395 Treated Web	ND	ND	0
European Fabric Protector Product	ND	ND	0
European Fabric Protector Treated Web	ND	ND	0
SG Carpet Protector Product	ND	ND	0
SG Carpet Protector Treated Web	ND	ND	0

Memo
November 14, 2000
Page 3

Table 4. Concentrations of PFOS (ppm)

Sample Identification	PFOS (original)	PFOS (current)	Difference
4101W Product	ND	2	----
4101 Treated Web	<5	11	+6
FC-1395 Product	<5	27	+22
FC-1395 Treated Web	ND	<1	----
European Fabric Protector Product	ND	<1	----
European Fabric Protector Treated Web	<5	2	----
SG Carpet Protector Product	220	610	+390 (+180 %)
SG Carpet Protector Treated Web	200	470	+270 (+140 %)

Table 5. Concentrations of PFHS (ppm)

Sample Identification	PFHS (original)	PFHS (current)	Difference
4101W Product	ND	1.2	+1.2
4101 Treated Web	<5	1.0	----
FC-1395 Product	ND	ND	----
FC-1395 Treated Web	ND	ND	----
European Fabric Protector Product	ND	ND	----
European Fabric Protector Treated Web	<5	2.6	----
SG Carpet Protector Product	440	1,900	+1,500 (+340 %)
SG Carpet Protector Treated Web	270	1,900	+1,600 (+590 %)

Memo
November 14, 2000
Page 4

Table 6. Concentrations of FOS Amide (ppm)

Sample Identification	FOS Amide (original)	FOS Amide (current)	Difference
4101W Product	ND	2.5	----
4101 Treated Web	<5	1.0	+6
FC-1395 Product	<5	110	+100
FC-1395 Treated Web	ND	ND	----
European Fabric Protector Product	ND	ND	----
European Fabric Protector Treated Web	<5	ND	----
SG Carpet Protector Product	ND	6.0	+6
SG Carpet Protector Treated Web	ND	ND	0

Appendix A2: 2nd Test Sample Re-analysis



TO: John Butenhoff

October 28, 2003

FROM: Fred L. DeRoos; 201-1W-29; 6-0665
CATC - Chromatography Group

REGARDING: Request GID-78889, Determination of Fluorochemical Residuals in Products and in Treated Fabric

Introduction

Eight samples were submitted for analysis to determine if they contained semivolatile fluorochemical residuals, specifically methyl FOS acrylate (Methyl FOSEA), methyl FOS methacrylate (Methyl FOSEMA), ethyl FOS acrylate (Ethyl FOSEA), ethyl FOS methacrylate (Ethyl FOSEMA), dimethyl FOS amide, methyl FOS amide, ethyl FOS amide, diethyl FOS amide, FOS amide, methyl FOS chloride, ethyl FOS chloride, methyl FOS alcohol or ethyl FOS alcohol. The samples were also analyzed to determine if they contained perfluorooctyl sulfonic acid (PFOS) or perfluorohexyl sulfonic acid (PFHA). The structures of the fluorochemical residuals of interest are shown in Figure 1. The specific sample identifications and the concentrations of the target analytes determined are listed in the attached data tables. The products were either diluted with a solvent before analysis or extracted. The treated fabrics were extracted before analysis. The analytical methods that were used for these analyses are described in the following paragraphs.

Sample Preparation

The liquid samples were diluted prior to analysis by mixing 1 gram of the sample with 5 mL of acetonitrile. The mixtures were centrifuged, and then an aliquot of the clear liquid was transferred to a glass autosampler vial. The web samples were extracted by mixing 0.5 grams of the web with 5 mL of acetonitrile. The mixtures were shaken overnight, and then aliquots of the extracts were transferred to glass autosampler vials.

Analytical Method for the Determination of Semivolatile Fluorochemical Residuals

The fluorochemical residual concentrations were determined using gas chromatography (HP 6890) with flame ionization detection (GC/FID). A 30-meter DB-5 column with a 0.32 mm inside diameter and a 0.25 μ m film thickness was used for the separations. The samples were injected splitless at 50 °C with a linear temperature ramp of 10 °C/min up to 270 °C. Standard solutions of each analyte were analyzed to produce standard curves covering the expected concentration ranges of the target analytes in the samples (factored for dilution).

Report
October 28, 2003
Page 2

Analytical Method for the Determination of PFOS and PFOA Residuals

The PFOS and PFOA were determined using combined high performance liquid chromatography/electrospray ionization mass spectrometry (HPLC/ESI-MS). The analyses were carried out using an Agilent Model LC/MSD HPLC/MS system equipped with and ESI source operated in the negative ionization mode. The sample components were separated using a 125 mm x 4 mm Merck LichroCART Lichrosphere 100 RP-8 column with a mobile phase gradient of 10 % acetonitrile in water to 95 % acetonitrile in water over a period of 15 minutes.

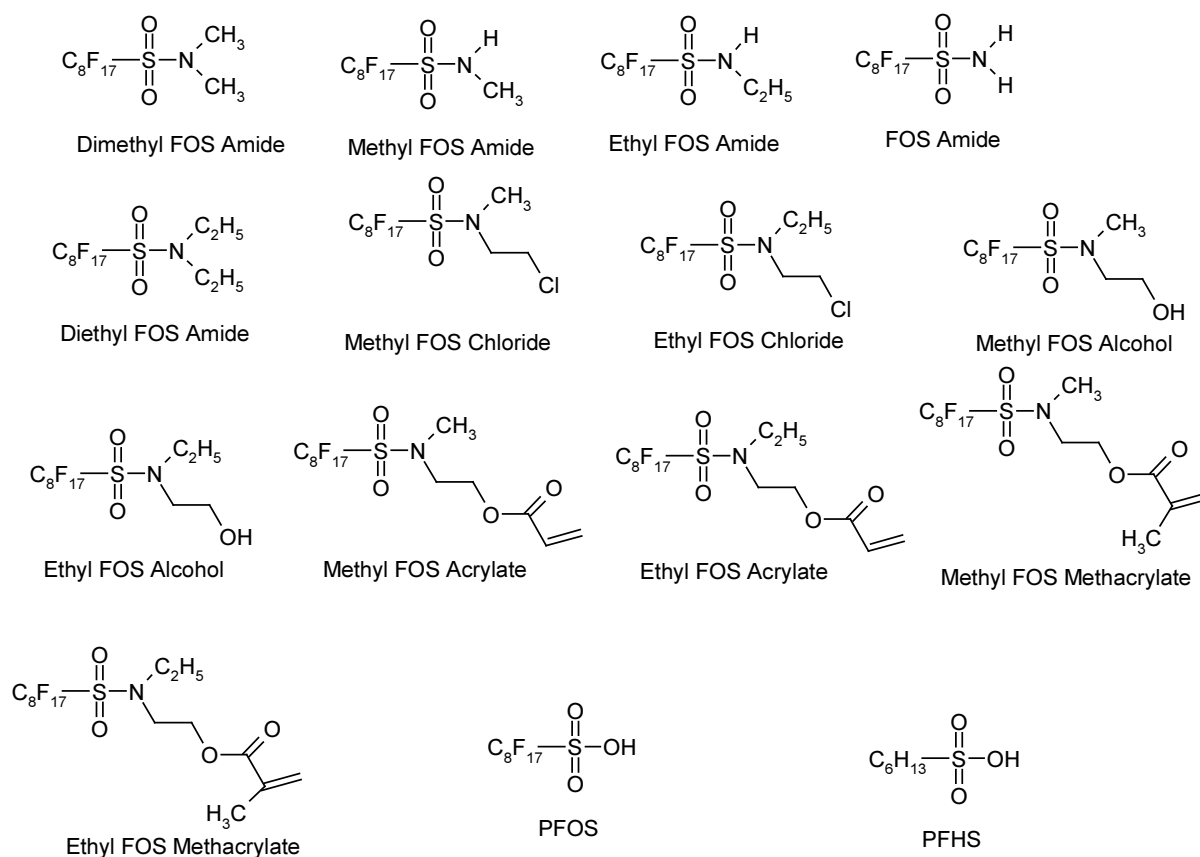


Figure 1. Fluorochemical Residuals of Interest

Report
October 28, 2003
Page 3

The results from the analyses are summarized in Table 1. The concentrations are reported in units of parts-per-million (ppm) or µg/gram of material.

Table 1. Analytical Results (parts-per-million)

Analyte	T-7088.2	T-7338	T-7090.2	T-7339	T-7340	T-7341	T-7342	T-7343
Dimethyl FOS Amide	16	<10	<5	<10	430	<10	<5	<10
Methyl FOS Amide	160	<10	7.7	<10	180	<10	<5	<10
Ethyl FOS Amide	8.9	<10	19	<10	<5	<10	<5	<10
FOS Amide	28	<10	<5	<10	350	<10	<5	<10
Diethyl FOS AMIDE	<5	<10	12	<10	<5	<10	<5	<10
Methyl FOS Chloride	13	<10	<5	<10	140	<10	<5	<10
Ethyl FOS Chloride	<5	<10	14	<10	<5	<10	<5	<10
Methyl FOS Alcohol	5,000	1,600	1,100	<10	4,000	180	47	<10
Ethyl FOS Alcohol	16	21	2,600	4,800	22	<10	<5	<10
Methyl FOS Acrylate	12	<10	<5	<10	<5	<10	<5	<10
Ethyl FOS Acrylate	8.9	<10	18	<10	200	<10	<5	<10
Methyl FOS Methacrylate	20	12	<5	<10	54	<10	<5	<10
Ethyl FOS Methacrylate	<5	<10	21	32	38	<10	<5	<10
PFOS	1.0	8.6	<0.5	<1	1.6	<1	180	190
PFHS	<0.1	0.41	<0.1	0.24	0.14	<0.2	330	270

The detection limits for the semivolatile fluorochemical residual determinations were either 5 ppm or 10 ppm on a weight/weight basis. Samples T-7088.2 and T-7340 contained the greatest number of separate fluorochemical residuals, with the highest concentration residuals being methyl FOS alcohol and ethyl FOS alcohol. Sample T-7343 did not contain any fluorochemical residuals above the detection limit, which was 10 ppm for this sample. Two of the samples, T-7342 and T-7343 were found to contain significant concentrations of PFOS and PFHS. The levels in the other samples were either low or below the detection limit.

The sample preparation steps and the GC and HPLC/MS analyses were carried out by Mike Busch, an on-site vendor employee. Fred L. DeRoos directed the work, interpreted the data and prepared the final report.

