**High Tack**

**Pressure Sensitive Adhesive (PSA)**

**PRODUCT DESCRIPTION**

The Tru-BondTM PSA 2500 High Tack Pressure Sensitive Adhesive (PSA) is a one-part, solventless liquid that cures to a tacky adhesive when exposed to UV/Visible light. This PSA can be cured directly through clear or translucent surfaces or cured first prior to assembly. The curing first method allows for the joining of parts at some future point. This product can bond a wide range of substrates including PE, PP, PET, TPU and most plastics, metals, glass, and ceramics. It can be sprayed, roll coated, bead or brush applied, screen printed or used in a flexographic printing process.

**PRODUCT CHARACTERISTICS TYPICAL PROPERTIES OF CURED MATERIALS**

**TYPICAL PROPERTIES OF UNCURED MATERIAL**

Color. Optically Clear

Water absorption, ASTM D570 (24 hrs.), % 1.5

|  |  |
| --- | --- |
| Chemical Class | Acrylic |
| Appearance(uncured) | Clear liquid |
| Components | Single-requires no mixing |
| Viscosity | Low |

Boiling Water, ASTM D570 (2 hrs.), % 1.4

Shore hardness <000 61

Temperature Range 0F (0C) -40-200 (-40-93)

**RoHS and REACH Compliant**

|  |  |  |
| --- | --- | --- |
| Specific gravity@25 oC | | 1.03 |
| Viscosity@25 oC, Brookfield RV  Spindle 2, 10 rpm, cP | | 2,500 |
| Flashpoint, oF(oC) |  | >212(100) |
| Non-Volatile Materials, % | | >99 |
| VOC, % |  | <1 |
| Shelf life, months |  | 24 |
| Solubility | ketones, oxygenated solvents | |



Rev03, Oct 2016

**UV/Visible Light Cure Adhesive**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Process**  **Latitude of 180 Degree Peel**-PET film 300mm\*25mm\*0.075mm; SS304 100mm\*25mm\*1mm apply the adhesive on the PET film first, cure, assemble the PET film on the 304 SS, and then  **Tru-Bond UV** roll with weight (2 Kg). Dwell 7 days.  **PSA** | | | | | | | | |
| **PSA 2500 High Tack** | **Dose with Fusion D bulb at 100 mW/cm2** | | | | | | | |
| **500**  **mJ/cm2** | **750**  **mJ/cm2** | **1000**  **mJ/cm2** | **1250**  **mJ/cm2** | **1500**  **mJ/cm2** | **1750**  **mJ/cm2** | **2000**  **mJ/cm2** | **2500**  **mJ/cm2** |
| **Nominal Film Thickness** | **Lineal Peel Strength** | | | | | | | |
|  | **lbs/inch N/25mm** | **lbs/inch N/25mm** | **lbs/inch N/25mm** | **lbs/inch N/25mm** | **lbs/inch N/25mm** | **lbs/inch N/25mm** | **lbs/inch N/25mm** | **lbs/inch N/25mm** |
| **0.5 mil (12.5µm)** | 2  9 | 2  9 | 2  9 | 2  9 | 2  9 | 2  9 | 2  9 | 2  9 |
| **1.0 mil (25µm)** | 6  26 | 6  26 | 6  26 | 6  26 | 6  26 | 6  26 | 5  22 | 5  22 |
| **2.0 mil (50µm)** | 4  17 | 6  26 | 7  30 | 8  34 | 8  34 | 8  34 | 8  34 | 8  34 |
| **3.0 mil (75µm)** | 4  17 | 5  22 | 6  26 | 7  30 | 7  30 | 7  30 | 7  30 | 7  30 |
| **5.0 mil (125 µm)** | 2  9 | 4  17 | 7  30 | 7  30 | 8  34 | 7  30 | 7  30 | 7  30 |

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Strength Development of Tru-Bond UV PSA 2500**  ASTM D330 modified 0.05mm aluminum film to Stainless Steel,  2 mil (0.0.50mm) adhesive film thickness. 1500 mJ/cm2 Dosage with Metal Halide lamp at 50 mW/cm2 | | | | | | | | | |
| 15 min. room temp.  90o Peel | | 72 hr. room  Temp. 90o  Peel | | 72 hr. Dwell 158oF (70oC)  90o Peel | | 72 hr. Room Temp. Dwell  180o Peel | | 7 Day Dwell  90o Peel | |
| lbs./inch | N/25mm | lbs./inch | N/25mm | lbs./inch | N/25mm | lbs./inch | N/25mm | lbs./inch | N/25mm |
| 5.6 | 24.9 | 7.2 | 32 | 8 | 35.6 | 10.4 | 46.3 | 9.7 | 43.1 |

**CONVERSIONS**

# (°C x 1.8) + 32 = °F

kV/mm x 25.4 = V/mil

# mm / 25.4 = inches

**STORAGE**

Store the unopened product in a cool, dry, well ventilated location away from sources of heat. Optimal storage temperatures should range between

μm / 25.4 = mil **10 oC (50 oF) and 32 oC (90 oF). Do not expose the**

# N x 0.225 = lb N/mm x 5.71 = lb/in N/mm² x 145 = psi MPa x 145 = psi N·m x 8.851 = lb·in N·m x 0.738 = lb·ft

N·mm x 0.142 = oz·in mPa·s = cP

**WARRANTY**

ITW will replace any material found to be defective. Because the storage, handling and application of this material are beyond our control, we can accept no liability for the results obtained.

**product to light.** It may polymerize upon prolonged exposure to ambient or artificial light.

**NOTE**

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For technical assistance, please call:

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| --- | --- |
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