

**Experiment Number:** 97003-06  
**Test Type:** 90-DAY  
**Route:** SKIN APPLICATION  
**Species/Strain:** Mouse/B6C3F1

**P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH  
AVERAGE SEVERITY GRADES[b]**

**Test Compound:** 1,2-Dibromo-2,4-dicyanobutane

**CAS Number:** 35691-65-7

**Date Report Requested:** 10/21/2014

**Time Report Requested:** 01:08:03

**First Dose M/F:** NA / NA

**Lab:** MBA

<b>C Number:</b>	C97003C
<b>Lock Date:</b>	10/27/2000
<b>Cage Range:</b>	All
<b>Date Range:</b>	All
<b>Reasons For Removal:</b>	All
<b>Removal Date Range:</b>	All
<b>Treatment Groups:</b>	All
<b>Study Gender:</b>	Both
<b>PWG Approval Date</b>	NONE

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 First Dose M/F: NA / NA  
 Lab: MBA

B6C3F1 Mouse MALE	VEHICLE CONTROL	0.2 MG/KG	0.6 MG/KG	2.0 MG/KG	6.0 MG/KG	18.0 MG/KG
<b>Disposition Summary</b>						
Animals Initially In Study	10	10	10	10	10	10
Early Deaths						
Survivors						
Accidentally Killed	3			2	1	1
Terminal Sacrifice	7	10	10	8	9	9
Animals Examined Microscopically	10	10	10	10	10	10
<b>ALIMENTARY SYSTEM</b>						
Esophagus	(10)	(0)	(0)	(0)	(0)	(10)
Gallbladder	(8)	(0)	(0)	(0)	(0)	(6)
Intestine Large, Cecum	(10)	(0)	(0)	(0)	(0)	(10)
Intestine Large, Colon	(10)	(0)	(0)	(0)	(0)	(10)
Intestine Large, Rectum	(10)	(0)	(0)	(0)	(0)	(10)
Intestine Small, Duodenum	(10)	(0)	(0)	(0)	(0)	(10)
Intestine Small, Ileum	(10)	(0)	(0)	(0)	(0)	(10)
Intestine Small, Jejunum	(10)	(0)	(0)	(0)	(0)	(10)
Liver	(10)	(0)	(0)	(0)	(0)	(10)
Hepatocyte, Inflammation, Chronic Active, Focal	1 [1.0]					
Inflammation, Chronic Active, Focal	1 [1.0]					
Pancreas	(10)	(0)	(0)	(0)	(0)	(10)
Salivary Glands	(10)	(0)	(0)	(0)	(0)	(10)
Infiltration Cellular, Lymphocyte, Focal						1 [1.0]
Stomach, Forestomach	(10)	(0)	(0)	(0)	(0)	(10)
Stomach, Glandular	(10)	(0)	(0)	(0)	(0)	(10)
<b>CARDIOVASCULAR SYSTEM</b>						
Blood Vessel	(10)	(0)	(0)	(0)	(0)	(10)
Heart	(10)	(0)	(0)	(0)	(0)	(10)

a - Number of animals examined microscopically at site and number of animals with lesion  
 b - Average severity grade (1-minimal; 2-mild; 3-moderate; 4-marked)

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First Dose M/F: NA / NA

Lab: MBA

B6C3F1 Mouse MALE	VEHICLE CONTROL	0.2 MG/KG	0.6 MG/KG	2.0 MG/KG	6.0 MG/KG	18.0 MG/KG
<b>ENDOCRINE SYSTEM</b>						
Adrenal Cortex	(10)	(0)	(0)	(0)	(0)	(10)
Inflammation, Suppurative						1 [1.0]
Subcapsular, Hyperplasia, Focal	1 [1.0]					
Adrenal Medulla	(10)	(0)	(0)	(0)	(0)	(10)
Islets, Pancreatic	(10)	(0)	(0)	(0)	(0)	(10)
Parathyroid Gland	(8)	(0)	(0)	(0)	(0)	(5)
Pituitary Gland	(10)	(0)	(0)	(0)	(0)	(6)
Thyroid Gland	(10)	(0)	(0)	(0)	(0)	(10)
<b>GENERAL BODY SYSTEM</b>						
None						
<b>GENITAL SYSTEM</b>						
Epididymis	(10)	(0)	(0)	(0)	(0)	(10)
Preputial Gland	(10)	(0)	(0)	(0)	(0)	(10)
Prostate	(10)	(0)	(0)	(0)	(0)	(10)
Seminal Vesicle	(10)	(0)	(0)	(0)	(0)	(10)
Testes	(10)	(0)	(0)	(0)	(0)	(10)
<b>HEMATOPOIETIC SYSTEM</b>						
Bone Marrow	(10)	(10)	(10)	(10)	(10)	(10)
Hyperplasia				1 [1.0]	3 [1.0]	4 [1.3]
Lymph Node	(1)	(0)	(0)	(0)	(0)	(0)
Lymph Node, Mandibular	(10)	(0)	(0)	(0)	(0)	(9)
Lymph Node, Mesenteric	(10)	(0)	(0)	(0)	(0)	(10)
Spleen	(10)	(0)	(0)	(0)	(0)	(10)
Hematopoietic Cell Proliferation	1 [1.0]					1 [1.0]
Thymus	(9)	(0)	(0)	(0)	(0)	(10)
<b>INTEGUMENTARY SYSTEM</b>						

a - Number of animals examined microscopically at site and number of animals with lesion

b - Average severity grade (1-minimal; 2-mild; 3-moderate; 4-marked)