F.L. DeRoos

Appendix B: Clinical Observation Data

Table1: Clinical Summary Incidence Report

28-Day Repeated Dermal Contact Study of 3M Test Articles in Sprague-Dawley Rats

Fraunhofer-Inst. f. Toxikologie u. Aerosolforsch.

Study : 01G00002

Clin. Observation Summary A-E

Species: Rat

Sex : Both All sub-sets

Page : 1

Clinical Summary Incidence Report (Brief report)

Days -6 - 42

With reference to nominal day zero

Dose Group	A	B	C	D	E
Dose	Control	1.Test art.	2.Test art.	3.Test art.	4.Test art.
Total animals	16	16	16	16	16
GENOBS					
WITHIN NORMAL LIMITS					
Incidence (%)	16(100)	16(100)	16(100)	16(100)	16(100)
SKIN					
SCABBY SKIN					
Max Score 3					
Incidence (%)	0(0)	0(0)	0(0)	1(6)	0(0)
Mean Severity	0.0	0.0	0.0	2.0	0.0
TOTALS					
Incidence (%)	0(0)	0(0)	0(0)	1(6)	0(0)

28-Day Repeated Dermal Contact Study of 3M Test Articles in Sprague-Dawley Rats

Fraunhofer-Inst. f. Toxikologie u. Aerosolforsch.

Study : 01G00002

Clin. Observation Summary F-I

Species: Rat

Sex : Both All sub-sets

Page : 2

Clinical Summary Incidence Report (Brief report)

Days -6 - 42

With reference to nominal day zero

Dose Group	F	G	H	I
Dose	5.Test art.	6.Test art.	7.Test art.	8.Test art.
Total animals	16	16	16	16
GENOBS				
WITHIN NORMAL LIMITS				
Incidence (%)	16(100)	16(100)	16(100)	16(100)
SKIN				
SCABBY SKIN				
Max Score 3				
Incidence (%)	0(0)	0(0)	0(0)	1(6)
Mean Severity	0.0	0.0	0.0	1.0
TOTALS				
Incidence (%)	0(0)	0(0)	0(0)	1(6)

Table 2: Individual Data on Clinical Observation

28-Day Repeated Dermal Contact Study of 3M Test Articles in Sprague-Dawley Rats

Fraunhofer-Inst. f. Toxikologie u. Aerosolforsch.

Study : 01G00002

Species: Rat

Sex : Both All sub-sets

Days : -6 to 42

Page : 1

C l i n i c a l C o m p r e s s e d H i s t o r y R e p o r t			Group: A	Dose: Control
Animal	Observation	Days		
010001	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-6,0 4	(12-MAY-00)	
010002	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-6,0 4	(12-MAY-00)	
010003	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-6,0,7,14 14	(22-MAY-00)	
010004	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-6,0,7,14 14	(22-MAY-00)	
010005	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-6,0,7,14,21,28 28	(05-JUN-00)	
010006	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-6,0,7,14,21,28 28	(05-JUN-00)	
010007	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-6,0,7,14,21,28,36,42 42	(19-JUN-00)	
010008	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-6,0,7,14,21,28,36,42 42	(19-JUN-00)	

28-Day Repeated Dermal Contact Study of 3M Test Articles in Sprague-Dawley Rats

Fraunhofer-Inst. f. Toxikologie u. Aerosolforsch.

Study : 01G00002

Species: Rat

Sex : Both All sub-sets

Days : -6 to 42

Page : 2

C l i n i c a l C o m p r e s s e d H i s t o r y R e p o r t

Group: B

Dose: 1.Test art.

Animal	Observation	Days
030001	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-6,0 4 (12-MAY-00)
030002	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-6,0 4 (12-MAY-00)
030003	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-6,0,7,14 14 (22-MAY-00)
030004	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-6,0,7,14 14 (22-MAY-00)
030005	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-6,0,7,14,21,28 28 (05-JUN-00)
030006	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-6,0,7,14,21,28 28 (05-JUN-00)
030007	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-6,0,7,14,21,28,36,42 42 (19-JUN-00)
030008	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-6,0,7,14,21,28,36,42 42 (19-JUN-00)

28-Day Repeated Dermal Contact Study of 3M Test Articles in Sprague-Dawley Rats

Fraunhofer-Inst. f. Toxikologie u. Aerosolforsch.

Study : 01G00002

Species: Rat

Sex : Both All sub-sets

Days : -6 to 42

Page : 3

C l i n i c a l C o m p r e s s e d H i s t o r y R e p o r t

Group: C

Dose: 2.Test art.

Animal	Observation	Days
050001	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-6,0 4 (12-MAY-00)
050002	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-6,0 4 (12-MAY-00)
050003	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-6,0,7,14 14 (22-MAY-00)
050004	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-6,0,7,14 14 (22-MAY-00)
050005	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-6,0,7,14,21,28 28 (05-JUN-00)
050006	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-6,0,7,14,21,28 28 (05-JUN-00)
050007	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-6,0,7,14,21,28,36,42 42 (19-JUN-00)
050008	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-6,0,7,14,21,28,36,42 42 (19-JUN-00)

28-Day Repeated Dermal Contact Study of 3M Test Articles in Sprague-Dawley Rats

Fraunhofer-Inst. f. Toxikologie u. Aerosolforsch.

Study : 01G00002

Species: Rat

Sex : Both All sub-sets

Days : -6 to 42

Page : 4

C l i n i c a l C o m p r e s s e d H i s t o r y R e p o r t

Group: D

Dose: 3.Test art.

Animal	Observation	Days
070001	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-6,0 4 (12-MAY-00)
070002	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-6,0 4 (12-MAY-00)
070003	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-6,0,7,14 14 (22-MAY-00)
070004	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-6,0,7,14 14 (22-MAY-00)
070005	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-6,0,7,14,21,28 28 (05-JUN-00)
070006	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-6,0,7,14,21,28 28 (05-JUN-00)
070007	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-6,0,7,14,21,28,36,42 42 (19-JUN-00)
070008	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-6,0,7,14,21,28,36,42 42 (19-JUN-00)

28-Day Repeated Dermal Contact Study of 3M Test Articles in Sprague-Dawley Rats

Fraunhofer-Inst. f. Toxikologie u. Aerosolforsch.

Study : 01G00002

Species: Rat

Sex : Both All sub-sets

Days : -6 to 42

Page : 5

C l i n i c a l C o m p r e s s e d H i s t o r y R e p o r t

Group: E

Dose: 4.Test art.

Animal	Observation	Days
090001	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-6,0 4 (12-MAY-00)
090002	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-6,0 4 (12-MAY-00)
090003	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-6,0,7,14 14 (22-MAY-00)
090004	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-6,0,7,14 14 (22-MAY-00)
090005	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-6,0,7,14,21,28 28 (05-JUN-00)
090006	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-6,0,7,14,21,28 28 (05-JUN-00)
090007	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-6,0,7,14,21,28,36,42 42 (19-JUN-00)
090008	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-6,0,7,14,21,28,36,42 42 (19-JUN-00)

28-Day Repeated Dermal Contact Study of 3M Test Articles in Sprague-Dawley Rats

Fraunhofer-Inst. f. Toxikologie u. Aerosolforsch.

Study : 01G00002

Species: Rat

Sex : Both All sub-sets

Days : -6 to 42

Page : 6

C l i n i c a l C o m p r e s s e d H i s t o r y R e p o r t Group: F Dose: 5. Test art.

Animal	Observation	Days
110001	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-6,0 4 (12-MAY-00)
110002	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-6,0 4 (12-MAY-00)
110003	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-6,0,7,14 14 (22-MAY-00)
110004	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-6,0,7,14 14 (22-MAY-00)
110005	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-6,0,7,14,21,28 28 (05-JUN-00)
110006	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-6,0,7,14,21,28 28 (05-JUN-00)
110007	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-6,0,7,14,21,28,36,42 42 (19-JUN-00)
110008	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-6,0,7,14,21,28,36,42 42 (19-JUN-00)

28-Day Repeated Dermal Contact Study of 3M Test Articles in Sprague-Dawley Rats

Fraunhofer-Inst. f. Toxikologie u. Aerosolforsch.

Study : 01G00002

Species: Rat

Sex : Both All sub-sets

Days : -6 to 42

Page : 7

C l i n i c a l C o m p r e s s e d H i s t o r y R e p o r t

Group: G

Dose: 6.Test art.

Animal	Observation	Days
130001	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-6,0 4 (12-MAY-00)
130002	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-6,0 4 (12-MAY-00)
130003	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-6,0,7,14 14 (22-MAY-00)
130004	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-6,0,7,14 14 (22-MAY-00)
130005	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-6,0,7,14,21,28 28 (05-JUN-00)
130006	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-6,0,7,14,21,28 28 (05-JUN-00)
130007	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-6,0,7,14,21,28,36,42 42 (19-JUN-00)
130008	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-6,0,7,14,21,28,36,42 42 (19-JUN-00)

28-Day Repeated Dermal Contact Study of 3M Test Articles in Sprague-Dawley Rats

Fraunhofer-Inst. f. Toxikologie u. Aerosolforsch.

Study : 01G00002

Species: Rat

Sex : Both All sub-sets

Days : -6 to 42

Page : 8

C l i n i c a l C o m p r e s s e d H i s t o r y R e p o r t

Group: H

Dose: 7.Test art.

Animal	Observation	Days
150001	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-6,0 4 (12-MAY-00)
150002	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-6,0 4 (12-MAY-00)
150003	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-6,0,7,14 14 (22-MAY-00)
150004	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-6,0,7,14 14 (22-MAY-00)
150005	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-6,0,7,14,21,28 28 (05-JUN-00)
150006	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-6,0,7,14,21,28 28 (05-JUN-00)
150007	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-6,0,7,14,21,28,36,42 42 (19-JUN-00)
150008	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-6,0,7,14,21,28,36,42 42 (19-JUN-00)

28-Day Repeated Dermal Contact Study of 3M Test Articles in Sprague-Dawley Rats

Fraunhofer-Inst. f. Toxikologie u. Aerosolforsch.

Study : 01G00002

Species: Rat

Sex : Both All sub-sets

Days : -6 to 42

Page : 9

C l i n i c a l C o m p r e s s e d H i s t o r y R e p o r t

Group: I

Dose: 8.Test art.

Animal	Observation	Days
170001	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-6,0 4 (12-MAY-00)
170002	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-6,0 4 (12-MAY-00)
170003	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-6,0,7,14 14 (22-MAY-00)
170004	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-6,0,7,14 14 (22-MAY-00)
170005	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-6,0,7,14,21,28 28 (05-JUN-00)
170006	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-6,0,7,14,21,28 28 (05-JUN-00)
170007	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-6,0,7,14,21,28,36,42 42 (19-JUN-00)
170008	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-6,0,7,14,21,28,36,42 42 (19-JUN-00)

28-Day Repeated Dermal Contact Study of 3M Test Articles in Sprague-Dawley Rats

Fraunhofer-Inst. f. Toxikologie u. Aerosolforsch.

