



Consumer Product Testing Co.

EST. 1975

FINAL REPORT

SPONSOR: Mr. Carter La Vay
Zenitech

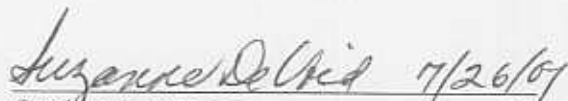
STUDY TITLE: Ames Salmonella Mutagenicity test.


CPTC STUDY # : M01-1145

TEST ARTICLES: M01-1145.01 Zenigloss Q, Lot:PO1153
M01-1145.02 Zenigloss, Lot:PO10358
M01-1145.03 Poloxicone 400, Lot:PO10407

STUDY DIRECTOR: Luis Jimenez, Ph.D.
Director of Microbiology

TESTING FACILITY: Consumer Product Testing Company, Inc.
70 New Dutch Lane
Fairfield, New Jersey 07004


Quality Assurance Date


Luis Jimenez, Ph.D. Date
Director of Microbiology

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Conclusion

The Ames test was performed on the test articles mentioned above by using Protocol 56-A. The results show that the test strains are sensitive to the positive control mutagens and had spontaneous reversion rates well within the accepted values of each strain, indicating that under the test conditions, the strains were sensitive to the detection of potentially genotoxic agents.

Using the same test conditions, there was no detectable genotoxic activity associated with the undiluted samples under testing, neither in the presence or absence of the S9 enzyme activation.



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Ames Mutagenicity Test Results.

Table # 1: Number of revertants without S-9 activation.

Client: Zenitech
Sample: Zenigloss
Concentration Tested = As is
Solvent Used = None

Study # M01-1145
Lot# PO10358

| Test Strain # | Strain Control | Positive Control | Test sample | |
|------------------|----------------|------------------|-------------|----|
| TA 1535 | 1- | 65 | >1000 | 53 |
| | 2- | 74 | >1000 | 57 |
| | 3- | 68 | >1000 | 56 |
| Average = | 69.00 | >1000 | 55.33 | |
| Std. Deviation = | 4.58 | N/A | 2.08 | |

| Test Strain # | Strain Control | Positive Control | Test sample | |
|------------------|----------------|------------------|-------------|----|
| TA 1537 | 1- | 15 | >1000 | 14 |
| | 2- | 14 | >1000 | 17 |
| | 3- | 15 | >1000 | 18 |
| Average = | 14.67 | >1000 | 16.33 | |
| Std. Deviation = | 0.58 | N/A | 2.08 | |

| Test Strain # | Strain Control | Positive Control | Test sample | |
|------------------|----------------|------------------|-------------|----|
| TA 98 | 1- | 60 | >1000 | 51 |
| | 2- | 61 | >1000 | 57 |
| | 3- | 63 | >1000 | 55 |
| Average = | 61.33 | >1000 | 54.33 | |
| Std. Deviation = | 1.53 | N/A | 3.06 | |

| Test Strain # | Strain Control | Positive Control | Test sample | |
|------------------|----------------|------------------|-------------|----|
| TA 1538 | 1- | 31 | >1000 | 35 |
| | 2- | 39 | >1000 | 36 |
| | 3- | 38 | >1000 | 35 |
| Average = | 36.00 | >1000 | 35.33 | |
| Std. Deviation = | 4.36 | N/A | 0.58 | |

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Ames Mutagenicity Test Results.

Table # 2: Number of revertants without S-9 activation.

Client: Zenitech
Sample: Poloxicone 400
Concentration Tested =As is
Solvent Used = None

Study # M01-1145
Lot# PO10407

| Test Strain # | Strain Control | Positive Control | Test sample | |
|------------------|----------------|------------------|-------------|----|
| TA 1535 | 1- | 65 | >1000 | 64 |
| | 2- | 74 | >1000 | 66 |
| | 3- | 68 | >1000 | 63 |
| Average = | 69.00 | >1000 | 64.33 | |
| Std. Deviation = | 4.58 | N/A | 1.53 | |

| Test Strain # | Strain Control | Positive Control | Test sample | |
|------------------|----------------|------------------|-------------|----|
| TA 1537 | 1- | 15 | >1000 | 14 |
| | 2- | 14 | >1000 | 17 |
| | 3- | 15 | >1000 | 19 |
| Average = | 14.67 | >1000 | 16.67 | |
| Std. Deviation = | 0.58 | N/A | 2.52 | |

