DOW CORNING

DOW CORNING® Q3-1566 Heat Resistant Sealant

FEATURES

- One-component adhesive/sealant
- Cures at room temperature when exposed to moisture in the air
- Acetoxy cure system
- Non-sag, paste consistency
- Easy to apply
- Good adhesion on many substrates
- Stable and flexible from -50ºC (-58ºF) to +275ºC (+527ºF), with short peaks up to +350ºC (+662ºF)

High temperature resistant silicone sealant

APPLICATIONS

- Can be used in ovens, cookers and other heating equipment.
- Automotive oil and other coolant sealing applications.

TYPICAL PROPERTIES

Specification writers: These values are not intended for use in preparing specifications. Please contact your local Dow Corning sales representative prior to writing specifications on this product.

CTM*	ASTM*	Property	Unit	Value
		As supplied		
0176		Appearance		Non-slump paste
		Color		Black
0364	MIL-S-8802D	Extrusion rate[1]	g/minute	270
0098		Skin-over time	minutes	5
		Mechanical properties, cured 7 days in air at 23ºC (73ºF) and 50% relative humidity		
0099	D2240	Durometer hardness, Shore A		43
0137A	D412	Tensile strength	MPa	3.6
0137A	D412	Elongation at break	%	340
0022	D792	Specific gravity at 25ºC (77ºF)		1.06
		Heat resistance (2 days at 235ºC/455ºF + 2 hours at 350ºC/662ºF)		Remains flexible, no cracks

1. Extrusion rate: 3.2mm orifice at 0.62MPa.
* CTM: Corporate Test Method, copies of CTMs are available on request.
ASTM: American Society for Testing and Materials.

HOW TO USE

Substrate preparation

All surfaces must be clean and dry. Degrease and wash off any contaminants that could impair adhesion. Suitable solvents include isopropyl alcohol, acetone or methyl ethyl ketone.

Unprimed adhesion may be obtained on many substrates such as glass, metals and most common engineering plastics. Substrates to which good adhesion is normally not obtained include PTFE, polyethylene, polypropylene and related materials.

For maximum adhesion, the use of DOW CORNING® 1200 OS Primer is recommended. After solvent cleaning, a thin coat of DOW CORNING 1200 OS Primer is applied by dipping, brushing or spraying. Allow primer to dry for 15 to 90 minutes at room temperature and in a relative humidity of 50% or higher.

How to apply

Apply a bead of DOW CORNING Q3-1566 Heat Resistant Sealant (see Handling Precautions) to one of the prepared surfaces, then quickly cover with the other substrate to be bonded.

On exposure to moisture, the freshly applied material will "skin-over" in about 5-7 minutes at room temperature and 50% relative humidity. Any tooling should be completed before this skin forms. The surface is easily tooled with a spatula. The sealant will be tack-free in about 18 minutes.

Cure time

After skin formation, cure continues inward from the surface. In 24 hours (at room temperature and 50% relative humidity) DOW CORNING Q3-1566 Sealant will cure to a depth of about 3mm. Very deep sections, especially when access to atmospheric moisture is restricted, will take longer to cure completely. Cure time is extended at lower humidity levels.

Before handling and packaging bonded components, users are advised to wait a sufficiently long time to ensure that the integrity of the adhesive seal is not affected. This will depend on many factors and should be determined by the user for each specific application.

COMPATIBILITY

DOW CORNING Q3-1566 Sealant releases a small amount of acetic acid during cure. This may cause corrosion on some metallic parts or substrates, especially in direct contact or when the cure is carried out in a totally enclosed configuration which would not allow cure by-products to escape.

HANDLING PRECAUTIONS

Product safety information required for safe use is not included. Before handling, read product and safety data sheets and container labels for safe use, physical and health hazard information. The material safety data sheet is available on the Dow Corning website at www.dowcorning.com. You can also obtain a copy from your local Dow Corning sales representative or Distributor or by calling your local Dow Corning Global Connection.

USABLE LIFE AND STORAGE

When stored at or below 32ºC (90ºF) in the original unopened containers, This product has a usable life of 11 months from the date of production.

PACKAGING

This product is available in 310ml cartridges, 20 liter pails and 190kg drums.

LIMITATIONS

This product is neither tested nor represented as suitable for medical or pharmaceutical uses.

HEALTH AND ENVIRONMENTAL INFORMATION

To support Customers in their product safety needs, Dow Corning has an extensive Product Stewardship organization and a team of Product Safety and Regulatory Compliance (PS&RC) specialists available in each area.

For further information, please see our website, www.dowcorning.com or consult your local Dow Corning representative.

LIMITED WARRANTY INFORMATION - PLEASE READ CAREFULLY

The information contained herein is offered in good faith and is believed to be accurate. However, because conditions and methods of use of our products are beyond our control, this information should not be used in substitution for customers' tests to ensure that Dow Corning's products are safe, effective, and fully satisfactory for the intended end use. Suggestions of use shall not be taken as inducements to infringe any patent.

Dow Corning's sole warranty is that the product will meet the Dow Corning sales specifications in effect at the time of shipment.

Your exclusive remedy for breach of such warranty is limited to refund of purchase price or replacement of any product shown to be other than as warranted.

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