Study : 01G00002

Species: Rat

Sex : Both All sub-sets

Days : -6 to 42

Page : 10

Clinical Compressed History Report Group: A Dose: Control

Animal	Observation	Days
020003	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-1,6,13 14 (23-MAY-00)
020004	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-1,6,13 14 (23-MAY-00)
020005	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-1,6,13,20 28 (06-JUN-00)
020006	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-1,6,13,20 28 (06-JUN-00)
020007	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-1,6,13,20,32,35,41 42 (20-JUN-00)
020008	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-1,6,13,20,32,35,41 42 (20-JUN-00)

28-Day Repeated Dermal Contact Study of 3M Test Articles in Sprague-Dawley Rats

Fraunhofer-Inst. f. Toxikologie u. Aerosolforsch.

Study : 01G00002

Species: Rat

Sex : Both All sub-sets

Days : -6 to 42

Page : 11

C l i n i c a l C o m p r e s s e d H i s t o r y R e p o r t Group: B Dose: 1.Test art.

Animal	Observation	Days
040003	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-1,6,13 14 (23-MAY-00)
040004	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-1,6,13 14 (23-MAY-00)
040005	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-1,6,13,20 28 (06-JUN-00)
040006	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-1,6,13,20 28 (06-JUN-00)
040007	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-1,6,13,20,32,35,41 42 (20-JUN-00)
040008	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-1,6,13,20,32,35,41 42 (20-JUN-00)

28-Day Repeated Dermal Contact Study of 3M Test Articles in Sprague-Dawley Rats

Fraunhofer-Inst. f. Toxikologie u. Aerosolforsch.

Study : 01G00002

Species: Rat

Sex : Both All sub-sets

Page : 12

Days : -6 to 42

Clinical Compressed History Report		Group: C	Dose: 2.Test art.
Animal	Observation	Days	
060003	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-1,6,13 14 (23-MAY-00)	
060004	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-1,6,13 14 (23-MAY-00)	
060005	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-1,6,13,20 28 (06-JUN-00)	
060006	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-1,6,13,20 28 (06-JUN-00)	
060007	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-1,6,13,20,32,35,41 42 (20-JUN-00)	
060008	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-1,6,13,20,32,35,41 42 (20-JUN-00)	

28-Day Repeated Dermal Contact Study of 3M Test Articles in Sprague-Dawley Rats

Fraunhofer-Inst. f. Toxikologie u. Aerosolforsch.

Study : 01G00002

Species: Rat

Sex : Both All sub-sets

Days : -6 to 42

Page : 13

Clinical Compressed History Report Group: D Dose: 3.Test art.

Animal	Observation	Days
080003	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-1,6,13 14 (23-MAY-00)
080004	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-1,6,13 14 (23-MAY-00)
080005	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED) SKIN SCABBY SKIN LEFT FORELEG MEDIUM BOTH-FORELEG MEDIUM	-1,6,13,20 28 (06-JUN-00) 27 28
080006	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-1,6,13,20 28 (06-JUN-00)
080007	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-1,6,13,20,32,35,41 42 (20-JUN-00)
080008	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-1,6,13,20,32,35,41 42 (20-JUN-00)

28-Day Repeated Dermal Contact Study of 3M Test Articles in Sprague-Dawley Rats

Fraunhofer-Inst. f. Toxikologie u. Aerosolforsch.

Study : 01G00002

Species: Rat

Sex : Both All sub-sets

Days : -6 to 42

Page : 14

Clinical Compressed History Report

Group: E

Dose: 4.Test art.

Animal	Observation	Days
100003	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-1,6,13 14 (23-MAY-00)
100004	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-1,6,13 14 (23-MAY-00)
100005	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-1,6,13,20 28 (06-JUN-00)
100006	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-1,6,13,20 28 (06-JUN-00)
100007	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-1,6,13,20,32,35,41 42 (20-JUN-00)
100008	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-1,6,13,20,32,35,41 42 (20-JUN-00)

28-Day Repeated Dermal Contact Study of 3M Test Articles in Sprague-Dawley Rats

Fraunhofer-Inst. f. Toxikologie u. Aerosolforsch.

Study : 01G00002

Species: Rat

Sex : Both All sub-sets

Days : -6 to 42

Page : 15

Clinical Compressed History Report		Group: F	Dose: 5.Test art.
Animal	Observation	Days	
120003	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-1,6,13 14 (23-MAY-00)	
120004	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-1,6,13 14 (23-MAY-00)	
120005	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-1,6,13,20 28 (06-JUN-00)	
120006	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-1,6,13,20 28 (06-JUN-00)	
120007	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-1,6,13,20,32,35,41 42 (20-JUN-00)	
120008	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-1,6,13,20,32,35,41 42 (20-JUN-00)	

28-Day Repeated Dermal Contact Study of 3M Test Articles in Sprague-Dawley Rats

Fraunhofer-Inst. f. Toxikologie u. Aerosolforsch.

Study : 01G00002

Species: Rat

Sex : Both All sub-sets

Days : -6 to 42

Page : 16

Clinical Compressed History Report		Group: G	Dose: 6.Test art.
Animal	Observation	Days	
140003	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-1,6,13 14 (23-MAY-00)	
140004	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-1,6,13 14 (23-MAY-00)	
140005	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-1,6,13,20 28 (06-JUN-00)	
140006	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-1,6,13,20 28 (06-JUN-00)	
140007	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-1,6,13,20,32,35,41 42 (20-JUN-00)	
140008	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-1,6,13,20,32,35,41 42 (20-JUN-00)	

28-Day Repeated Dermal Contact Study of 3M Test Articles in Sprague-Dawley Rats

Fraunhofer-Inst. f. Toxikologie u. Aerosolforsch.

Study : 01G00002

Species: Rat

Sex : Both All sub-sets

Days : -6 to 42

Page : 17

C l i n i c a l C o m p r e s s e d H i s t o r y R e p o r t Group: H Dose: 7. Test art.

Animal	Observation	Days
160003	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-1,6,13 14 (23-MAY-00)
160004	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-1,6,13 14 (23-MAY-00)
160005	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-1,6,13,20 28 (06-JUN-00)
160006	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-1,6,13,20 28 (06-JUN-00)
160007	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-1,6,13,20,32,35,41 42 (20-JUN-00)
160008	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-1,6,13,20,32,35,41 42 (20-JUN-00)

28-Day Repeated Dermal Contact Study of 3M Test Articles in Sprague-Dawley Rats

Fraunhofer-Inst. f. Toxikologie u. Aerosolforsch.

Study : 01G00002

Species: Rat

Sex : Both All sub-sets

Days : -6 to 42

Page : 18

Clinical Compressed History Report

Group: I

Dose: 8.Test art.

Animal	Observation	Days
180003	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-1,6,13 14 (23-MAY-00)
180004	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-1,6,13 14 (23-MAY-00)
180005	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-1,6,13,20 28 (06-JUN-00)
180006	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-1,6,13,20 28 (06-JUN-00)
180007	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-1,6,13,20,32,35,41 42 (20-JUN-00)
180008	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED) SKIN SCABBY SKIN LEFT FORELEG SLIGHT with text	-1,6,13,32,35,41 42 (20-JUN-00) 20,27

28-Day Repeated Dermal Contact Study of 3M Test Articles in Sprague-Dawley Rats

Fraunhofer-Inst. f. Toxikologie u. Aerosolforsch.

Study : 01G00002

Species: Rat

Sex : Both All sub-sets

Page : 19

Days : -6 to 42

C l i n i c a l C o m p r e s s e d H i s t o r y R e p o r t Group: A Dose: Control

Animal	Observation	Days

020001	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-3,4 4 (15-MAY-00)
020002	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-3,4 4 (15-MAY-00)

28-Day Repeated Dermal Contact Study of 3M Test Articles in Sprague-Dawley Rats

Fraunhofer-Inst. f. Toxikologie u. Aerosolforsch.

Study : 01G00002

Species: Rat

Sex : Both All sub-sets

Page : 20

Days : -6 to 42

C l i n i c a l C o m p r e s s e d H i s t o r y R e p o r t Group: B Dose: 1.Test art.

Animal	Observation	Days

040001	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-3,4 4 (15-MAY-00)
040002	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-3,4 4 (15-MAY-00)

28-Day Repeated Dermal Contact Study of 3M Test Articles in Sprague-Dawley Rats

Fraunhofer-Inst. f. Toxikologie u. Aerosolforsch.

Study : 01G00002

Species: Rat

Sex : Both All sub-sets

Page : 21

Days : -6 to 42

C l i n i c a l C o m p r e s s e d H i s t o r y R e p o r t		Group: C	Dose: 2.Test art.
Animal	Observation	Days	
060001	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-3,4 4	(15-MAY-00)
060002	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-3,4 4	(15-MAY-00)

28-Day Repeated Dermal Contact Study of 3M Test Articles in Sprague-Dawley Rats

Fraunhofer-Inst. f. Toxikologie u. Aerosolforsch.

Study : 01G00002

Species: Rat

Sex : Both All sub-sets

Page : 22

Days : -6 to 42

C l i n i c a l C o m p r e s s e d H i s t o r y R e p o r t Group: D Dose: 3.Test art.

Animal	Observation	Days
080001	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-3,4 4 (15-MAY-00)
080002	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-3,4 4 (15-MAY-00)

28-Day Repeated Dermal Contact Study of 3M Test Articles in Sprague-Dawley Rats

Fraunhofer-Inst. f. Toxikologie u. Aerosolforsch.

Study : 01G00002

Species: Rat

Sex : Both All sub-sets

Page : 23

Days : -6 to 42

C l i n i c a l C o m p r e s s e d H i s t o r y R e p o r t Group: E Dose: 4.Test art.

Animal	Observation	Days

100001	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-3,4 4 (15-MAY-00)
100002	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-3,4 4 (15-MAY-00)

28-Day Repeated Dermal Contact Study of 3M Test Articles in Sprague-Dawley Rats

Fraunhofer-Inst. f. Toxikologie u. Aerosolforsch.

Study : 01G00002

Species: Rat

Sex : Both All sub-sets

Page : 24

Days : -6 to 42

C l i n i c a l C o m p r e s s e d H i s t o r y R e p o r t Group: F Dose: 5. Test art.

