**SPECIFICATION SHEET OF TRACTOR OPERATED SPRAYER**

**(SAMPLE FOR BATCH TEST)**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | **DESCRIPTION** |  | **BASE MODEL**  **(Previous Sample)** |  | **BATCH MODEL**  **(Present sample)** |  | **Remarks** |
| **1** | | **General** |  |  |  |  |  |  |
|  | | Name and address of manufacturer | **:** | XXXX | **:** | XXXX | **:** | Changed/Not Changed |
|  | | Name and address of applicant | **:** | YYYY | **:** | YYYY | **:** | Changed/Not Changed |
|  | | Type | **:** | Tractor operated sprayer | **:** | Tractor operated sprayer | **:** | Changed/Not Changed |
|  | | Make | **:** | PQR | **:** | PQR | **:** | Changed/Not Changed |
|  | | Model | **:** | CH-10 | **:** | CH-10 | **:** | Changed/Not Changed |
|  | | Brand | **:** | MNC | **:** | MNC | **:** | Changed/Not Changed |
|  | | Serial No. | **:** | 170183 | **:** | 170183 | **:** | Changed/Not Changed |
|  | | Output capacity l/min | **:** | 35 to 50 | **:** | 35 to 50 | **:** | Changed/Not Changed |
|  | |  | **:** |  | **:** |  | **:** | Changed/Not Changed |
|  | | Year of manufacturer | **:** | 2021 | **:** | 2021 | **:** | Changed/Not Changed |
|  | | Recommended tractor  power, kW | **:** | 22 and above | **:** | 22 and above | **:** | Changed/Not Changed |
|  | | Country of Origin | **:** | India/other Country | **:** | India/other Country | **:** | Changed/Not Changed |
| **2** | | **Chemical Tank** |  |  |  |  |  | Changed/Not Changed |
|  | | Material | **:** | Plastic | **:** | Plastic | **:** | Changed/Not Changed |
|  | | Capacity, l | **:** | 500 |  | 500 | **:** | Changed/Not Changed |
|  | | Strainer at filing hole | **:** | Provided/Not provided | **:** | Provided/Not provided | **:** | Changed/Not Changed |
|  | | Provision of drain plug in tank | **:** | Provided/Not provided | **:** | Provided/Not provided | **:** | Changed/Not Changed |
|  | | Provision of hose reel | **:** | Provided/Not provided | **:** | Provided/Not provided | **:** | Changed/Not Changed |
| **3** | **Pump** | |  |  |  |  |  |  |
|  | Type | | **:** | Plunger type | **:** | Plunger type | **:** | Changed/Not Changed |
|  | Make & Model | | **:** | XYZ & QR | **:** | XYZ & QR | **:** | Changed/Not Changed |
|  | Year of manufacture | | **:** | 2021 | **:** | 2021 | **:** | Changed/Not Changed |
|  | Serial No. | | **:** | 1801720 | **:** | 1801720 | **:** | Changed/Not Changed |
|  | Recommended Pump Speed for spraying, rpm | | **:** | 900 | **:** | 900 | **:** | Changed/Not Changed |
|  | Suction volume, l/min | | **:** | 35 to 50 | **:** | 35 to 50 | **:** | Changed/Not Changed |
|  | Volumetric efficiency, % | | **:** | 85 | **:** | 85 | **:** | Changed/Not Changed |
|  | Rated pressure, kg/cm2 | | **:** | 38 | **:** | 38 | **:** | Changed/Not Changed |
|  | Pump discharge at rated pressure, l/min | | **:** | 40 | **:** | 40 | **:** | Changed/Not Changed |
|  | Working pressure, kg/cm 2 | | **:** | 36 to 45 | **:** | 36 to 45 | **:** | Changed/Not Changed |
|  | Pump discharge at working pressure, l/min | | **:** | 40 to 50 | **:** | 40 to 50 | **:** | Changed/Not Changed |
|  | Rated speed, rpm | | **:** | 900 | **:** | 900 | **:** | Changed/Not Changed |
|  | Maximum achievable  pressure, kg/cm2 | | **:** | 50 | **:** | 50 | **:** | Changed/Not Changed |
|  | Power requirement of pump, hp | | **:** | 4.0 | **:** | 4.0 | **:** | Changed/Not Changed |
|  | Plunger dia/stroke, mm | | **:** | 32/35 | **:** | 32/35 | **:** | Changed/Not Changed |
|  | Method of drive | | **:** | V belt & Pulley | **:** | V belt & Pulley | **:** | Changed/Not Changed |
|  | Pressure regulator | | **:** | Provided/Not provided | **:** | Provided/Not provided | **:** | Changed/Not Changed |
|  | Country of origin | | **:** | India | **:** | India | **:** | Changed/Not Changed |
| **4** | **Details of power transmission** | |  |  |  |  |  | Changed/Not Changed |
| **4.1** | **Type** | | **:** | Triangular M.S telescopic shaft having two universal joint. | **:** | Triangular M.S telescopic shaft having two universal joint. | **:** | Changed/Not Changed |
|  | Safety against over load PTO drive shaft and guard on shaft | | **:** | Provided/Not provided | **:** | Provided/Not provided | **:** | Changed/Not Changed |
|  | Guard on belt pulley drive | | **:** | Provided/Not provided | **:** | Provided/Not provided | **:** | Changed/Not Changed |
| **5** | **Spray Gun** | |  |  |  |  |  |  |
|  | Make | | **:** | ABCD | **:** | ABCD | **:** | Changed/Not Changed |
|  | **Discharge rate at 600 kpa pressure, l/min** | |  |  |  |  |  |  |
|  | -Jet spray pattern | | **:** | 10 | **:** | 10 | **:** | Changed/Not Changed |
|  | -Fine cone spray pattern | | **:** | 6 | **:** | 6 | **:** | Changed/Not Changed |
|  | Spray angle of gun | | **:** | 65 | **:** | 65 | **:** | Changed/Not Changed |
|  | Spray gun designation and marking | | **:** | Marked/Not marked | **:** | Marked/Not marked | **:** | Changed/Not Changed |
| **6** | **Spray Nozzle** | |  |  |  |  |  |  |
|  | Type | | **:** | Hollow cone | **:** | Hollow cone | **:** | Changed/Not Changed |
|  | **Discharge rate at 300 kpa pressure, l/min** | |  |  |  |  |  |  |
|  | -Jet spray pattern | | **:** | 7 | **:** | 7 | **:** | Changed/Not Changed |
|  | -Fine cone spray pattern | | **:** | 4 | **:** | 4 | **:** | Changed/Not Changed |
|  | Spray angle of nozzle | | **:** | 55 | **:** | 55 | **:** | Changed/Not Changed |
|  | Spray nozzle designation and marking | | **:** | Marked/Not marked | **:** | Marked/Not marked | **:** | Changed/Not Changed |
| **7** | **Agitating device** | | **:** | Provided/ Not provided | **:** | Provided/ Not provided | **:** | Changed/Not Changed |
| **8** | **Safety wear (For operator safety during operation)** | | **:** | Gloves, goggles, Mask, Ear protector, gum boot, apron & head cap | **:** | Gloves, goggles, Mask, Ear protector, gum boot, apron & head cap | **:** | Changed/Not Changed |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **9** | **Overall dimensions, mm** |  |  |  |  |  |  |
|  | Length (Without hose) | **:** | 1300 | **:** | 1300 | **:** | Changed/Not Changed |
|  | Width | **:** | 1450 | **:** | 1450 | **:** | Changed/Not Changed |
|  | Height | **:** | 1500 | **:** | 1500 | **:** | Changed/Not Changed |
|  | Hose length, m | **:** | 20 | **:** | 20 | **:** | Changed/Not Changed |
| **10** | **Total Mass (Without chemical)** | **:** | 250 | **:** | 250 | **:** | Changed/Not Changed |
| **11** | **Marking/Lebeling of machine** | **:** | The labeling plate should be riveted on the body of machine having name & address of manufacturer, country of origin, make, model, year of manufacture, serial number, type, size, required size of prime mover kW, | | | **:** | Changed/Not Changed |
| **12** | **MATERIAL USED FOR VARIOUS COMPONENTS** | | | | | | |

