

# ADSEAL HT 4706-3 ACETOXY HIGH TEMPERATURE SILICONE SEALANT

# **DESCRIPTION**

ADSEAL HT 4706-3 is a silicone-based adhesive sealant that withstands high temperatures. It hardens to a solid rubber when exposed to ambient humidity. ADSEAL HT 4706-3 is resistant to temperatures ranging from -65°C (-85°F) to 260°C (500°F) in continuous periods and up to 315°C (600°F) in intermittent periods. ADSEAL HT 4706-3 can be used to seal heating elements or industrial ovens. It can also be used as a sealants or as electrical insulation.

# ADSEAL HT 4706-3 CAN NOT BE PAINTED.

ADSEAL HT 4706-3 offers excellent weather resistance to vibration and ozone. It adheres very well to glass, aluminum, most painted metals, most types of wood. Ceramics as well as synthetic and natural fibers. For plastic substrates we recommend the use of the ADSEAL neutral cure silicones . ADSEAL HT 4706-3 can corrode metal surfaces as well as not adhere well to copper, brass, magnesium, zinc or galvanized steel (as well as all their alloys). Because of its vulcanization system in contact with moisture, the depth of the bead must not exceed 13 mm (1/2) otherwise the sealant will not be able to completely cure.

# **SPECIFICATIONS**

- Meets CAN / CGSB standards 19.13-M82
- Meets ASTM C920, type S, NS grade, class 25, use NT, G, A, O.

### **LIMITATIONS**

- Not designed for permanent immersion joints
- Where the sealant is encapsulated and does not have access to ambient humidity
- In contact with strongly acidic or alkaline products
- Not designed for horizontal seals with circulation
- Movement joint less than 1/4 "(6 mm) wide and deep
- Not designed for use on plastics applications (use a neutral cure silicone)

#### PHYSICAL PROPERTIES

Uncured	
Appearence	Pasty
Color	red
Density	1.1 – 1.2 g/ml
V.O.C.	49.36 g/L
Extrusion rate (30 psi/diamètre 5mm)	75 – 175 g/min.
Tack free time (ASTM C679)	12 – 30 minutes at 23°C (73°F) 50% r.h.
Rheological properties (ASTM C639)	No sagging



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Cured	
Hardness (shore A) (ASTM D2240)	32
Elongation at break (ASTM D412)	500%
Maximum Tensile strength	375 psi
Brittle point	-60°C (-76°F)
Dielectric stength	20 kv / mm
Dielectric constant	2.8 @ 60 hz
Dispersion factor	0.001 @ 60 Hz

#### **APPLICATION**

- Assembly
- Sealing
- Encapsulation
- Chimney
- Oven
- Fireplace

#### SURFACE PREPARATION

Surface must be free of dust, oil, grease, frost or any other contaminant. On porous surface, first use mechanical tool such as grinder to remove old sealant or any other contaminant. Use ADSEAL CLEANER 6003 to clean all surfaces. Let it evaporate 20 minutes before sealant application. Ensure that the backer rod ADSEAL BR-2600 is friction fitted properly and ADSEAL PRIMER MK60095 have been applied if necessary. When using ADSEAL PRIMER MK60095, let the primer evaporate for 20 minutes prior to ADSEAL HT 4706-3 application.

# **METHOD OF USE**

ADSEAL HT 4706-3 is easy to apply with a conventional manual, electric or pneumatic applicator (do not exceed 45 psi for a cartridge). 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. Bead surface contact should be at least 1/4".

#### **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 silicone sealant must be the



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same as the substrates. Avoid applying a warm sealant to a cold surface. The lower the temperature, the longer the sealant will take to vulcanize.

\*\*\* Beware of large fluctuations in temperature especially below freezing point. For example, when temperatures reach well below freezing point in a short period of time, the substrates may have a large elongation/compression movement. The sealant will not have enough time to form a fairly thick skin, which in some cases, may cause a breakage or wrinkling at the joint. If such phenomenon occurs, proceed with an adhesion test.

#### **PACKAGING**

- 304ml cartridge
- 400ml or 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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