Animal	Observation	Days
120001	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-3,4 4 (15-MAY-00)
120002	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-3,4 4 (15-MAY-00)

28-Day Repeated Dermal Contact Study of 3M Test Articles in Sprague-Dawley Rats

Fraunhofer-Inst. f. Toxikologie u. Aerosolforsch.

Study : 01G00002

Species: Rat

Sex : Both All sub-sets

Page : 25

Days : -6 to 42

C l i n i c a l C o m p r e s s e d H i s t o r y R e p o r t		Group: G	Dose: 6.Test art.
Animal	Observation	Days	
140001	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-3,4 4	(15-MAY-00)
140002	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-3,4 4	(15-MAY-00)

28-Day Repeated Dermal Contact Study of 3M Test Articles in Sprague-Dawley Rats

Fraunhofer-Inst. f. Toxikologie u. Aerosolforsch.

Study : 01G00002

Species: Rat

Sex : Both All sub-sets

Page : 26

Days : -6 to 42

C l i n i c a l C o m p r e s s e d H i s t o r y R e p o r t Group: H Dose: 7.Test art.

Animal	Observation	Days
160001	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-3,4 4 (15-MAY-00)
160002	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-3,4 4 (15-MAY-00)

28-Day Repeated Dermal Contact Study of 3M Test Articles in Sprague-Dawley Rats

Fraunhofer-Inst. f. Toxikologie u. Aerosolforsch.

Study : 01G00002

Species: Rat

Sex : Both All sub-sets

Page : 27

Days : -6 to 42

C l i n i c a l C o m p r e s s e d H i s t o r y R e p o r t Group: I Dose: 8.Test art.

Animal	Observation	Days
180001	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-3,4 4 (15-MAY-00)
180002	GENERAL OBSERVATION WITHIN NORMAL LIMITS KILLED (SCHEDULED)	-3,4 4 (15-MAY-00)

*** END OF REPORT ***

Appendix C: Individual and Mean Body Weight Data

28-Day Repeated Dermal Contact Study of 3M Test Articles in Sprague-Dawley Rats

Fraunhofer-Inst. f. Toxikologie u. Aerosolforsch.

Study : 01G00002

Species: Rat

Sex : Both All sub-sets

Page : 1

B o d y W e i g h t [g]

M A L E S			Day -6	Day 0	Day 3	Day 7	Day 10	Day 14
	Animal No.							
Control	A 010001		264.8	294.1	293.6			
	A 010002		262.2	289.3	294.0			
	A 010003		248.2	278.2	275.7	278.2	280.8	289.0
	A 010004		259.9	280.0	282.9	289.6	304.6	311.7
	A 010005		263.2	288.2	285.3	296.1	303.7	304.4
	A 010006		256.3	281.1	281.5	296.6	304.0	311.8
	A 010007		258.0	280.3	268.3	269.0	278.7	287.7
	A 010008		270.1	297.4	300.6	310.1	321.1	328.6
Control	Mean		260.3	286.1	285.2	289.9	298.8	305.5
	SD		6.5	7.2	10.6	14.6	16.2	15.5
	n		8	8	8	6	6	6
1.Test art.	B 030001		259.3	285.1	290.6			
	B 030002		255.1	284.4	285.3			
	B 030003		260.8	284.7	276.0	282.3	294.2	300.5
	B 030004		261.9	280.2	287.2	295.2	296.6	306.9
	B 030005		259.6	291.1	292.5	302.3	307.0	317.4
	B 030006		238.9	255.0	264.2	267.9	274.7	280.4
	B 030007		253.9	278.2	280.1	289.4	291.9	300.0
	B 030008		258.1	280.4	279.1	285.8	288.1	300.0
1.Test art.	Mean		256.0	279.9	281.9	287.2	292.1	300.9
	SD		7.4	10.8	9.2	11.8	10.6	12.1
	n		8	8	8	6	6	6
2.Test art.	C 050001		257.8	277.5	282.3			
	C 050002		249.7	276.6	279.8			
	C 050003		254.3	279.8	262.2	274.4	283.2	309.7
	C 050004		253.9	277.9	274.1	283.4	289.4	293.1
	C 050005		272.5	301.7	309.1	321.5	328.7	313.5
	C 050006		242.4	261.6	265.0	274.0	283.6	293.0
	C 050007		253.1	271.7	274.7	279.6	291.1	303.3
	C 050008		268.9	297.3	298.9	308.3	319.9	334.9
2.Test art.	Mean		256.6	280.5	280.8	290.2	299.3	307.9
	SD		9.9	13.1	16.1	19.9	19.8	15.7
	n		8	8	8	6	6	6
3.Test art.	D 070001		260.6	285.9	283.7			
	D 070002		268.5	300.4	307.9			
	D 070003		258.4	277.1	271.0	273.5	283.7	289.1
	D 070004		267.1	268.9	273.0	280.3	290.2	298.8
	D 070005		266.5	292.3	290.1	298.1	301.0	315.1
	D 070006		248.5	274.3	278.3	290.2	293.7	306.9
	D 070007		253.3	275.7	275.9	284.7	288.7	300.2
	D 070008		261.5	292.1	294.2	301.3	307.9	313.5
3.Test art.	Mean		260.6	283.3	284.3	288.0	294.2	303.9
	SD		7.0	11.0	12.5	10.6	8.8	9.9
	n		8	8	8	6	6	6

Statistics: Anova + Dunnett's tests.

(Two-Sided)

* P<=5% ; ** P<=1% ;

Exp.Unit = Animal

28-Day Repeated Dermal Contact Study of 3M Test Articles in Sprague-Dawley Rats

Fraunhofer-Inst. f. Toxikologie u. Aerosolforsch.

Study : 01G00002

Species: Rat

Sex : Both All sub-sets

Page : 2

B o d y W e i g h t [g]

M A L E S		Animal No.	Day -6	Day 0	Day 3	Day 7	Day 10	Day 14
4.Test art.	E	090001	265.8	293.3	288.6			
	E	090002	262.0	289.3	297.0			
	E	090003	246.2	264.5	264.9	275.0	279.5	281.8
	E	090004	256.0	286.3	282.5	287.9	295.6	297.3
	E	090005	262.4	288.6	299.7	302.8	312.6	318.8
	E	090006	245.1	272.8	278.8	289.4	294.6	306.2
	E	090007	249.4	274.6	285.3	291.9	301.3	317.2
	E	090008	265.1	306.7	313.2	328.6	337.7	354.2
4.Test art.		Mean	256.5	284.5	288.8	295.9	303.6	312.6
		SD	8.6	13.4	14.7	18.3	19.9	24.6
		n	8	8	8	6	6	6
5.Test art.	F	110001	266.9	296.0	302.8			
	F	110002	258.2	283.8	290.3			
	F	110003	239.1	250.0	247.6	245.6	253.0	256.9
	F	110004	244.3	267.3	267.3	272.4	280.5	295.0
	F	110005	270.1	302.0	296.9	308.1	316.5	326.6
	F	110006	240.9	268.6	273.4	287.5	293.8	291.8
	F	110007	249.0	278.7	279.1	284.9	295.1	300.4
	F	110008	264.6	295.2	292.7	306.1	317.0	325.2
5.Test art.		Mean	254.1	280.2	281.3	284.1	292.7	299.3
		SD	12.4	17.6	18.2	23.2	24.0	25.7
		n	8	8	8	6	6	6
6.Test art.	G	130001	255.4	288.8	289.7			
	G	130002	262.7	297.8	303.9			
	G	130003	249.5	284.2	288.2	297.1	303.1	316.2
	G	130004	255.2	284.7	294.9	302.6	307.7	313.5
	G	130005	261.7	293.6	298.8	309.8	319.9	323.5
	G	130006	233.9	256.8	258.8	267.5	275.5	277.2
	G	130007	251.9	281.9	284.2	295.0	295.8	309.5
	G	130008	268.3	297.4	300.2	313.6	319.4	337.4
6.Test art.		Mean	254.8	285.7	289.8	297.6	303.6	312.9
		SD	10.5	13.1	14.2	16.4	16.6	20.0
		n	8	8	8	6	6	6
7.Test art.	H	150001	259.3	278.9	288.6			
	H	150002	260.4	280.4	273.6			
	H	150003	252.0	279.2	287.9	299.9	304.2	308.7
	H	150004	254.4	284.2	276.9	282.0	282.1	302.7
	H	150005	261.4	284.7	288.9	297.3	303.9	314.3
	H	150006	243.2	273.8	280.8	293.2	298.8	314.3
	H	150007	242.2	262.5	267.0	272.5	274.7	283.1
	H	150008	261.0	284.5	288.1	294.4	296.0	306.0
7.Test art.		Mean	254.2	278.5	281.5	289.9	293.3	304.9
		SD	7.9	7.5	8.3	10.5	12.2	11.6
		n	8	8	8	6	6	6

Statistics: Anova + Dunnett's tests.

(Two-Sided)

* P<=5% ; ** P<=1% ;

Exp.Unit = Animal

28-Day Repeated Dermal Contact Study of 3M Test Articles in Sprague-Dawley Rats

Fraunhofer-Inst. f. Toxikologie u. Aerosolforsch.

Study : 01G00002

Species: Rat

Sex : Both All sub-sets

Page : 3

B o d y W e i g h t [g]

M A L E S		Day -6	Day 0	Day 3	Day 7	Day 10	Day 14
	Animal No.						
8.Test art.	I 170001	262.9	296.5	300.6			
	I 170002	251.5	280.1	284.6			
	I 170003	259.4	291.7	285.4	296.7	301.4	315.6
	I 170004	245.8	272.4	281.7	295.1	304.7	311.2
	I 170005	257.2	281.9	280.3	291.2	298.5	301.4
	I 170006	249.4	269.7	268.7	275.5	279.8	296.8
	I 170007	255.0	283.3	285.7	300.5	302.7	318.5
	I 170008	268.1	300.3	308.2	318.7	331.3	344.8
8.Test art.	Mean	256.2	284.5	286.9	296.3	303.1	314.7
	SD	7.3	10.9	12.3	14.0	16.5	16.9
	n	8	8	8	6	6	6

Statistics: Anova + Dunnett's tests.

(Two-Sided)

* P<=5% ; ** P<=1% ;

Exp.Unit = Animal

28-Day Repeated Dermal Contact Study of 3M Test Articles in Sprague-Dawley Rats

Fraunhofer-Inst. f. Toxikologie u. Aerosolforsch.