|  |  |  |
| --- | --- | --- |
| **Components** | **Materials (As per IS:11313-2007)** | **Used Material** |
| Pump cylinder | Brass, stainless steel | Brass |
| Pressure chamber | Brass, stainless steel | Stainless steel |
| Piston rod | Stainless steel | Not applicable |
| Piston or plunger | Gunmetal, stainless steel, plastics, Rubber, vegetable tanned leather, chrome tanned leather | Stainless steel |
| Spreader | Brass, stainless steel, plastics | Brass |
| Valve assembly | Brass, Stainless Steel, plastics | Stainless steel |
| Roller pump shaft | Stainless steel | Not applicable |
| Pump rollers | Nylon filled with lead | Not applicable |
| Pressure regulators | Brass, stainless steel | Stainless Steel |
| Suction strainer | Brass, stainless steel, plastics | Stainless steel |
| Strainer body | Brass, plastics | Plastic |
| Gasket | Rubber, PVC, Leather, fiber | PVC |
| Spray nozzles | Brass, stainless steel | Stainless Steel |
| Spray boom | Mild steel, Galvanized, iron Braided rubber | Not applicable |
| Hose | Synthetic rubber, P.V.C | PVC |
| Tank | Galvanized iron, Brass, Fiber glass reinforced plastics. | Plastic |
| Pipe for agitator | Galvanized iron, Brass, PVC | PVC |
| Piston (bucket) screw | Brass, stainless steel | Stainless Steel |
| Crank case | Aluminum alloy | Aluminum alloy |
| Roller pump body | Nickel resistant cast iron | Not applicable |
| Roller pump and plate | Nickel resistant cast iron | Not applicable |
| Roller pump rotor | Nickel resistant cast iron | Not applicable |
| Piston pump crank shaft | Carbon steel | Carbon steel |
| Pump inlet port end fitting | Brass | Brass |
| Piston rod guide | Brass, Aluminum alloy, Gunmetal, Nylon | Not applicable |
| Connecting rod | Carbon steel | Carbon Steel |
| Gudgeon pin | Carbon steel | Carbon steel |
| Big end bearing | Steel coated with tin base white metal | Steel coated with tin base white metal |
| Small end bush | Gunmetal | Gunmetal |

Place:

Date:

Signature------------------------------

Name of applicant-------------------

Designation---------------------------

Address--------------------------------