

SIMPLE. ACCURATE. RELIABLE.

# Topi-Pump<sup>®</sup><sub>X</sub>

Metered Dosing for Topical Pharmaceuticals

## Accuracy Reliability Study



### Topi-Pump #3

**Pump Type:** ..... 0.5ml Butyl

**Pouch Type:** ..... 60ml LDPE

**Trial:** ..... 60-day period (2 pumps per day)

Filled Total Weight (gm): ..... 87.21 gm

Weight of Product: ..... 66.09 gm

Weight of 1ml of Product: ..... 1 gm

No. of Priming Strokes: ..... 9

Change in Color: ..... No

Other: ..... Bubbles

Product: ..... Gel

| DAY | PUMP # | DOSAGE (grams) |
|-----|--------|----------------|
| 1   | 1      | 0.48           |
|     | 2      | 0.49           |
| 2   | 3      | 0.51           |
|     | 4      | 0.52           |
| 3   | 5      | 0.50           |
|     | 6      | 0.51           |
| 4   | 7      | 0.54           |
|     | 8      | 0.53           |
| 5   | 9      | 0.50           |
|     | 10     | 0.50           |
| 6   | 11     | 0.49           |
|     | 12     | 0.48           |
| 7   | 13     | 0.50           |
|     | 14     | 0.53           |
| 8   | 15     | 0.51           |
|     | 16     | 0.50           |
| 9   | 17     | 0.53           |
|     | 18     | 0.50           |
| 10  | 19     | 0.50           |
|     | 20     | 0.49           |

| DAY | PUMP # | DOSAGE (grams) |
|-----|--------|----------------|
| 11  | 21     | 0.51           |
|     | 22     | 0.48           |
| 12  | 23     | 0.49           |
|     | 24     | 0.47           |
| 13  | 25     | 0.48           |
|     | 26     | 0.50           |
| 14  | 27     | 0.51           |
|     | 28     | 0.52           |
| 15  | 29     | 0.52           |
|     | 30     | 0.47           |
| 16  | 31     | 0.49           |
|     | 32     | 0.50           |
| 17  | 33     | 0.53           |
|     | 34     | 0.55           |
| 18  | 35     | 0.54           |
|     | 36     | 0.53           |
| 19  | 37     | 0.52           |
|     | 38     | 0.50           |
| 20  | 39     | 0.51           |
|     | 40     | 0.53           |

| DAY | PUMP # | DOSAGE (grams) |
|-----|--------|----------------|
| 21  | 41     | 0.48           |
|     | 42     | 0.46           |
| 22  | 42     | 0.50           |
|     | 44     | 0.48           |
| 23  | 45     | 0.50           |
|     | 46     | 0.51           |
| 24  | 47     | 0.48           |
|     | 48     | 0.49           |
| 25  | 49     | 0.50           |
|     | 50     | 0.53           |
| 26  | 51     | 0.51           |
|     | 52     | 0.54           |
| 27  | 53     | 0.49           |
|     | 54     | 0.47           |
| 28  | 55     | 0.48           |
|     | 56     | 0.48           |
| 29  | 57     | 0.47           |
|     | 58     | 0.50           |
| 30  | 59     | 0.51           |
|     | 60     | 0.48           |

# Topi-Pump #3 trial data cont'd.

Pump Type:.....0.5ml Butyl  
 Pouch Type:..... 60ml LDPE  
 Trial:.....60-day period (2 pumps per day)

| DAY | PUMP # | DOSAGE (grams) |
|-----|--------|----------------|
| 31  | 61     | 0.50           |
|     | 62     | 0.49           |
| 32  | 63     | 0.47           |
|     | 64     | 0.49           |
| 33  | 65     | 0.46           |
|     | 66     | 0.47           |
| 34  | 67     | 0.50           |
|     | 68     | 0.50           |
| 35  | 69     | 0.49           |
|     | 70     | 0.51           |
| 36  | 71     | 0.50           |
|     | 72     | 0.53           |
| 37  | 73     | 0.50           |
|     | 74     | 0.54           |
| 38  | 75     | 0.53           |
|     | 76     | 0.52           |
| 39  | 77     | 0.51           |
|     | 78     | 0.50           |
| 40  | 79     | 0.50           |
|     | 80     | 0.49           |

| DAY | PUMP # | DOSAGE (grams) |
|-----|--------|----------------|
| 41  | 81     | 0.54           |
|     | 82     | 0.50           |
| 42  | 83     | 0.49           |
|     | 84     | 0.49           |
| 43  | 85     | 0.47           |
|     | 86     | 0.46           |
| 44  | 87     | 0.48           |
|     | 88     | 0.49           |
| 45  | 89     | 0.50           |
|     | 90     | 0.50           |
| 46  | 91     | 0.50           |
|     | 92     | 0.48           |
| 47  | 93     | 0.52           |
|     | 94     | 0.51           |
| 48  | 95     | 0.50           |
|     | 96     | 0.52           |
| 49  | 97     | 0.54           |
|     | 98     | 0.49           |
| 50  | 99     | 0.46           |
|     | 100    | 0.50           |

| DAY | PUMP # | DOSAGE (grams) |
|-----|--------|----------------|
| 51  | 101    | 0.49           |
|     | 102    | 0.48           |
| 52  | 103    | 0.49           |
|     | 104    | 0.48           |
| 53  | 105    | 0.46           |
|     | 106    | 0.47           |
| 54  | 107    | 0.50           |
|     | 108    | 0.49           |
| 55  | 109    | 0.46           |
|     | 110    | 0.47           |
| 56  | 111    | 0.47           |
|     | 112    | 0.49           |
| 57  | 113    | 0.48           |
|     | 114    | 0.49           |
| 58  | 115    | 0.50           |
|     | 116    | 0.51           |
| 59  | 117    | 0.46           |
|     | 118    | 0.46           |
| 60  | 119    | 0.47           |
|     | 120    | 0.47           |

120-Dose Total Weight:..... 58.80 gm  
 Mean of Accepted Doses: .....0.49 gm

Maximum Accepted Doses:..... 0.55 gm  
 Minimum Accepted Doses:.....0.46 gm



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