Study : 01G00002

Species: Rat

Sex : Both All sub-sets

Page : 4

B o d y W e i g h t [g]

F E M A L E S		Animal No.	Day -6	Day 0	Day 3	Day 7	Day 10	Day 14
Control	A	020003	199.3	209.5	226.1	236.8	246.4	264.0
	A	020004	203.7	208.9	214.9	221.2	229.2	236.5
	A	020005	195.8	205.4	212.6	215.0	217.7	224.3
	A	020006	196.9	220.6	214.7	226.0	227.6	234.2
	A	020007	198.8	201.5	202.8	210.2	214.1	216.9
	A	020008	209.3	213.3	217.1	224.5	230.7	238.2
	A	020001	189.7	194.3	198.7			
	A	020002	212.6	205.2	214.6			
Control		Mean	200.8	207.3	212.7	222.3	227.6	235.7
		SD	7.5	7.8	8.5	9.3	11.4	16.1
		n	8	8	8	6	6	6
1.Test art.	B	040003	202.2	231.1	233.1	232.3	237.6	247.3
	B	040004	213.3	210.7	211.6	220.3	223.6	235.1
	B	040005	196.6	209.1	216.1	222.8	228.9	234.1
	B	040006	191.4	198.9	207.0	209.2	217.9	220.9
	B	040007	192.1	213.6	210.6	214.0	205.8	216.7
	B	040008	208.2	217.8	219.9	228.3	236.3	247.6
	B	040001	185.5	194.1	213.1			
	B	040002	207.4	206.1	221.0			
1.Test art.		Mean	199.6	210.2	216.6	221.2	225.0	233.6
		SD	9.7	11.4	8.2	8.6	12.0	12.9
		n	8	8	8	6	6	6
2.Test art.	C	060003	201.0	208.0	215.1	219.0	221.2	233.3
	C	060004	203.5	218.6	224.5	232.3	236.4	241.5
	C	060005	189.2	199.0	197.0	204.4	207.9	212.0
	C	060006	201.6	212.6	218.6	230.2	238.3	243.7
	C	060007	195.6	202.3	203.3	211.7	227.1	229.2
	C	060008	206.4	211.6	214.6	224.5	226.7	235.5
	C	060001	180.8	202.1	192.3			
	C	060002	218.9	223.1	219.2			
2.Test art.		Mean	199.6	209.7	210.6	220.4	226.3	232.5
		SD	11.4	8.5	11.6	10.8	11.1	11.4
		n	8	8	8	6	6	6
3.Test art.	D	080003	199.7	205.3	210.6	226.1	236.7	242.0
	D	080004	196.0	206.8	211.5	229.0	241.8	243.4
	D	080005	203.2	215.0	219.9	223.3	248.0	253.1
	D	080006	204.3	216.3	219.7	229.9	232.3	250.5
	D	080007	187.6	202.1	205.6	217.9	214.3	224.3
	D	080008	186.7	202.9	201.6	217.4	230.2	227.4
	D	080001	183.8	196.1	205.6			
	D	080002	209.0	231.4	229.2			
3.Test art.		Mean	196.3	209.5	213.0	223.9	233.9	240.1
		SD	9.3	11.1	9.3	5.4	11.6	11.9
		n	8	8	8	6	6	6

Statistics: Anova + Dunnett's tests.

(Two-Sided)

* P<=5% ; ** P<=1% ;

Exp.Unit = Animal

28-Day Repeated Dermal Contact Study of 3M Test Articles in Sprague-Dawley Rats

Fraunhofer-Inst. f. Toxikologie u. Aerosolforsch.

Study : 01G00002

Species: Rat

Sex : Both All sub-sets

Page : 5

B o d y W e i g h t [g]

F E M A L E S		Day -6	Day 0	Day 3	Day 7	Day 10	Day 14
	Animal No.						
4.Test art.	E 100003	204.5	206.1	211.7	220.9	226.0	231.3
	E 100004	210.1	224.4	230.3	235.4	239.2	243.4
	E 100005	189.2	198.8	201.0	209.3	203.5	219.1
	E 100006	198.8	202.6	202.8	206.9	211.7	220.1
	E 100007	186.6	196.3	198.1	210.1	208.2	216.1
	E 100008	204.4	226.0	229.5	238.6	238.4	253.5
	E 100001	194.8	209.3	203.9			
	E 100002	203.7	203.1	216.2			
4.Test art.	Mean	199.0	208.3	211.7	220.2	221.2	230.6
	SD	8.2	11.2	12.7	13.9	15.6	15.1
	n	8	8	8	6	6	6
5.Test art.	F 120003	208.7	216.7	215.2	237.4	248.0	251.4
	F 120004	199.0	203.9	207.5	222.2	225.2	227.4
	F 120005	201.4	205.1	209.0	216.1	222.3	238.0
	F 120006	201.3	217.6	216.8	225.5	234.2	236.7
	F 120007	189.5	204.9	205.6	212.1	220.9	227.8
	F 120008	194.7	209.3	217.6	231.1	228.5	240.3
	F 120001	191.6	201.6	205.1			
	F 120002	202.9	224.7	229.7			
5.Test art.	Mean	198.6	210.5	213.3	224.1	229.9	236.9
	SD	6.4	8.2	8.3	9.4	10.1	8.9
	n	8	8	8	6	6	6
6.Test art.	G 140003	211.9	207.1	217.6	223.2	220.3	226.8
	G 140004	205.8	208.1	206.3	222.2	217.1	222.8
	G 140005	198.9	204.6	205.7	214.6	221.9	229.3
	G 140006	217.6	218.6	219.4	229.3	226.6	233.3
	G 140007	185.4	184.6	191.3	205.9	204.7	209.7
	G 140008	204.7	205.3	216.9	227.9	227.5	235.5
	G 140001	204.2	211.6	222.2			
	G 140002	209.1	222.3	229.2			
6.Test art.	Mean	204.7	207.8	213.6	220.5	219.7	226.2
	SD	9.6	11.3	11.9	8.8	8.3	9.3
	n	8	8	8	6	6	6
7.Test art.	H 160003	203.7	209.6	216.4	230.9	227.5	240.8
	H 160004	191.4	200.8	206.2	212.7	210.7	217.4
	H 160005	202.0	208.6	207.5	226.1	229.8	234.5
	H 160006	199.4	199.8	213.1	222.2	222.0	231.7
	H 160007	187.0	191.4	195.5	205.1	206.6	211.3
	H 160008	207.6	206.2	201.7	212.1	213.4	221.5
	H 160001	196.2	213.6	211.1			
	H 160002	205.8	208.9	216.4			
7.Test art.	Mean	199.1	204.9	208.5	218.2	218.3	226.2
	SD	7.2	7.1	7.3	9.8	9.5	11.3
	n	8	8	8	6	6	6

Statistics: Anova + Dunnett's tests.

(Two-Sided)

* P<=5% ; ** P<=1% ;

Exp.Unit = Animal

28-Day Repeated Dermal Contact Study of 3M Test Articles in Sprague-Dawley Rats

Fraunhofer-Inst. f. Toxikologie u. Aerosolforsch.

Study : 01G00002

Species: Rat

Sex : Both All sub-sets

Page : 6

B o d y W e i g h t [g]

F E M A L E S		Day -6	Day 0	Day 3	Day 7	Day 10	Day 14
	Animal No.						
8.Test art.	I 180003	192.9	200.3	211.2	225.8	219.9	225.4
	I 180004	203.1	212.6	212.9	223.5	229.3	236.8
	I 180005	197.2	203.4	206.5	210.3	219.2	222.0
	I 180006	199.0	208.7	215.3	228.2	233.8	234.2
	I 180007	193.6	202.3	205.2	216.7	215.2	233.6
	I 180008	212.0	240.4	241.6	251.4	252.2	266.5
	I 180001	194.3	207.1	204.4			
	I 180002	213.2	229.0	235.7			
8.Test art.	Mean	200.7	213.0	216.6	226.0	228.3	236.4
	SD	8.1	14.3	14.2	14.1	13.6	15.8
	n	8	8	8	6	6	6

Statistics: Anova + Dunnett's tests.

(Two-Sided)

* P<=5% ; ** P<=1% ;

Exp.Unit = Animal

28-Day Repeated Dermal Contact Study of 3M Test Articles in Sprague-Dawley Rats

Fraunhofer-Inst. f. Toxikologie u. Aerosolforsch.

Study : 01G00002

Species: Rat

Sex : Both All sub-sets

Page : 7

B o d y W e i g h t [g]

M A L E S		Animal No.	Day 17	Day 21	Day 24	Day 28	Day 31	Day 35
Control	A	010005	310.6	316.2	323.0	324.9		
	A	010006	329.4	329.1	326.7	338.3		
	A	010007	285.9	297.5	287.5	294.2	315.2	320.8
	A	010008	334.8	343.5	344.3	354.7	365.9	365.4
Control		Mean	315.2	321.6	320.4	328.0	340.6	343.1
		SD	22.1	19.5	23.8	25.6	35.9	31.5
		n	4	4	4	4	2	2
1.Test art.	B	030005	318.2	323.5	325.2	337.1		
	B	030006	280.9	276.5	279.8	288.0		
	B	030007	304.8	312.1	318.6	326.8	338.2	337.7
	B	030008	305.8	332.4	318.9	327.0	325.9	342.0
1.Test art.		Mean	302.4	311.1	310.6	319.7	332.1	339.9
		SD	15.6	24.5	20.8	21.7	8.7	3.0
		n	4	4	4	4	2	2
2.Test art.	C	050005	333.0	340.3	356.9	367.4		
	C	050006	300.4	304.3	311.5	314.6		
	C	050007	305.6	309.8	315.1	329.5	338.2	346.4
	C	050008	340.0	343.7	347.2	354.2	369.8	378.1
2.Test art.		Mean	319.8	324.5	332.7	341.4	354.0	362.3
		SD	19.7	20.4	22.8	23.8	22.3	22.4
		n	4	4	4	4	2	2
3.Test art.	D	070005	320.1	322.5	321.5	332.1		
	D	070006	311.3	314.9	315.6	328.9		
	D	070007	302.6	314.4	316.8	329.3	343.7	348.5
	D	070008	322.4	326.5	326.9	336.2	350.1	352.1
3.Test art.		Mean	314.1	319.6	320.2	331.6	346.9	350.3
		SD	9.0	5.9	5.1	3.4	4.5	2.5
		n	4	4	4	4	2	2
4.Test art.	E	090005	328.8	329.4	333.5	336.4		
	E	090006	318.8	318.9	315.3	329.1		
	E	090007	323.5	323.8	329.8	338.8	356.7	360.3
	E	090008	358.6	362.1	367.6	378.0	394.6	402.0
4.Test art.		Mean	332.4	333.6	336.6	345.6	375.7	381.2
		SD	17.9	19.5	22.1	22.0	26.8	29.5
		n	4	4	4	4	2	2
5.Test art.	F	110005	322.9	336.0	329.4	339.5		
	F	110006	306.3	310.2	315.9	328.0		
	F	110007	308.0	310.2	315.4	322.3	336.6	347.4
	F	110008	333.4	343.1	347.7	355.8	367.0	376.6
5.Test art.		Mean	317.7	324.9	327.1	336.4	351.8	362.0
		SD	12.9	17.2	15.2	14.8	21.5	20.6
		n	4	4	4	4	2	2

Statistics: Anova + Dunnett's tests.

