COMMERCIAL TEST REPORT

HAND OPERATED KNAPSACK SPRAYER
“Govind Agrimax-Sathi GMS 16 B-A”

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

NORTHERN REGION FARM MACHINERY TRAINING AND TESTING INSTITUTE
TRACTOR NAGAR, SIRSA ROAD, HISAR-125001 ( HARYANA )

Telephone: 01662-276824, 276172
Website: http://nrfmtti/dacnet.nic.in

Telefax No.: 01662-276984
E-Mail: fmti-nr@nic.in
<table>
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<th>Clause No.</th>
<th>Specified requirement</th>
<th>Observations</th>
<th>Remarks</th>
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<tr>
<td>Cl. 4.3</td>
<td>All metallic parts coming in contact with the pesticides, should preferably be of the same material to minimize bimetallic corrosion</td>
<td>Only handle operating lever and pivot is made of mild steel. Rest of the parts are made of plastic.</td>
<td>Conforms</td>
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<tr>
<td>Cl. 4.4</td>
<td>The material used for different components shall be declared by the manufacturer in the manual</td>
<td>Separately declared by the manufacturer on a leaflet.</td>
<td>Conforms</td>
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<tr>
<td>5.1</td>
<td><strong>Discharge rate</strong>&lt;br&gt;When tested in accordance with the method given in 6.1.3 of IS: 10134-Dec. 2004 the pump shall be capable of discharging a minimum of 500 ml of water per minute</td>
<td>Average rate of discharge is measured as 655 ml/min</td>
<td>Conforms</td>
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<tr>
<td>5.2</td>
<td><strong>Volumetric Efficiency</strong>&lt;br&gt;When tested in accordance with the method given in 6.2 of IS: 10134-Dec. 2004, the volumetric efficiency shall be not less than 80 percent</td>
<td>Volumetric efficiency is 93.6%</td>
<td>Conforms</td>
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<tr>
<td>Cl. 6</td>
<td><strong>Constructional requirements</strong>&lt;br&gt;Cl. 6.1&lt;br&gt;Tank&lt;br&gt;The tank capacity shall be 10, 13 or 16 litres with a tolerance of ±0.5 litre</td>
<td>The tank capacity is 16 litres</td>
<td>Conforms</td>
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<tr>
<td>Cl. 6.1.1</td>
<td>The thickness of sheet used in manufacture of brass tank shall be minimum of 0.63 ± 0.03 mm</td>
<td>Not applicable as the tank is made of HDPE of 2.6 mm thickness</td>
<td>--</td>
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<tr>
<td>Cl. 6.1.2</td>
<td>The tank when filled up to its neck level with water shall not show any sign of leakage and shall not buckle</td>
<td>No sign of leakage is noticed when water is filled to its neck level.</td>
<td>Conforms</td>
</tr>
<tr>
<td>Cl. 6.2</td>
<td><strong>Skirt/Stands</strong>&lt;br&gt;The tank shall be provided with a skirt/stand which shall project a minimum of 12 mm beyond the lowest portion of the bottom of the tank</td>
<td>Skirt/stand is integrated part of the tank extended 33 mm beyond the lowest portion of the bottom of the tank</td>
<td>Conforms</td>
</tr>
</tbody>
</table>
6. COMMENTS:

1. Hand operated knapsack sprayer Govind Agrimax Sathi GMS 16 B-A conforms with all the requirements of IS:3906-2006 except the constructional requirements specified in following clauses. These should be incorporated at manufacturing level.
   - Cl. 4.1(ix) and (xxix) IS: 3906- 2006-Material of construction –Piston rod and cut off device components –Operating trigger.
   - Cl. C-10 IS:3652-2004-Hand operated cut off device marking
   - Cl. D-5 IS:3652-2004- Spray lance –Marking
   - Cl. F 3.2 IS:3652-2004- Declaration of spray angle of nozzle
   - Cl. F-5 IS:3652-2004- Hydraulic spray nozzles-Designation
   - Cl. 7.1 IS:3652-2004 – Hydraulic spray nozzles- Designation
   - Cl. F-11 IS:3652-2004-Hydraulic spray nozzles-Marking
   - Cl. 9 IS:3906-2006 -Cl. 9.1(b) –Marking
   - Please refer para 5 for more details

TESTING AUTHORITY

(R.M. Tiwari)
Assistant Engineer (W/S)

(P. K. CHOPRA)
SENIOR AGRICULTURAL ENGINEER

A. N. MESHRAM
-DIRECTOR-

Tests conducted/Reports compiled by :
1. Sh. Ram Dayal, Training Assistant

Applicants comments: No comments received