| Test Strain # | Strain Control | Positive Control | Test sample | |
|------------------|----------------|------------------|-------------|----|
| TA 98 | 1- | 60 | >1000 | 78 |
| | 2- | 61 | >1000 | 79 |
| | 3- | 63 | >1000 | 77 |
| Average = | 61.33 | >1000 | 78.00 | |
| Std. Deviation = | 1.53 | N/A | 1.00 | |

| Test Strain # | Strain Control | Positive Control | Test sample | |
|------------------|----------------|------------------|-------------|----|
| TA 1538 | 1- | 31 | >1000 | 36 |
| | 2- | 39 | >1000 | 36 |
| | 3- | 38 | >1000 | 35 |
| Average = | 36.00 | >1000 | 35.67 | |
| Std. Deviation = | 4.36 | N/A | 0.58 | |

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Ames Mutagenicity Test Results.

Table # 3: Number of revertants without S-9 activation.

Client: Zenitech
Sample: Zenigloss Q
Concentration Tested =As is
Solvent Used= None

Study # M01-1145
Lot# PO1153

| Test Strain # | Strain Control | Positive Control | Test sample | |
|------------------|----------------|------------------|-------------|----|
| TA 1535 | 1- | 65 | >1000 | 48 |
| | 2- | 74 | >1000 | 44 |
| | 3- | 68 | >1000 | 49 |
| Average = | 69.00 | >1000 | 47.00 | |
| Std. Deviation = | 4.58 | N/A | 2.65 | |

| Test Strain # | Strain Control | Positive Control | Test sample | |
|------------------|----------------|------------------|-------------|----|
| TA 1537 | 1- | 15 | >1000 | 6 |
| | 2- | 14 | >1000 | 7 |
| | 3- | 15 | >1000 | 10 |
| Average = | 14.67 | >1000 | 7.67 | |
| Std. Deviation = | 0.58 | N/A | 2.08 | |

| Test Strain # | Strain Control | Positive Control | Test sample | |
|------------------|----------------|------------------|-------------|----|
| TA 98 | 1- | 60 | >1000 | 29 |
| | 2- | 61 | >1000 | 32 |
| | 3- | 63 | >1000 | 35 |
| Average = | 61.33 | >1000 | 32.00 | |
| Std. Deviation = | 1.53 | N/A | 3.00 | |

| Test Strain # | Strain Control | Positive Control | Test sample | |
|------------------|----------------|------------------|-------------|----|
| TA 1538 | 1- | 31 | >1000 | 24 |
| | 2- | 39 | >1000 | 18 |
| | 3- | 38 | >1000 | 25 |
| Average = | 36.00 | >1000 | 22.33 | |
| Std. Deviation = | 4.36 | N/A | 3.79 | |

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Ames Mutagenicity Test Results.

Table # 4: Number of revertants with S-9 activation.

Client: Zenitech
Sample: Zenigloss
Concentration Tested = As is
Solvent Used = None

Study # M01-1145
Lot# PO10358

| Test Strain # | Strain Control | Positive Control | Test sample | |
|------------------|----------------|------------------|-------------|----|
| TA 1535 | 1- | 66 | >1000 | 55 |
| | 2- | 73 | >1000 | 54 |
| | 3- | 69 | >1000 | 53 |
| Average = | 69.33 | >1000 | 54.00 | |
| Std. Deviation = | 3.51 | N/A | 1.00 | |

| Test Strain # | Strain Control | Positive Control | Test sample | |
|------------------|----------------|------------------|-------------|----|
| TA 1537 | 1- | 16 | >1000 | 17 |
| | 2- | 15 | >1000 | 15 |
| | 3- | 15 | >1000 | 18 |
| Average = | 15.33 | >1000 | 16.67 | |
| Std. Deviation = | 0.58 | N/A | 1.53 | |

| Test Strain # | Strain Control | Positive Control | Test sample | |
|------------------|----------------|------------------|-------------|----|
| TA 98 | 1- | 62 | >1000 | 52 |
| | 2- | 61 | >1000 | 56 |
| | 3- | 60 | >1000 | 58 |
| Average = | 61.00 | >1000 | 55.33 | |
| Std. Deviation = | 1.00 | N/A | 3.06 | |

| Test Strain # | Strain Control | Positive Control | Test sample | |
|------------------|----------------|------------------|-------------|----|
| TA 1538 | 1- | 30 | >1000 | 36 |
| | 2- | 37 | >1000 | 34 |
| | 3- | 39 | >1000 | 33 |
| Average = | 35.33 | >1000 | 34.33 | |
| Std. Deviation = | 4.73 | N/A | 1.53 | |

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Ames Mutagenicity Test Results.