(Two-Sided)

* P<=5% ; ** P<=1% ;

Exp.Unit = Animal

28-Day Repeated Dermal Contact Study of 3M Test Articles in Sprague-Dawley Rats

Fraunhofer-Inst. f. Toxikologie u. Aerosolforsch.

Study : 01G00002

Species: Rat

Sex : Both All sub-sets

Page : 8

B o d y W e i g h t [g]

M A L E S			Day 17	Day 21	Day 24	Day 28	Day 31	Day 35
		Animal No.						
6.Test art.	G	130005	327.2	338.7	329.9	341.9		
	G	130006	282.7	284.9	290.8	298.2		
	G	130007	308.8	315.3	313.7	324.1	333.7	334.8
	G	130008	344.7	346.1	346.9	355.3	368.6	374.8
6.Test art.		Mean	315.9	321.3	320.3	329.9	351.2	354.8
		SD	26.5	27.6	23.9	24.7	24.7	28.3
		n	4	4	4	4	2	2
7.Test art.	H	150005	311.3	311.9	316.7	323.9		
	H	150006	318.2	322.5	325.5	330.9		
	H	150007	283.5	286.0	293.0	301.6	310.4	314.6
	H	150008	303.0	309.2	311.7	325.3	338.4	338.1
7.Test art.		Mean	304.0	307.4	311.7	320.4	324.4	326.4
		SD	15.0	15.4	13.7	12.9	19.8	16.6
		n	4	4	4	4	2	2
8.Test art.	I	170005	303.0	307.8	313.6	328.3		
	I	170006	292.4	305.7	311.6	320.1		
	I	170007	316.9	320.1	327.9	334.9	346.5	359.4
	I	170008	336.7	346.7	345.1	361.4	374.0	382.3
8.Test art.		Mean	312.3	320.1	324.6	336.2	360.3	370.9
		SD	19.1	18.9	15.5	17.9	19.4	16.2
		n	4	4	4	4	2	2

Statistics: Anova + Dunnett's tests.

(Two-Sided)

* P<=5% ; ** P<=1% ;

Exp.Unit = Animal

28-Day Repeated Dermal Contact Study of 3M Test Articles in Sprague-Dawley Rats

Fraunhofer-Inst. f. Toxikologie u. Aerosolforsch.

Study : 01G00002

Species: Rat

Sex : Both All sub-sets

Page : 9

B o d y W e i g h t [g]

F E M A L E S		Day 17	Day 21	Day 24	Day 28	Day 31	Day 35
	Animal No.						
Control	A 020005	228.1	228.8	230.4	232.9		
	A 020006	243.4	250.2	254.0	259.1		
	A 020007	219.2	220.8	224.0	224.3	229.0	231.2
	A 020008	237.0	236.3	243.3	248.8	252.4	262.0
Control	Mean	231.9	234.0	237.9	241.3	240.7	246.6
	SD	10.6	12.5	13.4	15.6	16.5	21.8
	n	4	4	4	4	2	2
1.Test art.	B 040005	238.6	234.0	241.9	250.2		
	B 040006	222.5	232.3	226.6	234.6		
	B 040007	217.7	227.3	221.0	228.8	236.9	237.8
	B 040008	255.9	247.9	247.1	257.7	267.0	269.2
1.Test art.	Mean	233.7	235.4	234.2	242.8	252.0	253.5
	SD	17.3	8.8	12.4	13.4	21.3	22.2
	n	4	4	4	4	2	2
2.Test art.	C 060005	211.1	219.9	230.9	232.7		
	C 060006	240.9	250.7	242.0	247.6		
	C 060007	238.3	228.9	236.5	246.0	248.0	246.2
	C 060008	237.7	239.2	241.7	252.2	258.4	256.4
2.Test art.	Mean	232.0	234.7	237.8	244.6	253.2	251.3
	SD	14.0	13.3	5.2	8.4	7.4	7.2
	n	4	4	4	4	2	2
3.Test art.	D 080005	250.4	262.0	265.2	271.8		
	D 080006	245.5	249.8	245.8	253.8		
	D 080007	223.4	232.2	227.6	232.5	240.3	240.7
	D 080008	228.5	237.4	231.7	242.5	261.1	269.8
3.Test art.	Mean	237.0	245.4	242.6	250.2	250.7	255.3
	SD	13.0	13.3	17.0	16.9	14.7	20.6
	n	4	4	4	4	2	2
4.Test art.	E 100005	224.0	233.5	230.6	234.9		
	E 100006	218.0	214.3	214.0	218.9		
	E 100007	221.4	227.6	229.8	233.4	237.0	244.2
	E 100008	254.8	260.6	262.6	270.7	277.2	278.6
4.Test art.	Mean	229.6	234.0	234.3	239.5	257.1	261.4
	SD	17.0	19.5	20.4	22.0	28.4	24.3
	n	4	4	4	4	2	2
5.Test art.	F 120005	241.7	239.9	250.5	254.2		
	F 120006	242.8	249.1	256.6	254.8		
	F 120007	230.9	239.7	238.2	244.4	246.4	250.4
	F 120008	238.2	247.9	247.3	252.8	254.4	260.7
5.Test art.	Mean	238.4	244.2	248.2	251.6	250.4	255.6
	SD	5.4	5.0	7.7	4.8	5.7	7.3
	n	4	4	4	4	2	2

Statistics: Anova + Dunnett's tests.

(Two-Sided)

* P<=5% ; ** P<=1% ;

Exp.Unit = Animal

28-Day Repeated Dermal Contact Study of 3M Test Articles in Sprague-Dawley Rats

Fraunhofer-Inst. f. Toxikologie u. Aerosolforsch.

Study : 01G00002

Species: Rat

Sex : Both All sub-sets

Page : 10

B o d y W e i g h t [g]

F E M A L E S		Day 17	Day 21	Day 24	Day 28	Day 31	Day 35
	Animal No.						
6.Test art.	G 140005	231.2	237.2	242.8	244.0		
	G 140006	238.0	247.1	240.3	251.1		
	G 140007	216.8	228.7	224.5	231.9	239.8	240.3
	G 140008	236.4	249.3	244.8	253.5	250.8	249.3
6.Test art.	Mean	230.6	240.6	238.1	245.1	245.3	244.8
	SD	9.6	9.5	9.3	9.7	7.8	6.4
	n	4	4	4	4	2	2
7.Test art.	H 160005	239.3	249.7	254.3	257.4		
	H 160006	234.0	241.9	241.3	246.1		
	H 160007	211.7	235.7	218.6	221.5	222.4	229.7
	H 160008	224.3	237.8	236.5	241.4	249.3	258.5
7.Test art.	Mean	227.3	241.3	237.7	241.6	235.9	244.1
	SD	12.1	6.2	14.8	15.0	19.0	20.4
	n	4	4	4	4	2	2
8.Test art.	I 180005	225.1	230.2	236.4	238.6		
	I 180006	239.2	243.9	241.5	254.5		
	I 180007	232.9	237.9	241.5	247.7	249.7	255.2
	I 180008	265.6	269.4	274.9	281.7	288.2	288.2
8.Test art.	Mean	240.7	245.4	248.6	255.6	269.0	271.7
	SD	17.6	17.0	17.7	18.6	27.2	23.3
	n	4	4	4	4	2	2

Statistics: Anova + Dunnett's tests.

(Two-Sided)

* P<=5% ; ** P<=1% ;

Exp.Unit = Animal

28-Day Repeated Dermal Contact Study of 3M Test Articles in Sprague-Dawley Rats
Fraunhofer-Inst. f. Toxikologie u. Aerosolforsch.

Study : 01G00002

Species: Rat

Sex : Both All sub-sets

Page : 11

B o d y W e i g h t [g]

M A L E S		Animal No.	Day 38	Day 42
Control	A	010007	324.1	336.7
	A	010008	374.8	378.0
Control		Mean	349.5	357.4
		SD	35.8	29.2
		n	2	2
1.Test art.	B	030007	348.5	352.3
	B	030008	347.6	357.2
1.Test art.		Mean	348.1	354.8
		SD	0.6	3.5
		n	2	2
2.Test art.	C	050007	354.8	361.0
	C	050008	383.0	390.4
2.Test art.		Mean	368.9	375.7
		SD	19.9	20.8
		n	2	2
3.Test art.	D	070007	358.0	363.7
	D	070008	371.0	383.6
3.Test art.		Mean	364.5	373.7
		SD	9.2	14.1
		n	2	2
4.Test art.	E	090007	362.1	374.2
	E	090008	407.3	412.9
4.Test art.		Mean	384.7	393.6
		SD	32.0	27.4
		n	2	2
5.Test art.	F	110007	356.9	368.1
	F	110008	377.1	384.1
5.Test art.		Mean	367.0	376.1
		SD	14.3	11.3
		n	2	2
6.Test art.	G	130007	338.9	348.4
	G	130008	377.8	385.2
6.Test art.		Mean	358.4	366.8
		SD	27.5	26.0
		n	2	2
7.Test art.	H	150007	320.8	330.0
	H	150008	343.5	347.4
7.Test art.		Mean	332.2	338.7
		SD	16.1	12.3
		n	2	2
8.Test art.	I	170007	365.1	375.2
	I	170008	389.7	399.5
8.Test art.		Mean	377.4	387.4
		SD	17.4	17.2
		n	2	2

Statistics: Anova + Dunnett's tests.

(Two-Sided) * P<=5% ; ** P<=1% ;

Exp.Unit = Animal

28-Day Repeated Dermal Contact Study of 3M Test Articles in Sprague-Dawley Rats

Fraunhofer-Inst. f. Toxikologie u. Aerosolforsch.

