

#### DESCRIPTION

ADSEAL DWSP 1940 SERIES is a one-part paintable, high modulus, all purpose sealant based on hybrid polymer. It exhibits outstanding adhesion and excellent storage stability. It can be used in industrial and construction applications.

ADSEAL DWSP 1940 SERIES cures at room temperature in the presence of moisture to form a permanently flexible product.

ADSEAL DWSP 1940 SERIES adheres to glass, most types of wood, clean metals, fibreglass, ceramics, and many painted surfaces (Validate with your representative) or certain plastics. Additionally, it adheres well on masonry. The use of a primer might be necessary. Always perform an adhesion test before starting work. ADSEAL DWSP 1940 SERIES will not crack, degrade, lose volume, or change consistency if used within the parameters listed in the physical properties section.

Due to its curing system in contact with moisture, the depth of the bead should not exceed 13 mm (1/2 "), otherwise the sealant cannot cure completely. It is recommended to respect a 2:1 ratio (width / depth) bead as possible. For applications with a bead depth of more than 13 mm, we recommend a two components silicone. The minimum size of a movement or a waterproofing joint should be 1/4" x 1/4".

Although ADSEAL DWSP SERIES 1940 is dry after 24 hours (for a 1/8 " [3.2mm] open bead), ADFAST requires that the product cure completely for 28 days at 23 °C (73 °F) 50% R.H. when used in food processing plants or in clean rooms (indirect contact).

# **SPECIAL FEATURES**

- No shrinkage
- Solvent free
- Isocyanate free
- Phthalate free
- Odorless
- No dibutyl tin compound
- Easy to apply from -17°C à 40°C (1°F to 104°F)
- Stable at temperature from -40°C à 100°C (-40°F to 212 °F)
- Fast curing
- Highly elastic after curing
- Non-corrosive
- Paintable (due to the wide variety of paint, always proceed with an adhesion test before the start of work)
- Excellent UV resistance and very good aging properties
- Suitable for adhesion to many different surfaces, even without primer
- Weatherable and highly resistant to media such as mineral oils, solvents, acids, and alkalis

# **SPECIFICATION**

- Meets ASTM C920, S, NS, Class 50 (excluding clear and translucent), Use NT, A, G, M, O
- ECOLOGO UL2761
- Complies with FDA 21CFR177.2600 (indirect contact / open joint)





### **LIMITATIONS**

- Not designed for permanent immersion joints
- Not designed for indoor applications
- Where the sealant is encapsulated and does not have access to ambient humidity
- In contact with strongly acidic or alkaline products
- Not designed for sealing horizontal traffic joints
- Not recommended for joint less than 1/4 " or 6 mm. (width and depth)
- When the ADSEAL DWSP 1940 series is painted, it is possible that the paint will crack if the sealant has a higher elasticity than the paint

# **PHYSICAL PROPERTIES**

Uncured @ 23°C (73°F) 50% R.H				
Tests	Standards	Unit	Results	
Appearance			Paste	
Color			Various (special colors on	
			order)	
Density	ASTM D1475	g/ml	1.22	
V.O.C. (SCAQMD Method)	SCAQMD	g/L (%)	15.8 (1.28)	
Extrusion rate (50 psi/diameter 5mm) – colors	ASTM C1183	gr/min.	50 – 200	
Tack free time	ASTM C679	Minutes	40	
Shelf Life		Mois	24	

Cured 21 days @ 23°C (73°F) / 50% R.H.)				
Tests	Standards	Units	Results	
Hardness (shore A)	ASTM D2240	Points	43	
Tensile Strength at 100% Elongation	ASTM D412	PSI	83	
Elongation at Break	ASTM D412	%	890	
Maximum Tensile Strength	ASTM D412	PSI	346	
Movement Capability	ASTM C719	± %	50	
Lap Shear Strength(wood)	ASTM C961	PSI	21	
Lap Shear Strength (aluminum)	ASTM C961	PSI	103	