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Test Type: 90-DAY

Route: SKIN APPLICATION

Species/Strain: Mouse/B6C3F1

**P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH  
AVERAGE SEVERITY GRADES[b]**

Test Compound: 1,2-Dibromo-2,4-dicyanobutane

CAS Number: 35691-65-7

Date Report Requested: 10/21/2014

Time Report Requested: 01:08:03

First Dose M/F: NA / NA

Lab: MBA

B6C3F1 Mouse MALE	VEHICLE CONTROL	0.2 MG/KG	0.6 MG/KG	2.0 MG/KG	6.0 MG/KG	18.0 MG/KG
Mammary Gland	(1)	(0)	(0)	(0)	(0)	(0)
Skin	(10)	(10)	(10)	(10)	(10)	(10)
SOA Dermis, Fibrosis						9 [1.7]
SOA Dermis, Inflammation, Chronic Active, Focal				2 [1.0]	1 [1.0]	9 [1.1]
SOA Dermis, Sebaceous GI, Hyperplasia				2 [1.0]	6 [1.0]	10 [1.3]
SOA Epidermis, Exudate						5 [1.8]
SOA Epidermis, Hyperkeratosis				10 [1.0]	10 [1.0]	10 [1.7]
SOA Epidermis, Hyperplasia				10 [1.0]	10 [1.5]	10 [2.7]
SOA Epidermis, Necrosis, Focal					2 [1.0]	6 [2.0]
SOA Epidermis, Parakeratosis, Focal					5 [1.0]	9 [1.1]
SOA Epidermis, Ulcer, Focal						2 [2.0]
<b>MUSCULOSKELETAL SYSTEM</b>						
Bone	(10)	(0)	(0)	(0)	(0)	(10)
<b>NERVOUS SYSTEM</b>						
Brain	(10)	(0)	(0)	(0)	(0)	(10)
<b>RESPIRATORY SYSTEM</b>						
Lung	(10)	(0)	(0)	(0)	(0)	(10)
Alveolus, Hemorrhage, Focal	1 [1.0]					
Nose	(10)	(0)	(0)	(0)	(0)	(10)
Trachea	(10)	(0)	(0)	(0)	(0)	(10)
<b>SPECIAL SENSES SYSTEM</b>						
Eye	(10)	(0)	(0)	(0)	(0)	(10)
<b>URINARY SYSTEM</b>						
Kidney	(10)	(0)	(0)	(0)	(0)	(10)
Urinary Bladder	(10)	(0)	(0)	(0)	(0)	(10)

a - Number of animals examined microscopically at site and number of animals with lesion

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**CAS Number:** 35691-65-7

**Date Report Requested:** 10/21/2014  
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**First Dose M/F:** NA / NA  
**Lab:** MBA

\*\*\*END OF MALE DATA\*\*\*

a - Number of animals examined microscopically at site and number of animals with lesion  
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 Route: SKIN APPLICATION  
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 CAS Number: 35691-65-7

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 Time Report Requested: 01:08:03  
 First Dose M/F: NA / NA  
 Lab: MBA

B6C3F1 Mouse FEMALE	VEHICLE CONTROL	0.2 MG/KG	0.6 MG/KG	2.0 MG/KG	6.0 MG/KG	18.0 MG/KG
<b>Disposition Summary</b>						
Animals Initially In Study	10	10	10	10	10	10
Early Deaths						
Survivors						
Terminal Sacrifice	10	10	10	10	10	10
Animals Examined Microscopically	10	10	10	10	10	10
<b>ALIMENTARY SYSTEM</b>						
Esophagus	(10)	(0)	(0)	(0)	(0)	(10)
Gallbladder	(9)	(0)	(0)	(0)	(0)	(9)
Intestine Large, Cecum	(10)	(0)	(0)	(0)	(0)	(10)
Intestine Large, Colon	(10)	(0)	(0)	(0)	(0)	(10)
Intestine Large, Rectum	(10)	(0)	(0)	(0)	(0)	(10)
Intestine Small, Duodenum	(10)	(0)	(0)	(0)	(0)	(10)
Intestine Small, Ileum	(10)	(0)	(0)	(0)	(0)	(10)
Intestine Small, Jejunum	(10)	(0)	(0)	(0)	(0)	(10)
Liver	(10)	(0)	(0)	(0)	(0)	(10)
Hepatocyte, Necrosis, Focal						1 [1.0]
Inflammation, Chronic Active, Focal	3 [1.0]					
Pancreas	(10)	(0)	(0)	(0)	(0)	(10)
Salivary Glands	(10)	(0)	(0)	(0)	(0)	(10)
Infiltration Cellular, Lymphocyte, Focal	2 [1.0]					
Stomach, Forestomach	(10)	(0)	(0)	(0)	(0)	(10)
Stomach, Glandular	(10)	(0)	(0)	(0)	(0)	(10)
<b>CARDIOVASCULAR SYSTEM</b>						
Blood Vessel	(10)	(0)	(0)	(0)	(0)	(10)
Heart	(10)	(0)	(0)	(0)	(0)	(10)
<b>ENDOCRINE SYSTEM</b>						