Study : 01G00002

Species: Rat

Sex : Both All sub-sets

Page : 12

B o d y W e i g h t [g]

F E M A L E S		Animal No.	Day 38	Day 42
Control	A	020007	232.6	233.6
	A	020008	261.6	258.1
Control	Mean		247.1	245.9
	SD		20.5	17.3
	n		2	2
1.Test art.	B	040007	234.2	243.0
	B	040008	269.7	271.2
1.Test art.	Mean		252.0	257.1
	SD		25.1	19.9
	n		2	2
2.Test art.	C	060007	245.5	248.1
	C	060008	259.5	260.8
2.Test art.	Mean		252.5	254.5
	SD		9.9	9.0
	n		2	2
3.Test art.	D	080007	237.9	245.5
	D	080008	256.6	256.4
3.Test art.	Mean		247.3	251.0
	SD		13.2	7.7
	n		2	2
4.Test art.	E	100007	251.1	250.6
	E	100008	279.7	281.0
4.Test art.	Mean		265.4	265.8
	SD		20.2	21.5
	n		2	2
5.Test art.	F	120007	254.8	261.9
	F	120008	259.9	260.7
5.Test art.	Mean		257.4	261.3
	SD		3.6	0.8
	n		2	2
6.Test art.	G	140007	244.5	245.4
	G	140008	261.4	260.2
6.Test art.	Mean		253.0	252.8
	SD		12.0	10.5
	n		2	2
7.Test art.	H	160007	224.8	217.6
	H	160008	257.3	254.5
7.Test art.	Mean		241.1	236.1
	SD		23.0	26.1
	n		2	2
8.Test art.	I	180007	246.0	259.8
	I	180008	290.6	298.6
8.Test art.	Mean		268.3	279.2
	SD		31.5	27.4
	n		2	2

Statistics: Anova + Dunnett's tests.

(Two-Sided) * P<=5% ; ** P<=1% ;

Exp.Unit = Animal

*** END OF REPORT ***

Appendix D: Absolute and Relative Liver Weights

28-Day Repeated Dermal Contact Study of 3M Test Articles in Sprague-Dawley Rats

Fraunhofer-Inst. f. Toxikologie u. Aerosolforsch.

Study : 01G00002

Species: Rat

Sex : Both All sub-sets

Page : 1

 T e r m i n a l B o d y W e i g h t & L i v e r W e i g h t D a t a

M A L E S			Day 4	Day 4	Day 4	Day 14	Day 14	Day 14
	Animal No.		TermBW G	Liver	r.Liver g/kg	TermBW G	Liver	r.Liver g/kg
Control	A 010001		295.7	12.147	41.08			
	A 010002		289.1	12.155	42.04			
	A 010003					289.1	11.154	38.58
	A 010004					309.7	11.934	38.53
Control	Mean		292.4	12.151	41.56	299.4	11.544	38.56
	SD		4.7	0.000	0.68	14.6	0.551	0.03
	n		2	2	2	2	2	2
1.Test art.	B 030001		281.4	11.519	40.93			
	B 030002		283.0	11.274	39.84			
	B 030003					298.3	11.447	38.37
	B 030004					304.3	11.668	38.34
1.Test art.	Mean		282.2	11.396	40.39	301.3	11.557	38.36
	SD		1.1	0.173	0.77	4.2	0.156	0.02
	n		2	2	2	2	2	2
2.Test art.	C 050001		276.9	12.534	45.26			
	C 050002		267.5	10.301	38.51			
	C 050003					300.8	13.970	46.44
	C 050004					289.9	10.641	36.71
2.Test art.	Mean		272.2	11.417	41.89	295.4	12.305	41.57
	SD		6.6	1.578	4.78	7.7	2.354	6.89
	n		2	2	2	2	2	2
3.Test art.	D 070001		285.5	12.997	45.52			
	D 070002		305.4	12.392	40.57			
	D 070003					288.7	10.214	35.38
	D 070004					295.7	12.236	41.38
3.Test art.	Mean		295.5	12.694	43.05	292.2	11.225	38.38
	SD		14.1	0.428	3.50	5.0	1.430	4.25
	n		2	2	2	2	2	2
4.Test art.	E 090001		281.1	11.495	40.89			
	E 090002		290.4	12.497	43.03			
	E 090003					281.7	11.052	39.23
	E 090004					299.0	11.313	37.84
4.Test art.	Mean		285.8	11.996	41.96	290.4	11.182	38.53
	SD		6.6	0.708	1.51	12.2	0.185	0.99
	n		2	2	2	2	2	2
5.Test art.	F 110001		296.8	13.038	43.93			
	F 110002		294.9	12.458	42.24			
	F 110003					255.7	9.788	38.28
	F 110004					294.4	11.666	39.63
5.Test art.	Mean		295.9	12.748	43.09	275.1	10.727	38.95
	SD		1.3	0.411	1.19	27.4	1.328	0.95
	n		2	2	2	2	2	2

Statistics: Anova + Dunnett's tests.

(Two-Sided)

* P<=5% ; ** P<=1% ;

Exp.Unit = Animal

28-Day Repeated Dermal Contact Study of 3M Test Articles in Sprague-Dawley Rats

Fraunhofer-Inst. f. Toxikologie u. Aerosolforsch.

Study : 01G00002

Species: Rat

Sex : Both All sub-sets

Page : 2

T e r m i n a l B o d y W e i g h t & L i v e r W e i g h t D a t a

M A L E S		Animal	Day 4	Day 4	Day 4	Day 14	Day 14	Day 14
		No.	TermBW G	Liver	r.Liver g/kg	TermBW G	Liver	r.Liver g/kg
6.Test art.	G	130001	285.0	11.965	41.98			
	G	130002	305.5	13.261	43.41			
	G	130003				310.8	11.860	38.16
	G	130004				311.0	13.058	41.99
6.Test art.		Mean	295.3	12.613	42.69	310.9	12.459	40.07
		SD	14.5	0.916	1.01	0.2	0.847	2.71
		n	2	2	2	2	2	2
7.Test art.	H	150001	282.6	11.841	41.90			
	H	150002	270.1	10.673	39.52			
	H	150003				311.2	12.534	40.28
	H	150004				291.9	12.780	43.78
7.Test art.		Mean	276.4	11.257	40.71	301.6	12.657	42.03
		SD	8.8	0.826	1.69	13.6	0.173	2.48
		n	2	2	2	2	2	2
8.Test art.	I	170001	294.3	11.339	38.53			
	I	170002	282.1	12.552	44.50			
	I	170003				312.5	12.312	39.40
	I	170004				309.6	12.403	40.06
8.Test art.		Mean	288.2	11.946	41.51	311.1	12.358	39.73
		SD	8.6	0.858	4.22	2.0	0.064	0.47
		n	2	2	2	2	2	2

Statistics: Anova + Dunnett's tests.

(Two-Sided)

* P<=5% ; ** P<=1% ;

Exp.Unit = Animal

28-Day Repeated Dermal Contact Study of 3M Test Articles in Sprague-Dawley Rats

Fraunhofer-Inst. f. Toxikologie u. Aerosolforsch.

Study : 01G00002

Species: Rat

Sex : Both All sub-sets

Page : 3

T e r m i n a l B o d y W e i g h t & L i v e r W e i g h t D a t a

F E M A L E S		Animal No.	Day 4 TermBW G	Day 4 Liver	Day 4 r.Liver g/kg	Day 14 TermBW G	Day 14 Liver	Day 14 r.Liver g/kg
Control	A	020003				259.9	9.740	37.47
	A	020004				237.1	9.491	40.03
	A	020001	194.2	6.873	35.39			
	A	020002	218.2	8.125	37.24			
Control		Mean	206.2	7.499	36.31	248.5	9.615	38.75
		SD	17.0	0.885	1.30	16.1	0.176	1.81
		n	2	2	2	2	2	2
1.Test art.	B	040003				242.6	9.870	40.68
	B	040004				231.1	9.950	43.05
	B	040001	213.0	8.556	40.17			
	B	040002	216.1	8.339	38.59			
1.Test art.		Mean	214.6	8.447	39.38	236.9	9.910	41.87
		SD	2.2	0.153	1.12	8.1	0.056	1.67
		n	2	2	2	2	2	2
2.Test art.	C	060003				229.3	10.304	44.94
	C	060004				239.5	10.648	44.46
	C	060001	187.2	6.521	34.84			
	C	060002	219.3	9.212	42.01			
2.Test art.		Mean	203.3	7.867	38.42	234.4	10.476	44.70
		SD	22.7	1.903	5.07	7.2	0.243	0.34
		n	2	2	2	2	2	2
3.Test art.	D	080003				237.4	10.911	45.96
	D	080004				244.1	10.452	42.82
	D	080001	206.2	7.878	38.21			
	D	080002	228.2	9.416	41.26			
3.Test art.		Mean	217.2	8.647	39.73	240.8	10.681	44.39
		SD	15.6	1.087	2.16	4.7	0.325	2.22
		n	2	2	2	2	2	2
4.Test art.	E	100003				232.1	9.294	40.04
	E	100004				242.5	9.288	38.30
	E	100001	210.2	8.741	41.58			
	E	100002	213.0	7.497	35.20			
4.Test art.		Mean	211.6	8.119	38.39	237.3	9.291	39.17
		SD	2.0	0.880	4.52	7.4	0.004	1.23
		n	2	2	2	2	2	2
5.Test art.	F	120003				248.2	11.125	44.82
	F	120004				226.6	9.102	40.17
	F	120001	198.3	7.182	36.22			
	F	120002	214.4	8.079	37.68			
5.Test art.		Mean	206.4	7.630	36.95	237.4	10.114	42.50
		SD	11.4	0.634	1.03	15.3	1.430	3.29
		n	2	2	2	2	2	2

Statistics: Anova + Dunnett's tests.

(Two-Sided)

* P<=5% ; ** P<=1% ;

Exp.Unit = Animal

28-Day Repeated Dermal Contact Study of 3M Test Articles in Sprague-Dawley Rats

Fraunhofer-Inst. f. Toxikologie u. Aerosolforsch.

Study : 01G00002

Species: Rat

Sex : Both All sub-sets

Page : 4

T e r m i n a l B o d y W e i g h t & L i v e r W e i g h t D a t a

F E M A L E S		Day 4	Day 4	Day 4	Day 14	Day 14	Day 14
	Animal No.	TermBW G	Liver	r.Liver g/kg	TermBW G	Liver	r.Liver g/kg
6.Test art.	G 140003				224.8	8.469	37.68
	G 140004				218.0	8.494	38.96
	G 140001	214.5	8.305	38.72			
	G 140002	224.4	8.422	37.53			
6.Test art.	Mean	219.5	8.364	38.13	221.4	8.482	38.32
	SD	7.0	0.083	0.84	4.8	0.017	0.91
	n	2	2	2	2	2	2
7.Test art.	H 160003				238.5	10.199	42.76
	H 160004				215.7	8.820	40.89
	H 160001	212.2	8.603	40.54			
	H 160002	213.5	7.182	33.64			
7.Test art.	Mean	212.9	7.893	37.09	227.1	9.509	41.83
	SD	0.9	1.004	4.88	16.1	0.975	1.32
	n	2	2	2	2	2	2
8.Test art.	I 180003				223.0	8.296	37.20
	I 180004				233.2	11.915	51.10
	I 180001	199.6	6.684	33.49			
	I 180002	225.7	7.309	32.38			
8.Test art.	Mean	212.7	6.997	32.94	228.1	10.106	44.15
	SD	18.5	0.442	0.78	7.2	2.560	9.83
	n	2	2	2	2	2	2

Statistics: Anova + Dunnett's tests.

