

Universal Packaging Company (Pvt) Ltd Certificate Of Analysis REC-QA-34-22 Effective Date 12.12.2022 Rev:0 Page 1 of 1

| Customer Name: | UNILEVER | Job Name: | WRPR SSK SHP BLACKSHNE 4ml |
|--------------------|------------|------------------|-------------------------------------|
| Job card #: | 23070144 | Structure: | PET (12μ) + MPET (12μ) + LDPE (40μ) |
| Dispatched Date: | 24-Jul-23 | Production Date: | 20-Jul-23 |
| Best Before: | 6 Months | Sampling Plan: | SOP-QA-11-19 |
| Dispatch Quantity: | 8636.10 Kg | Vehicle Number: | TMK-622 |
| | | | |

| S.NO | Parameters | Target | Min | Max | Test method | Unit | Results | | |
|------|--|--------|-------|-------|-------------|---------------|---------|--|--|
| | | | | | | | | | |
| 1 | Grammage | 75.46 | 69.59 | 81.33 | ISO 536 | g/m² | 77.6 | | |
| 2 | Reel Width | 1056 | 1055 | 1057 | Internal | mm | 1056 | | |
| 3 | Coef of Fr. Dynamic face\face | 0.25 | 0.2 | 0.3 | ASTM D1894 | Number | 0.26 | | |
| 4 | Coef of Fr. Dynamic Reverse\Reverse | 0.3 | 0.2 | 0.5 | ASTM D1894 | Number | 0.24 | | |
| 5 | Coef of Fr. Static face\face | 0.25 | 0.2 | 0.3 | ASTM D1894 | Number | 0.26 | | |
| 6 | Coef of Fr. Static Reverse\Metal | 0.25 | 0.15 | 0.3 | ASTM D1894 | Number | 0.27 | | |
| 7 | Lamination Strength Interface 1 | 0.3 | 0.15 | 0.45 | F 904-98 | N/15mm | 0.39 | | |
| 8 | Lamination Strength Interface 2 | 1.25 | 1.1 | 1.4 | F 904-98 | N/15mm | 1.35 | | |
| 9 | Repeat Length | 65 | 64 | 66 | Internal | mm | 65 | | |
| 10 | Seal Strength | 30 | 25 | 35 | ASTM F88 | N/15mm | 33 | | |
| 11 | Tensile Strength @ Break (CD) | 60 | 57 | - | ASTM D882 | N/mm² | 62 | | |
| 12 | Tensile Strength @ Break (MD) | 48 | 44 | - | ASTM D882 | N/mm² | 47 | | |
| 13 | Thickness | 68.9 | 63.21 | 74.59 | DIN 53370 | μ | 70 | | |
| 14 | Moisture Permeability | 0.61 | 0.41 | 0.81 | Undefined | g/m²/day | 0.489 | | |
| 15 | Oxygen Permeability | 1.5 | 1 | 2 | Undefined | ml/m²*day*bar | 0.915 | | |

Remarks: Storage condition, Temperature should be below 30°C & 50% humidity.

Note: System generated document signature donot required.

Universal Packaging Company(pvt) Ltd. Plot No : GA-65-66-A4-A5, Korangi Creek National Industrial park, Korangi Town Karachi, Pakistan