Issue date: 27 th July 2018 * Issue version: $1.4^{*}$ Owner: Bryan Gao

## Product Name: SEALs

Uses: Paint Protection Film for Cars

## Regulatory

| Regulatory | Value |
| :--- | :--- |
| Product Name | SEALs |
| Part \# | PPFO2 |
| Brand | HAS-PPF |
| Color | Clear |
| Anti-Yellowing | Great |
| Film Coating | Special Polyurethane |
| Self-Healing | In 5 minutes |
| Width | 152 cm |
| Length | 15 m |
| Product Form | Roll |
| Guarantee | 5 years will not turn yellow |

Physical Properties

| Physical Properties | Standard No. | Units | Value |
| :--- | :--- | :--- | :--- |
| Adhesive Material |  |  | Pressure Sensitive Adhesive |
| Adhesive Type |  |  | PSA |
| Backing Material |  |  | Paper |
| Liner Color |  |  | Clear |
| Base Film |  | Tm | TPU |
| Base Film Thickness |  | Celsius | BASF China |
| Base Film Supplier |  | Fhore A | 95 |
| Base Film Operating <br> Temperature Range | ASTM D2240 to +120 |  |  |
| Base Film Hardness | ASTM D412 | MPa | $\mathbf{4 0}$ |
| Base Film Tensile Stress | \% | $\mathbf{3 6 0}$ |  |
| Base Film Elongation At Break | ASTM D412 | KN/m | $\mathbf{7 0}$ |
| Base Film Tear Resistance | ASTM D624 | $\%$ | 90 |
| Base Film Transparency | ASTM D2457 | (B) |  |
| Base Film Glossiness | ASTM D1003 | $\mathbf{9 2}$ at Angle 20 Degree |  |
|  |  |  |  |

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