(Two-Sided)

* P<=5% ; ** P<=1% ;

Exp.Unit = Animal

28-Day Repeated Dermal Contact Study of 3M Test Articles in Sprague-Dawley Rats

Fraunhofer-Inst. f. Toxikologie u. Aerosolforsch.

Study : 01G00002

Species: Rat

Sex : Both All sub-sets

Page : 5

T e r m i n a l B o d y W e i g h t & L i v e r W e i g h t D a t a

M A L E S		Animal No.	Day 28	Day 28	Day 28	Day 42	Day 42	Day 42
			TermBW G	Liver	r.Liver g/kg	TermBW G	Liver	r.Liver g/kg
Control	A	010005	324.0	12.331	38.06			
	A	010006	336.0	12.325	36.68			
	A	010007				334.1	11.409	34.15
	A	010008				378.1	14.802	39.15
Control		Mean	330.0	12.328	37.37	356.1	13.106	36.65
		SD	8.5	0.000	0.97	31.1	2.399	3.54
		n	2	2	2	2	2	2
1.Test art.	B	030005	334.1	11.979	35.85			
	B	030006	287.6	10.361	36.03			
	B	030007				351.8	13.057	37.12
	B	030008				358.4	13.980	39.01
1.Test art.		Mean	310.9	11.170	35.94	355.1	13.519	38.06
		SD	32.9	1.144	0.12	4.7	0.652	1.34
		n	2	2	2	2	2	2
2.Test art.	C	050005	366.0	13.691	37.41			
	C	050006	315.6	11.344	35.94			
	C	050007				361.1	14.927	41.34
	C	050008				392.9	15.148	38.55
2.Test art.		Mean	340.8	12.517	36.68	377.0	15.038	39.95
		SD	35.6	1.660	1.04	22.5	0.156	1.97
		n	2	2	2	2	2	2
3.Test art.	D	070005	329.3	11.821	35.90			
	D	070006	324.5	12.279	37.84			
	D	070007				364.1	14.366	39.46
	D	070008				381.4	13.176	34.55
3.Test art.		Mean	326.9	12.050	36.87	372.8	13.771	37.00
		SD	3.4	0.324	1.37	12.2	0.841	3.47
		n	2	2	2	2	2	2
4.Test art.	E	090005	335.2	11.747	35.05			
	E	090006	324.7	12.948	39.88			
	E	090007				372.9	13.484	36.16
	E	090008				410.2	15.394	37.53
4.Test art.		Mean	330.0	12.348	37.46	391.6	14.439	36.84
		SD	7.4	0.849	3.42	26.4	1.351	0.97
		n	2	2	2	2	2	2
5.Test art.	F	110005	338.6	13.507	39.89			
	F	110006	326.1	12.174	37.33			
	F	110007				366.9	13.774	37.54
	F	110008				388.1	14.574	37.55
5.Test art.		Mean	332.4	12.840	38.61	377.5	14.174	37.55
		SD	8.8	0.942	1.81	15.0	0.565	0.00
		n	2	2	2	2	2	2

Statistics: Anova + Dunnett's tests.

(Two-Sided)

* P<=5% ; ** P<=1% ;

Exp.Unit = Animal

28-Day Repeated Dermal Contact Study of 3M Test Articles in Sprague-Dawley Rats

Fraunhofer-Inst. f. Toxikologie u. Aerosolforsch.

Study : 01G00002

Species: Rat

Sex : Both All sub-sets

Page : 6

T e r m i n a l B o d y W e i g h t & L i v e r W e i g h t D a t a

M A L E S			Day 28	Day 28	Day 28	Day 42	Day 42	Day 42
	Animal							
	No.	TermBW	Liver	r.Liver	TermBW	Liver	r.Liver	
		G		g/kg	G		g/kg	
6.Test art.	G 130005	340.1	12.187	35.83				
	G 130006	294.7	11.241	38.14				
	G 130007				346.5	13.360	38.56	
	G 130008				382.2	13.479	35.27	
6.Test art.	Mean	317.4	11.714	36.99	364.4	13.419	36.91	
	SD	32.1	0.669	1.63	25.2	0.084	2.33	
	n	2	2	2	2	2	2	
7.Test art.	H 150005	319.6	11.292	35.33				
	H 150006	331.6	13.481	40.65				
	H 150007				328.2	11.791	35.93	
	H 150008				350.6	13.423	38.29	
7.Test art.	Mean	325.6	12.387	37.99	339.4	12.607	37.11	
	SD	8.5	1.547	3.76	15.8	1.154	1.67	
	n	2	2	2	2	2	2	
8.Test art.	I 170005	330.9	12.665	38.27				
	I 170006	318.1	11.640	36.59				
	I 170007				372.2	13.901	37.35	
	I 170008				399.0	15.179	38.04	
8.Test art.	Mean	324.5	12.152	37.43	385.6	14.540	37.69	
	SD	9.1	0.725	1.19	19.0	0.904	0.49	
	n	2	2	2	2	2	2	

Statistics: Anova + Dunnett's tests.

(Two-Sided)

* P<=5% ; ** P<=1% ;

Exp.Unit = Animal

28-Day Repeated Dermal Contact Study of 3M Test Articles in Sprague-Dawley Rats

Fraunhofer-Inst. f. Toxikologie u. Aerosolforsch.

Study : 01G00002

Species: Rat

Sex : Both All sub-sets

Page : 7

T e r m i n a l B o d y W e i g h t & L i v e r W e i g h t D a t a

F E M A L E S	Animal No.	Day 28			Day 42		
		TermBW G	Liver	r.Liver g/kg	TermBW G	Liver	r.Liver g/kg
Control	A 020005	232.1	8.001	34.47			
	A 020006	258.3	10.907	42.23			
	A 020007				256.6	8.409	32.77
	A 020008				280.3	9.276	33.09
Control	Mean	245.2	9.454	38.35	268.5	8.842	32.93
	SD	18.5	2.055	5.48	16.8	0.613	0.23
	n	2	2	2	2	2	2
1.Test art.	B 040005	249.1	9.177	36.84			
	B 040006	234.8	8.594	36.60			
	B 040007				265.1	8.229	31.04
	B 040008				268.7	9.461	35.21
1.Test art.	Mean	242.0	8.886	36.72	266.9	8.845	33.13
	SD	10.1	0.412	0.17	2.5	0.871	2.95
	n	2	2	2	2	2	2
2.Test art.	C 060005	231.7	10.087	43.53			
	C 060006	245.6	8.372	34.09			
	C 060007				248.3	9.031	36.37
	C 060008				258.1	9.128	35.37
2.Test art.	Mean	238.7	9.230	38.81	253.2	9.080	35.87
	SD	9.8	1.212	6.68	6.9	0.068	0.71
	n	2	2	2	2	2	2
3.Test art.	D 080005	272.3	11.389	41.82			
	D 080006	252.6	9.243	36.59			
	D 080007				241.9	8.270	34.19
	D 080008				252.8	8.146	32.22
3.Test art.	Mean	262.5	10.316	39.21	247.4	8.208	33.21
	SD	13.9	1.517	3.70	7.7	0.088	1.39
	n	2	2	2	2	2	2
4.Test art.	E 100005	237.7	6.943	29.21			
	E 100006	219.0	9.557	43.64			
	E 100007				251.5	9.509	37.81
	E 100008				278.0	11.309	40.68
4.Test art.	Mean	228.4	8.250	36.42	264.8	10.409	39.24
	SD	13.2	1.848	10.20	18.7	1.273	2.03
	n	2	2	2	2	2	2
5.Test art.	F 120005	252.8	10.627	42.04			
	F 120006	254.1	11.849	46.63			
	F 120007				257.9	9.423	36.54
	F 120008				259.2	9.128	35.22
5.Test art.	Mean	253.5	11.238	44.33	258.6	9.276	35.88
	SD	0.9	0.864	3.25	0.9	0.208	0.93
	n	2	2	2	2	2	2

Statistics: Anova + Dunnett's tests.

(Two-Sided)

* P<=5% ; ** P<=1% ;

Exp.Unit = Animal

28-Day Repeated Dermal Contact Study of 3M Test Articles in Sprague-Dawley Rats

Fraunhofer-Inst. f. Toxikologie u. Aerosolforsch.

Study : 01G00002

Species: Rat

Sex : Both All sub-sets

Page : 8

T e r m i n a l B o d y W e i g h t & L i v e r W e i g h t D a t a

F E M A L E S		Animal	Day 28	Day 28	Day 28	Day 42	Day 42	Day 42
		No.	TermBW G	Liver	r.Liver g/kg	TermBW G	Liver	r.Liver g/kg
6.Test art.	G	140005	237.3	8.024	33.81			
	G	140006	248.6	8.110	32.62			
	G	140007				245.4	8.967	36.54
	G	140008				260.8	9.491	36.39
6.Test art.		Mean	243.0	8.067	33.22	253.1	9.229	36.47
		SD	8.0	0.061	0.84	10.9	0.370	0.10
		n	2	2	2	2	2	2
7.Test art.	H	160005	251.6	10.795	42.90			
	H	160006	244.6	8.330	34.06			
	H	160007				219.9	6.636	30.18
	H	160008				255.9	9.001	35.17
7.Test art.		Mean	248.1	9.563	38.48	237.9	7.819	32.68
		SD	4.9	1.742	6.26	25.5	1.672	3.53
		n	2	2	2	2	2	2
8.Test art.	I	180005	237.5	9.872	41.57			
	I	180006	250.2	10.574	42.26			
	I	180007				257.2	8.521	33.13
	I	180008				295.7	11.082	37.48
8.Test art.		Mean	243.9	10.223	41.91	276.5	9.802	35.30
		SD	9.0	0.496	0.49	27.2	1.811	3.07
		n	2	2	2	2	2	2

Statistics: Anova + Dunnett's tests.

(Two-Sided)

* P<=5% ; ** P<=1% ;

Exp.Unit = Animal

*** END OF REPORT ***