

# Technical Data Sheet

## High Performance SilverTape® Transparent Industrial Series VST 3050 - Clear

### **Application** *VST 3050*

Clear SilverTape® is a double sided high performance acrylic based adhesive tape, which is especially designed for the bonding of high and medium energy surfaces as well as glass and various transparent plastics where a highly transparent bond is required and no stress corrosion may occur. These tapes conform to various substrate surfaces and absorb the differing thermal expansions of the two different materials. These tapes maintain high impact resistance even at temperatures below 32 F° (0 °C). Due to this conformability they are capable of bonding a variety of different thin and structured materials full surface and tension free. Always be sure to avoid stress and tension on the bond during application. Additional advantages of the 5305 series include vibration dampening, very good sealing properties, very good resistance to weathering, aging, yellowing (UV influence), chemicals, plasticizers, and excellent long term stability. Some examples of applications are attaching light box / neon advertisements and signs, strip lighting assemblies etc.

### **General Information**

#### *VST 3050*

Industrial clear series tape has a closed cell structure which is wind and water resistant. Because they are 100% acrylic based, they will form an almost indestructible bond between the materials. This family is resistant to UV, aging, softening agents and solvents (good plasticizer resistance). These tapes bond immediately and offer extreme resistance to the peel and shear loads that can affect a bond. These tapes are very well suited to absorb dynamic loads as they are viscoelastic, they can act as a sealant, form a permanent tension free bond, and are suitable to bond many different types of synthetic materials.

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High Performance SilverTape®  
Transparent Industrial Series  
VST 3050 - Clear

## Structure

Tape type:	<b>3050</b>
Adhesive:	High Performance Acrylic
Adhesive carrier:	Conformable Closed Cell Acrylic Foam
Description:	Transparent
Coating:	Clear (liner side) Clear (open side)
Thickness: inch (mm)	0.02 (0,50)
Tolerance: inch (mm)	+ 0.004 (0,1)
Density: lb/ft <sup>3</sup> (kg/m <sup>3</sup> )	56 (900)
Tape Color:	Transparent Transparent Transparent Transparent
Liner:	Red PE film (paper liner is optional)

## Structure

Tape type:	<b>3050</b>
Peel Adhesion: lb/in (N/100mm) (ASTM D 3330)	17 (300)
Normal Tensile: lb/in <sup>2</sup> (kPa) (ASTM 897)	99 (680)
Dynamic Shear: lb/in <sup>2</sup> (kPa 20min) Overlap (ASTM 1002)	88 (610)
Static Shear: lb/in <sup>2</sup> (kPa) (ASTM 3654)	78 (540)
Solvent Resistance:	Excellent
UV Resistance:	Excellent
Temperature Resistance	
Long term: F° (°C)	212 (100)
Short term: F° (°C)	320 (160)

## Available Sizes

Standard Length: yards (meter)	36 (33,0)
Maximum Length: yards (meter)	72 (66,0)
Core Diameter: inch (mm)	3 (75,0)
Width Tolerance: inch (mm)	+ 0.016 (0,4)

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### Manual Production

Every good bond starts with good preparation. This preparation consists of several steps, such as cleaning, use of a primer and the right working area. Please ensure that your workshop area is in a dust free environment and has a minimum room temperature of 59 F° (15 °Celsius).

### Cleaning

Before you begin, always check that the materials you want to bond to are clean and dry. If they are highly contaminated with oil or grease, clean them with an industrial cleaner or a heptanes solution. Even when the surface is clean, use a 100% Isopropanol solution cleaner. Ensure that you wipe the surface in just one direction, so that the dirt is wiped off. If you do not do this, you will always leave some dust or dirt on the substrate.

### Quality

The quality of the bond also depends largely on the contact that the two surfaces make with each other. Due to its viscoelasticity, the tape is able to flow into the microscopic pores of the materials. However, if there is a big surface mismatch or if the materials are not pressed together the bond will reach its end strength more slowly, or not at all. Therefore, we advise you to put pressure on the bond of at least 15psi to allow the tape to make the strongest bond between the two materials.

### Maximum Bond

The end strength will be reached much faster if you use a primer. This enables the tape to reach its end bond within 5 - 20 minutes instead of taking 72 hours. If you have any questions regarding the primer, the manual or the mechanical application, please contact our technical sales team.

### Storage & Shelf life Important Information

Please make sure that the tape is stored in its original packaging, in a dry place and at a temperature of preferably between 39 F° and 100 F° (4 °C and 38 °Celsius). When the tape is stored under the right conditions, it has a shelf life of 18 months.

All technical data in this product data sheet is based on our own experience and independent test labs. These values are representative and cannot automatically be used for your own specific application. You will need to test whether the tape is suitable for your application or project first. We must point out that you need to follow the rules and regulations that are applicable in the state, county or country that you are using our product in. If you have any questions regarding the use of our acrylic foam tape, please contact our technical service or technical sales team. For questions on the warranty, we refer to our delivery terms and conditions, or another warranty document should be agreed on in writing between us and the customer.