

# **ADSEAL STRUCTURAL 4940HV SERIES**

STRUCTURAL NEUTRAL CURE SILICONE SEALANT

### DESCRIPTION

ADSEAL STRUCTURAL 4940HV SERIES is a one-component sealant/adhesive that vulcanizes as durable, elastic rubber silicone in contact with ambient humidity. Due to its rheological and non-sagging characteristics, it can be applied above the head, over the joints and on surfaces of vertical and horizontal walls. ADSEAL STRUCTURAL SERIES 4940HV SERIES can be used in various industrial applications including the bonding of aluminum panels on trailers frame. ADSEAL STRUCTURAL 4940HV SERIES adheres very well to aluminum (with chemical abrasion or anodized) as well as to various metals including clean steel, galvanized steel and stainless steel as well as certain plastics.

ADSEAL STRUCTURAL 4940HV SERIES CAN NOT BE PAINTED.

ADSEAL STRUCTURAL 4940HV SERIES does not give off any unpleasant odor during vulcanization and will not oxidize the metal. (Discoloration of copper-based metals may occur when sealed tightly). Due to its vulcanization system in contact with moisture, the **depth / thickness** of the sealant joint should not exceed 1/2" (13mm), otherwise the sealant cannot vulcanize completely. For applications with a sealant joint depth of more than 1/2" (13mm), we recommend a two component silicone. Minimum structural joints size should be 1/4" x 1/4" (6mm x 6mm).

### LIMITATIONS

- Structural adhesion to bare metal or surfaces subject to corrosion.
- Structural adhesion where silicone is encapsulated and does not have access to ambient humidity
- In continual contact with water or in immersion.
- In contact with strongly acidic or basic products.
- Joint less than 1/4 "(6 mm) wide and deep
- When ambient and substrates temperature are below 41°F (5°C) or above 122°F (50°C)

## **PHYSICAL PROPERTIES**

Uncured (73°F / 23°C - 50% r.h.)	
Appearence	Pasty
Color	Black (4943HV)
	Anodized aluminum (4948HV)
Density	1.316 g/ml
V.O.C.	51 g/L
Extrusion rate (30 psi/diamètre 5mm)	37 g/min
Tack free time (ASTM C679)	4 minutes
Rheological properties (ASTM C639)	
4 hours at 37°F (3°C)	0%
4 hours at 122°F (50°C)	0%



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Cured (73°F / 23°C - 50% r.h.)	
Hardness (ASTM C661)	47 (shore A)
Peel strength (ASTM C794)	
Etched aluminum	30 pli
Galvanised steel	26 pli
Lap shear strength (ASTM D1002)	
Aluminum (chemical etching)	133 psi
Galvanised steel	140 psi
Heat resistance	392°F (200°C)

## APPLICATION

- Bonding aluminum panels on trailer frame or truck boxes
- Structural bonding
- Bonding requiring good initial grip

## SURFACE PREPARATION

Surfaces must be free of dust, grease, frost or other contaminants. Clean the surfaces with the ADSEAL CLEANER 6003 using the two rags method. This method consists of washing with the first cloth moistened with cleaning agent and then wiping with the second dry, clean cloth before the solvent is evaporated. Change cloths regularly to avoid accumulation of dirt. Avoid soaking a soiled cloth in the clean solvent to avoid contaminating it. Choose white rags that do not keep dust and do not leave lint on substrates. Be sure to clean all surfaces where the ADSEAL STRUCTURAL 4940HV SERIES will be applied. Allow to evaporate for 20 minutes before application of the ADSEAL STRUCTURAL 4940HV SERIES. Sealant should be applied within one hour of cleaning to avoid contamination of surfaces. If the application is made after more than one hour, repeat the cleaning. Avoid using detergents or other cleaning agents not specified by ADFAST. In some cases the ADSEAL STRUCTURAL 4940HV SERIES may require the use of a primer. If this is the case, use the ADSEAL PRIMER MK60095. Consult our technical department for more information.

#### **METHOD OF USE**

ADSEAL STRUCTURAL 4940 SERIES should be applied in a continuous operation with a conventional manual, electric or pneumatic applicator (do not exceed 45 psi for a cartridge). Bonding should be done before skin formation. Uncured adhesive can be clean with a solvent such as mineral spirit. Cured adhesive can be removed mechanically. Bead surface contact should be at least 1/4". Adhesive and substrates should be at the same temperature.



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### PACKAGING

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

## STORAGE

Store the sealant in closed original packaging. Store in dry premises at a temperature lower than 25°C (77°F). Expiration date is indicate 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 Safety Data Sheet (SDS) before using the product. 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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