Table # 5: Number of revertants with S-9 activation.

Client: Zenitech
Sample: Poloxicone 400
Concentration Tested =As is
Solvent Used = None

Study # M01-1145
Lot# PO10407

| Test Strain # | Strain Control | Positive Control | Test sample | |
|------------------|----------------|------------------|-------------|----|
| TA 1535 | 1- | 66 | >1000 | 62 |
| | 2- | 73 | >1000 | 67 |
| | 3- | 69 | >1000 | 64 |
| Average = | 69.33 | >1000 | 64.33 | |
| Std. Deviation = | 3.51 | N/A | 2.52 | |

| Test Strain # | Strain Control | Positive Control | Test sample | |
|------------------|----------------|------------------|-------------|----|
| TA 1537 | 1- | 16 | >1000 | 15 |
| | 2- | 15 | >1000 | 16 |
| | 3- | 15 | >1000 | 18 |
| Average = | 15.33 | >1000 | 16.33 | |
| Std. Deviation = | 0.58 | N/A | 1.53 | |

| Test Strain # | Strain Control | Positive Control | Test sample | |
|------------------|----------------|------------------|-------------|----|
| TA 98 | 1- | 62 | >1000 | 77 |
| | 2- | 61 | >1000 | 78 |
| | 3- | 60 | >1000 | 79 |
| Average = | 61.00 | >1000 | 78.00 | |
| Std. Deviation = | 1.00 | N/A | 1.00 | |

| Test Strain # | Strain Control | Positive Control | Test sample | |
|------------------|----------------|------------------|-------------|----|
| TA 1538 | 1- | 30 | >1000 | 35 |
| | 2- | 37 | >1000 | 38 |
| | 3- | 39 | >1000 | 37 |
| Average = | 35.33 | >1000 | 36.67 | |
| Std. Deviation = | 4.73 | N/A | 1.53 | |

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Ames Mutagenicity Test Results.

Table # 6: Number of revertants with S-9 activation.

Client: Zenitech
Sample: Zenigloss Q
Concentration Tested =As is
Solvent Used= None

Study # M01-1145
Lot# PO1153

| Test Strain # | Strain Control | Positive Control | Test sample | |
|------------------|----------------|------------------|-------------|----|
| TA 1535 | 1- | 66 | >1000 | 43 |
| | 2- | 73 | >1000 | 48 |
| | 3- | 69 | >1000 | 46 |
| Average = | 69.33 | >1000 | 45.67 | |
| Std. Deviation = | 3.51 | N/A | 2.52 | |

| Test Strain # | Strain Control | Positive Control | Test sample | |
|------------------|----------------|------------------|-------------|---|
| TA 1537 | 1- | 16 | >1000 | 8 |
| | 2- | 15 | >1000 | 9 |
| | 3- | 15 | >1000 | 8 |
| Average = | 15.33 | >1000 | 8.33 | |
| Std. Deviation = | 0.58 | N/A | 0.58 | |

| Test Strain # | Strain Control | Positive Control | Test sample | |
|------------------|----------------|------------------|-------------|----|
| TA 98 | 1- | 62 | >1000 | 30 |
| | 2- | 61 | >1000 | 35 |
| | 3- | 60 | >1000 | 35 |
| Average = | 61.00 | >1000 | 33.33 | |
| Std. Deviation = | 1.00 | N/A | 2.89 | |

| Test Strain # | Strain Control | Positive Control | Test sample | |
|------------------|----------------|------------------|-------------|----|
| TA 1538 | 1- | 30 | >1000 | 21 |
| | 2- | 37 | >1000 | 20 |
| | 3- | 39 | >1000 | 21 |
| Average = | 35.33 | >1000 | 20.67 | |
| Std. Deviation = | 4.73 | N/A | 0.58 | |

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