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First Dose M/F: NA / NA

Lab: MBA

<b>B6C3F1 Mouse FEMALE</b>	<b>VEHICLE CONTROL</b>	<b>0.2 MG/KG</b>	<b>0.6 MG/KG</b>	<b>2.0 MG/KG</b>	<b>6.0 MG/KG</b>	<b>18.0 MG/KG</b>
Adrenal Cortex	(10)	(0)	(0)	(0)	(0)	(10)
Subcapsular, Hyperplasia, Focal	9 [1.0]					10 [1.0]
Adrenal Medulla	(10)	(0)	(0)	(0)	(0)	(10)
Islets, Pancreatic	(10)	(0)	(0)	(0)	(0)	(10)
Parathyroid Gland	(2)	(0)	(0)	(0)	(0)	(4)
Pituitary Gland	(10)	(0)	(0)	(0)	(0)	(7)
Thyroid Gland	(9)	(0)	(0)	(0)	(0)	(10)
Follicular Cel, Cyst						1
<b>GENERAL BODY SYSTEM</b>						
None						
<b>GENITAL SYSTEM</b>						
Clitoral Gland	(7)	(0)	(0)	(0)	(0)	(5)
Ovary	(10)	(0)	(0)	(1)	(0)	(10)
Uterus	(10)	(0)	(0)	(0)	(0)	(10)
<b>HEMATOPOIETIC SYSTEM</b>						
Bone Marrow	(10)	(0)	(0)	(0)	(0)	(10)
Hyperplasia						1 [2.0]
Lymph Node, Mandibular	(10)	(0)	(0)	(0)	(0)	(10)
Lymph Node, Mesenteric	(10)	(0)	(0)	(0)	(0)	(10)
Spleen	(10)	(10)	(10)	(10)	(10)	(10)
Hematopoietic Cell Proliferation		3 [1.3]	2 [1.5]	6 [1.3]	4 [1.0]	8 [1.8]
Thymus	(10)	(0)	(0)	(0)	(0)	(10)
Ectopic Thyroid	1 [1.0]					
<b>INTEGUMENTARY SYSTEM</b>						
Mammary Gland	(10)	(0)	(0)	(0)	(0)	(10)
Skin	(10)	(10)	(10)	(10)	(10)	(10)
SOA Dermis, Fibrosis						9 [1.1]

a - Number of animals examined microscopically at site and number of animals with lesion

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B6C3F1 Mouse FEMALE	VEHICLE CONTROL	0.2 MG/KG	0.6 MG/KG	2.0 MG/KG	6.0 MG/KG	18.0 MG/KG
SOA Dermis, Inflammation, Chronic Active, Focal			2 [1.0]	4 [1.0]	4 [1.0]	4 [1.0]
SOA Dermis, Sebaceous Gland, Hyperplasia					5 [1.0]	10 [1.8]
SOA Epidermis, Exudate				1 [1.0]		1 [2.0]
SOA Epidermis, Hyperkeratosis			3 [1.0]	7 [1.0]	10 [1.1]	10 [1.7]
SOA Epidermis, Hyperplasia			2 [1.0]	8 [1.0]	9 [1.2]	10 [2.0]
SOA Epidermis, Necrosis, Focal					1 [1.0]	1 [1.0]
SOA Epidermis, Parakeratosis, Focal					1 [1.0]	2 [1.0]
<b>MUSCULOSKELETAL SYSTEM</b>						
Bone	(10)	(0)	(0)	(0)	(0)	(10)
<b>NERVOUS SYSTEM</b>						
Brain	(10)	(0)	(0)	(0)	(0)	(10)
<b>RESPIRATORY SYSTEM</b>						
Lung	(10)	(0)	(0)	(0)	(0)	(10)
Nose	(10)	(0)	(0)	(0)	(0)	(10)
Respiratory Epithelium, Septum, Hyaline Droplet						1 [1.0]
Trachea	(10)	(0)	(0)	(0)	(0)	(10)
<b>SPECIAL SENSES SYSTEM</b>						
Eye	(10)	(0)	(0)	(0)	(0)	(10)
<b>URINARY SYSTEM</b>						
Kidney	(10)	(0)	(0)	(0)	(0)	(10)
Infiltration Cellular, Mononuclear Cell	1 [1.0]					
Urinary Bladder	(10)	(0)	(0)	(0)	(0)	(10)
Infiltration Cellular						1 [1.0]
Infiltration Cellular, Lymphocyte	1 [1.0]					

**\*\* END OF REPORT \*\***

a - Number of animals examined microscopically at site and number of animals with lesion

b - Average severity grade (1-minimal; 2-mild; 3-moderate; 4-marked)