Effective Date: March 25, 2019

Thermal Transfer Printable Self-Laminating Translucent Vinyl Tape (Vinyl Self-Laminating Overwrap/ Cable Wrap)

PRODUCT SPECIFICATIONS:

Description:

| Print Technology | Thermal Transfer |
|-------------------------------------|--|
| Material Type | Translucent vinyl |
| Adhesive | Acrylic |
| Standard Colors | Translucent film with white printable area |
| Finish | Self-laminated format |
| Service Temperature Range | -40°C to 90°C |
| Recommended Application Temperature | 5°C to 35°C |
| Storage Condition | From -10°C to 40°C and from 30% to 80% Relative Humidity |

Thickness (mm)

| | Transparent |
|-----------------|-------------|
| Substrate | 0.050 |
| (Colored layer) | (0.010) |
| Adhesive | 0.015 |
| Liner | 0.087 |
| Total | 0.172 |

APPLICATIONS

Wire and cable identification

REGULATORY/AGENCY APPROVALS

UL/ cUL: Epson Vinyl Self-Laminating label is compliant to UL969 for Indoor use. You may refer to details on www.ul.com under file MH49716, Vol 1.

RoHS: Epson Translucent Vinyl Tape (Self-laminating cable wrap tape) is compliant to RoHS Standards to Directive (2011/65/ EU) and (Annex II (EU) 2015/863) established on June 8, 2011.

Target model

| SKU | Ink color/tape color | |
|--------------------|-----------------------------|--|
| 224VSLPX, 236VSLPX | Black on White/ Transparent | |

PROPERTIES

| Properti | es | Test method | Average result |
|---------------------------|------------|--|--------------------------------------|
| <u>Adhesive</u> | | | |
| Adhesion to | Time | | |
| Stainless Steel | 20 min. | Compliance to JIS (Japanese | 17.47 N/25mm |
| | 96 hours | Industrial Standards) Z 0237(2000), | 27.91 N/25mm |
| Polypropylene | 20 min. | pressure-sensitive adhesive tapes | 6.72 N/25mm |
| | 96 hours | and sheets testing. | 8.86 N/25mm |
| Glass | 20 min. | Peeling angle 180 degrees / peeling | 10.76 N/25mm |
| | 96 hours | speed 300mm/min | 11.16 N/25mm |
| Vinyl chloride | 20 min. | | 16.21 N/25mm |
| | 96 hours | | 15.87 N/25mm |
| Acrylic | 20 min. | | 10.42 N/25mm |
| | 96 hours | | 13.69 N/25mm |
| <u> Shear / Displacem</u> | <u>ent</u> | Putting on glass plate (adhesion area | 53,906 sec. |
| | | is 12 x 20 mm), then load 1kg to the | |
| | | label for 1 hour | |
| <u>Tack</u> | | Probe tack test with dia. 5mm probe | 5.3 N |
| UV Light resistand | <u>ce</u> | Putting on stainless plate, then | No visible effect, such as peeling |
| | | irradiance 40W/m², B.P.T 63 degrees | / cracking / discoloration / printed |
| | | C and 50% RH, for 390 hours in | text removing. |
| | | Super Xenon Weather Meter (Suga | |
| | | SX75) | |
| <u>Weatherability</u> | | Repeat below 1 to 4 for 55 hours / 110 | No visible effect, such as peeling |
| | | hours. | / cracking / discoloration / printed |
| | | 1. Irradiation for 10 hours | text removing. |
| | | 1.24kW/m² irradiance, B.P.T 63 | |
| | | degrees C and 50% RH | |
| | | 2. Spray plain water for 1 minute | |
| | | 3. Dark and condensation for 1 hour | |
| | | 4. Spray plain water for 1 minute | |
| | | 55 hours / 110 hours acceleration test | |
| | | equals to 1 year / 2 years of | |
| | | environment of Japan in metaling | |
| | | weather meter machine (SUGA M6T). | |
| Abrasion Resistance | | 50 cycles on 500gf pressure by | No visible effect, such as printed |
| | | Japanese 10 Yen coin | text removing |
| | | 50 cycles on 2kgf pressure by plastic | |
| | | eraser. | |

CHEMICAL/ SOLVENT RESISTANCE

| Chemical reagents | Test method | Results |
|----------------------------|--|-----------|
| Trichloroethane | Paste the labels on glass rods of Φ3mm | Failed |
| Sodium Hypochlorite | × 100mm, then sink in each chemical / | No Effect |
| Ammonia (10%) | solvent for 10 minutes. After that leave for | No Effect |
| Sulfuric Acid (10%) | 30 minutes. Repeat 5 sets. | No Effect |
| Hydrogen Chloride (30%) | | No Effect |
| Salt Water (5%) | | No Effect |
| Acetic Acid | | No Effect |
| Sodium Hydroxide (50%) | | No Effect |
| Terpene Cleaner | | No Effect |
| Fomula409 (Cleaner) | | No Effect |
| MIL-H-5606 Oil | | No Effect |
| Mil 7808 Oil | | No Effect |
| Brake Cleaner | | No Effect |
| Fluid type rust preventive | | No Effect |
| Brake Fluid DOT4 | | No Effect |
| Engine Oil | | No Effect |
| Cleaning Solvent | | No Effect |
| Acetone | | Failed |
| Isopropyl Alcohol | | No Effect |
| Ethanol | | No Effect |
| Gasoline | | No Effect |
| Jet fuel (JP-8) | | No Effect |
| Toluene | | Failed |
| Hexane | | No Effect |
| Heptane | | No Effect |
| Water | | No Effect |
| Mineral Spirit | | No Effect |
| Methanol | | No Effect |
| Ethyl Methyl Ketone | | Failed |
| Ethyl Acetate | | Failed |

Note:

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Product availability may vary by country. Please refer to your local Epson office for full details.

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