

## Technical Data Sheet

### BlueGrip™ S2-F Workholding Adhesive

#### Product Description

Blue Photon's BlueGrip S2-F is an ultraviolet (UV) curable workholding adhesive designed for bonding and fixturing. The gel like consistency of BlueGrip S2-F allows the formation of thick bondlines for bonding of widely spaced or uneven workpieces. BlueGrip S2-F is designed especially for use with the Blue Photon workholding system. BlueGrip S2-F fluoresces under 365 nm UV light allowing for visual or automated detection of material on a part or assembly.

#### Typical Applications

Typical applications for BlueGrip S2-F include bonding of metal, ceramic and other materials to a Blue Photon gripper attached to a workholding fixture.

#### Instructions for Use

For best performance, surfaces should be free of dirt and grease. Apply enough of the BlueGrip S2-F to the gripper face to completely fill the gap between the gripper and the workpiece, then load the workpiece in the fixture as needed and expose to an appropriate UV light source through the gripper. BlueGrip S2-F cures in 120 seconds. The exception to this is when Blue Photon's right angle adapter is utilized, in which case the recommended cure time is 150 seconds. For curing thick sections, emission sources in the longer UV wavelengths (around 380 nm) are preferred. Adhesive can be thermally cured at 130°C for 45-60 minutes. Allow adhesive to cool at room temperature before use with UV light.

#### Technical Features

Chemical Type ..... Acrylic  
Appearance ..... Translucent White  
Fluoresces at 365 nm..... Yes  
Glass Transition (*by DSC*) ..... 65°C  
Viscosity @ 25°C ..... ~275,000 cps  
Specific Gravity ..... 1.07

#### Performance of Cured Material

Depth of cure when using UV light..... .020-.125"  
Maximum Gap Fill ..... .125"  
Block Shear ..... >2400 psi  
(*Modified ISO13445, 0.25 in<sup>2</sup> steel block to glass plate*)  
Temperature Range ..... 32°F to 150°F

#### Packaging

30 cc Amber Syringe  
1L Amber Cartridge  
40 lb Pail  
Others Available

#### General Information

##### Safe Handling and Storage

Store BlueGrip S2-F in its original container in a cool, dry location. Avoid prolonged exposure to light.

##### Shelf Life

9 months from date of manufacture.

##### Note

This data is furnished for information only and is believed to be reliable. We cannot assume responsibility for the results obtained by others over whose methods we have no control. It is recommended that the product be tested in the application for which it is to be used.

*For assistance and recommendations on specifications for this product, contact Blue Photon at [sales@bluephoton.com](mailto:sales@bluephoton.com).*

©2021 Blue Photon Technology & Workholding Systems LLC. All Rights Reserved. Blue Photon Technology & Workholding Systems LLC assumes no responsibility for any errors or omissions in this document. This document is for reference only and actual application will vary according to the application. Blue Photon has made every effort to ensure the accuracy of the product information in this document; however, we are not responsible for typographical discrepancies. Actual products may vary from those shown in photos. Refer to our website for current product and safety information. BP-TDS-S2-F 10469 03.19.21