BATTERY OPERATED KNAPSACK SPRAYER
"KISAN 76 (BS-16)"

GOVERNMENT OF INDIA
MINISTRY OF AGRICULTURE
(DEPARTMENT OF AGRICULTURE & COOPERATION)

NORTHERN REGION FARM MACHINERY TRAINING AND TESTING INSTITUTE TRACTOR NAGAR,
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## PERFORMANCE REQUIREMENT (Cl 5 IS 3906:2006)

| Cl 5.1 IS 3906:2006 Discharge rate | When tested in accordance with the method given in 6.1.3 of IS: 10134-1994 the pump shall be capable of discharging a minimum of 500 ml of water per minute | Pump is capable of discharging 740 ml/min water. | Conforms |
| Cl 5.2 IS 3906:2006 Volumetric Efficiency | When tested in accordance with the method given in 6.2 of IS: 10134-1994, the volumetric efficiency shall be not less than 85 percent | Not applicable, as there is battery operated diaphragm pump. | -- |

## CONSTRUCTIONAL REQUIREMENTS (Cl 6 IS 3906:2006)

| Cl 6.1 IS 3906:2006 Tank | The tank capacity shall be 10,13 or 16 litres with a tolerance of ± 0.5 liter | The tank capacity is 16 litres | Conforms |
| Cl 6.1.1 IS 3906:2006 | The thickness of sheet used in manufacture of brass tank shall be minimum of 0.63 mm ± 0.03 mm | Not applicable, as the tank is made of plastic | Conforms |
| Cl 6.1.2 IS 3906:2006 | The tank when filled up to its neck level with water, shall not show any sign of leakage and shall not buckle | No sign of leakage buckling in tank is noticed, when filled up to the neck level with water. | Conforms |
| Cl 6.2 IS 3906:2006 Skirt/Stands | The tank shall be provided with a skirt/stand which shall project a minimum of 6 mm beyond the lowest portion of the bottom of the tank | The tank is provided with a stand which is projected 132 mm beyond the lowest portion of the bottom of the tank | Conforms |
Each sprayer shall be packed as agreed to between the purchase and the supplier for safe handling in transit.

5. COMMENTS:

1. Kisan-76 (BS-16) battery operated continues sprayer does not conforms the following requirements specified in Indian Standard. These should be included to make sprayer as per Indian Standard.
   - Cl. 4.1 IS:3652-1995 - Material of Packing gland.
   - Cl. 4.3 IS: 3906 – 2006 - Declaration of material for different components.
   - Cl 6.5 IS: 3652-1995 - Threaded connections.
   - Cl E-5 IS: 3652-1995 Designation of spray gun
   - Cl 7.3.1 IS:3906-2006-Strap cushion
   - Cl. 9 IS:3906-2006 – Marking and Batch or Code No.

2. Spray distribution patter is complying in figure 22 triangular distribution limit as IS : 3652-1995.

TESTING AUTHORITY

<table>
<thead>
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APPLICANT'S COMMENTS

No comments received

NORTHERN REGION FARM MACHINERY TRAINING & TESTING INSTITUTE-HISAR