# **APPLICATION**

# Construction

- Exterior
- Sealing joints between a wide variety of materials, such as wood, glass, metals, certain plastics, or mineral based substrates
- Doors, windows, and siding (perimeter joints)
- Expansion joints

# **Industrial**

- HVAC cabinet
- Transport vehicle
- Refrigerated counter
- Cold room
- Clean room



#### SURFACE PREPARATION

Surfaces must be free of dust, grease, frost, or any other contaminant. Clean surfaces with ADSEAL CLEANER 6003. Allow to evaporate for 20 minutes before applying ADSEAL DWSP 1940 SERIES. For porous surfaces, mechanical cleaning may be necessary during repair work. In some cases, ADSEAL DWSP 1940 SERIES may require the use of a primer. If this is the case, use ADSEAL PRIMER. For the complete procedure and the type of primer to use, consult our <u>ADSEAL PRIMER Guide</u>. The use of ADSEAL BACKER ROD is recommended for a movement joint. If there is insufficient space for the use of backer rod, we strongly suggest the use of non-stick tape.

# **METHOD OF USE**

ADSEAL DWSP 1940 SERIES is easy to apply with conventional manual, pneumatic or electric caulking equipment. Shape the sealant bead with the ADSEAL TOOLING KIT before skin formation. In order, to facilitate the work, the shaping can be done with a solution of 5% clear dish soap and 95% water. Dip the ADSEAL TOOLING KIT into the solution. Avoid applying solution directly to the sealant. The use of this solution may reduce sealant adhesion if used in an abusive manner. Uncured sealant can be clean with a solvent such as mineral spirit. Cured adhesive can only be removed mechanically. For more details consult the technical document: Application Procedure for Sealant Movement and Waterproofing Joint

# **TEMPERATURE APPLICATION**

Sealants from the ADSEAL product line can be applied throughout the year, even in winter, unlike organic sealants such as polyurethanes, thermoplastics or any solvent-based adhesives or sealants. Never apply sealant in weather conditions where condensation or precipitation exists such as rainfall, freezing rain, snow, or intense fog. Make sure the surface is free of frost. The temperature of the sealant must be the same as the substrates. Avoid applying a warm sealant to a cold surface. The lower the temperature, the longer the sealant will take to cure.

\*\*\* Cure of the sealant occurs from the surface down and if the joint is moving during cure, due to large fluctuations in ambient temperature, there will be expansion and contraction of the material creating a risk of cracking or wrinkling / swelling at the surface of the joint.

To reduce this impact, it is recommended to:

- Use an open cell polyurethane backer rod to accelerate the curing of the sealant.
- Install the sealant at the average daily temperature to reduce daily movement.
- Ensure that the joint depth does not exceed a ratio of 2:1 or 12 mm (1/2") maximum.
- The use of a primer can accelerates the development of the adhesion. Although not necessarily recommended, this step can help establish the success of the project if there is excessive movement of the joint during cure.

### **PACKAGING**

- 304 ml cartridge
- 600 ml sausage
- Pail
- Drum



#### **STORAGE**

Store the sealant in closed original packaging. Store in dry premises at a temperature between 8°C (46°F) and 25°C (77°F). High humidity and storage below or above these temperatures will shorten shelf life. Expiration date is indicated on each container. Storage beyond the date specified on the container does not necessarily mean that the product is no longer usable. In this case however, the properties required for the intended use must be checked for quality insurance reasons. Contact our technical service.

# **CAUTION**

Always consult SDS (Safety Data Sheet) before using the adhesive. Apply usual hygienic rules. Always test the product on your application before use. For industrial use only. For more information, please contact your technical representative.

# **IMPORTANT**

# **READ CAREFULLY**

The information and recommendations contained herein are derived from our research and information from other reliable sources. This data applies only to our products and not when used with other products. We believe in the reliability of our information. However, no guarantee is offered to that effect. It is the responsibility of the buyer to verify this data according to their own operating conditions to ensure that they conform to the purpose for which the product is intended, even before using it.

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