



SHANGHAI WALLIS TECHNOLOGY CO.,LTD

GENERAL INDUSTRY LIMITED

PVC/PVDC film for pharmaceutical

### Examination Report

|                                     |                            |               |  |             |  |   |            |  |  |
|-------------------------------------|----------------------------|---------------|--|-------------|--|---|------------|--|--|
| Commodity                           |                            | PVC/PVDC FILM |  | Dimensions  |  | 0.25/60g*140MM CLEAR                      |            |  |  |
| LOT. Number                         |                            | 250817        |  | Standard    |  | YBB00222005-2015                          |            |  |  |
| Date of MFG                         |                            | 2025.08.17    |  | Date of EXP |  | 2028.08.16                                |            |  |  |
| Test Item and Conclusion            |                            |               |  |             |  |   |            |  |  |
| Item                                |                            |               | Requirements   |             |  | Test Result                               | Conclusion |  |  |
| Appearance                          |                            |               | Free from colour difference, wrinkles, dirt, foreign particles, perforation, fisheye’s diameter      |             |  | Yes                                       | Qualified  |  |  |
| width                               |                            | ≥300          | ±2 mm  |             |  | -----                                     | Qualified  |  |  |
|                                     |                            | <300          | ±1 mm  |             |  | 140                                       | Qualified  |  |  |
| Thickness                           |                            |               | ±0.02mm  |             |  | 0.29                                      | Qualified  |  |  |
| Grammage                            |                            |               | 380-400g/m <sup>2</sup>  |             |  | 391                                       | Qualified  |  |  |
| Infrared spectroscopy (outsourcing) |                            |               | PVC and PVDC layers should be basically consistent with the control                                  |             |  | Yes                                       | Qualified  |  |  |
| Coating weight                      |                            |               | 60g/m <sup>2</sup> ±7%   |             |  | -1.8% +2.7%                               | Qualified  |  |  |
| Water Vapour Transmission           |                            |               | ≤0.6g/(m <sup>2</sup> ·24h)  |             |  | 0.4                                       | Qualified  |  |  |
| Oxygen Transmission                 |                            |               | ≤3cm <sup>3</sup> /(m <sup>2</sup> ·24h·0.1MPa)  |             |  | 1.1                                       | Qualified  |  |  |
| Tensile Strength                    |                            |               | TD:≥44MPa  |             |  | 58.5                                      | Qualified  |  |  |
|                                     |                            |               | MD:≥44MPa  |             |  | 56.7                                      | Qualified  |  |  |
| Falling Ball Impact Breakage Rate   |                            |               | TD:≤40%  |             |  | 0   | Qualified  |  |  |
|                                     |                            |               | MD:≤40%  |             |  | 0   | Qualified  |  |  |
| Heat Shrinking rate                 |                            |               | TD:≤±6.0%  |             |  | +0.8                                      | Qualified  |  |  |
|                                     |                            |               | MD: ≤±6.0%   |             |  | -1.7                                      | Qualified  |  |  |
| Heat Sealing Strength               |                            |               | ≥7.0 N/15mm  |             |  | 15.8                                      | Qualified  |  |  |
| Residual solvent                    |                            |               | The total amount shall not exceed 5mg/m <sup>2</sup> , and benzene and benzene shall not be detected |             |  | 1.1mg/m <sup>2</sup><br>Benzene not found | Qualified  |  |  |
| Vinyl Chloride Monomer              |                            |               | ≤0.0001%   |             |  | <0.0001%                                  | Qualified  |  |  |
| Vinylidene chloride monomer         |                            |               | ≤0.0003%   |             |  | <0.0003%                                  | Qualified  |  |  |
| Test of Extraction                  | Degree of Clear            |               | Ought to be clear  |             |  | Clear                                     | Qualified  |  |  |
|                                     | Easily Oxidized Substances |               | Difference of titrant consumed by test solution and blank solution should be ≤2.0 ml                 |             |  | 1.3                                       | Qualified  |  |  |
|                                     | Heavy Metal                |               | ≤0.0001%   |             |  | <0.0001%                                  | Qualified  |  |  |
|                                     | Non-Volatile substance     | Water         | ≤30mg/100ml  |             |  | 1.4                                       | Qualified  |  |  |
|                                     |                            | Ethanol       | ≤30mg/100ml  |             |  | 1.8                                       | Qualified  |  |  |
|                                     |                            | n-Hexane      | ≤30mg/100ml  |             |  | 1.5                                       | Qualified  |  |  |
| Barium                              |                            |               | Ought to be clear  |             |  | Yes                                       | Qualified  |  |  |
| Microbial Limit Test                | Bacteria                   |               | ≤1000/100cm <sup>2</sup>   |             |  | Not found                                 | Qualified  |  |  |
|                                     | Mold & Yeast               |               | ≤100/100cm <sup>2</sup>  |             |  | Not found                                 | Qualified  |  |  |
|                                     | E.Coli                     |               | Not allowed  |             |  | Not found                                 | Qualified  |  |  |
|                                     |                            |               |  |             |  |   |            |  |  |
| Approval                            |                            |               |  | Check       |  |   | Test       |  |  |