

**Technical Data Sheet** 

# DOWSIL<sup>™</sup> 737 Neutral Cure Sealant

	Multipurpose, one-part sealant for application in a wide range of industrial assembly and installation operations
Features & Benefits	<ul> <li>Primerless adhesion to many materials</li> <li>Oxime cure; cures at room temperature upon exposure to moisture in the air</li> <li>Adhesion to many plastics, metals, painted surfaces, glass and rubbers</li> <li>Does not react with or corrode most metals or plastics (see Limitations)</li> <li>Fast cure - 3 to 6 minutes skin-over time; 14 minute tack-free time</li> <li>Cures to a handling condition in 24 hours on exposure to moisture in the air</li> <li>Will not slump, sag or run off surfaces</li> <li>Broad temperature range performance; cured material stays flexible from -85°F to 350°F (-65°C to 177°C)</li> <li>100 percent silicone rubber</li> <li>Excellent weather resistance against sunlight (UV), rain, snow, and temperature extremes</li> </ul>
Composition	One-part silicone rubber supplied as nonslumping paste
Applications	DOWSIL <sup>™</sup> 737 Neutral Cure Sealant is designed for diverse OEM and assembly applications. General uses include bonding and sealing, formed-inplace gasketing and maintenance applications. Specific uses include:
	<ul> <li>Substitute for mechanical fasteners on large and small appliances</li> <li>Sealing refrigerator and freezer liners (however, not FDA-approved for food-contact applications)</li> <li>Adhering plastic moldings to plastic substrates for trim applications, decals</li> <li>Waterproofing electrical components</li> </ul>
	Sealing coaxial connectors

• Protecting instrumentation assemblies

## **Typical Properties**

Specification Writers: These values are not intended for use in preparing specifications.

CTM <sup>1</sup>	Property	Unit	Result
	As Supplied		
	Color		Translucent, white, black
0062	Flow, Sag or Slump	inches	Nil
0097	Specific Gravity		1.04
0364	Extrusion Rate (1/8" Orifice, 90 psi)	grams/minute	395
	Cure Characteristics – Exposed to Air at 77°F (25°C) and 50 Percent RH		
0098	Skin-over Time	minutes	3–6
	Tack-free Time, at 77°F (25°C) and 50 Percent RH	minutes	14
	Physical Properties – As Cured 7 Days at 77°F (25°C) and 50 Percent RH		
0099	Durometer Hardness, Shore A	points	33
0137A	Tensile Strength	psi	> 175
0137A	Elongation	percent	> 300
0293	Typical Adhesion, Peel Strength <sup>2</sup>	ррі	20

1. CTMs (Corporate Test Methods) correspond to standard ASTM tests in most instances.

 Laboratory tests and market tests have demonstrated adhesion to many substrates, including acrylonitrile butadiene styrene, anodized aluminum, brass, carbon steel, copper, galvanized steel, glass, neoprene, phenolic G-10, silicone rubber, stainless steel and wrought iron.

**Description** DOWSIL<sup>™</sup> 737 Neutral Cure Sealant adheres without priming to a variety of materials and cures to a durable, flexible silicone rubber upon exposure to water vapor in the air.

### How to Use Surface Preparation

All surfaces must be clean and dry. Metal and glass surfaces should be cleaned by wiping with a solvent such as DOWSIL<sup>™</sup> OS fluids and an oil-free rag.<sup>1</sup>

### Priming

Priming is not required for most glass, aluminum, steel and other common substrates. A test placement prior to general use is always recommended.

### Applying the Sealant

DOWSIL<sup>™</sup> 737 Neutral Cure Sealant should be applied in a continuous operation. If needed, tool the sealant with light pressure to spread it against the substrate. Tool immediately after sealant application and before a skin forms.

Uncured sealant may be cleaned from tools and nonporous surfaces using DOWSIL<sup>™</sup> OS fluids or commercial solvents.<sup>1</sup> On porous surfaces, allow excess sealant to cure and then remove by abrasion or other mechanical means.

<sup>1</sup>Follow solvent manufacturer's recommended safe handling procedures and applicable federal, state and local regulations.

Handling Precautions	PRODUCT SAFETY INFORMATION REQUIRED FOR SAFE USE IS NOT INCLUDED IN THIS DOCUMENT. BEFORE HANDLING, READ PRODUCT AND SAFETY DATA SHEETS AND CONTAINER LABELS FOR SAFE USE, PHYSICAL AND HEALTH HAZARD INFORMATION. THE SAFETY DATA SHEET IS AVAILABLE ON THE DOW WEBSITE AT DOW.COM, OR FROM YOUR DOW SALES APPLICATION ENGINEER, OR DISTRIBUTOR, OR BY CALLING DOW CUSTOMER SERVICE.
Usable Life and Storage	Product should be stored at or below 32°C (90°F) in original, unopened containers.
Limitations	DOWSIL™ 737 Neutral Cure Sealant is not recommended:
	<ul> <li>For continuous water immersion</li> <li>In applications where excessive abrasion and physical abuse are encountered</li> <li>On materials that bleed oils, plasticizers or solvents; materials such as impregnated wood, oil based caulks, and certain green or partially vulcanized rubber gaskets and tapes</li> <li>In totally confined spaces where the sealant is not exposed to atmospheric moisture</li> <li>On surfaces that will be painted; the paint film will not stretch with the extension of the sealant and may crack and peel</li> </ul>
	In confined cure conditions, DOWSIL™ 737 Neutral Cure Sealant may:
	<ul><li>Discolor brass, copper or other sensitive metals</li><li>Stress craze polycarbonate</li></ul>
	This product is neither tested nor represented as suitable for medical or pharmaceutical uses.
Shipping Limitations	None.
Health and Environmental Information	To support customers in their product safety needs, Dow has an extensive Product Stewardship organization and a team of product safety and regulatory compliance specialists available in each area.
	For further information, please see our website, dow.com or consult your local Dow representative.
Disposal Considerations	Dispose in accordance with all local, state (provincial) and federal regulations. Empty containers may contain hazardous residues. This material and its container must be disposed in a safe and legal manner.
	It is the user's responsibility to verify that treatment and disposal procedures comply with local, state (provincial) and federal regulations. Contact your Dow Technical Representative for more information.

Product Stewardship	Dow has a fundamental concern for all who make, distribute, and use its products, and for the environment in which we live. This concern is the basis for our product stewardship philosophy by which we assess the safety, health, and environmental information on our products and then take appropriate steps to protect employee and public health and our environment. The success of our product stewardship program rests with each and every individual involved with Dow products - from the initial concept and research, to manufacture, use, sale, disposal, and recycle of each product.
Customer Notice	Dow strongly encourages its customers to review both their manufacturing processes and their applications of Dow products from the standpoint of human health and environmental quality to ensure that Dow products are not used in ways for which they are not intended or tested. Dow personnel are available to answer your questions and to provide reasonable technical support. Dow product literature, including safety data sheets, should be consulted prior to use of Dow products. Current safety data sheets are available from Dow.

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