

WINSIL 20
Building and Sanitary
Silicone Sealant

PRODUCT DESCRIPTION

Winsil 20 is fast curing, one part silicone adhesive sealant that cures to silicone rubber when exposed to atmospheric moisture at room temperature to form a highly elastic rubber seal with excellent adhesion to most common building surfaces: glass or glazed surfaces, painted wood, aluminium and other metals, masonry, concrete, GRP, uPVC and many other plastics. Winsil 20 sealants utilise a moisture vapour cure system and release methyl alcohol and ammonia vapours from the sealant surface as a by-product of cure. Winsil 20 is unaffected by high or low temperatures and its superior physical properties are designed to give outstanding durability and performance.

KEY PERFORMANCE PROPERTIES

- One component, ready to use product
- Capability to cure at room temperature and ambient humidity conditions
- Primerless adhesion to many substrates including glass or glazed surfaces, painted wood, aluminium and other metals, masonry, concrete, GRP, uPVC and many other plastics
- Excellent UV, ozone and chemical resistance

TYPICAL APPLICATIONS

- Perimeter joint sealing of wood, metal, uPVC and coated frames
- Sanitary: perimeter sealing of bathtubs, basins etc.
- Ceramic tile sealing
- Curtainwall sealing : glass, metal, uPVC, GRP and cement cladding systems

TYPICAL PRODUCT DATA

Uncured Properties	
Form	Paste
Color	Translucent / White / Black
Specific Gravity	1.0
Application rate, g/min	200
Tooling time, min	5-8
Tack free time, min	25
Full cure, days	1-5
(depending on temp., RH, and bead thickness)	
Application temperature, °C	-30 to +60
Cured Properties	
Hardness, shore A	22
Tensile strength, Mpa	1.5
Elongation at break, %	450
Movement accommodation	+25%
Temperature resistance, °C	-40 to +150

SPECIFICATIONS

Typical product data values should not be used as specifications. Assistance and recommendations are available by contacting Momentive Performance Materials India.

INSTRUCTIONS FOR USE

Surface Preparation

Application surface should be clean, dry, sound and free from all contaminants such as dust, rust, grease etc. For optimum adhesion, surfaces should be thoroughly cleaned with a suitable solvent such as methyl ketone (MEK) or isopropyl alcohol (IPA) to remove dirt, oil and grease. The surface should be wiped dry before applying the silicone sealant.

When solvent are used, proper safety precautions must be observed. All solvents must be considered toxic and must be used only in well ventilated areas.

Winsil 20 sealants will bond to many clean surfaces. An evaluation should be made to determine bond strength for each specific application. For difficult-to-bond substrates use of a primer is suggested. GEBSI primers such as SS 4004, SS 4044, SS 4179 are recommended to use with these adhesive sealants.

Application and Cure Time Cycle

Winsil 20 may be applied directly to the clean substrate. Where broad surfaces are to be matted, the sealant should be applied in a thin, less than 6 mm diameter bead or ribbon around the edge of the surface to be bonded.

The cure process begins with the formation of skin on the exposed surface of the adhesive sealant and progresses inwards through the material. At 25⁰C and 50% relative humidity, these products will form a surface skin which is typically tack-free to rough to about 25min. Once the skin had begun to form, further tooling of the sealant is not advisable. Increased temperatures up to 60⁰C and high humidity will accelerate the cure process. Low temperature and low humidity will slow the cure rate.

As the Winsil 20 sealants cure, methyl alcohol and ammonia vapours are released from the sealant surface. The odour of methyl alcohol and ammonia will completely disappear when the cure is completed.

In addition to the effects of temperature and relative humidity, development of maximum physical properties will depend on joint configuration, degree of confinement, sealant thickness, and substrate porosity.

LIMITED WARRANTY

Momentive Performance Materials India warrants that its product will conform to Momentive Performance Materials India specifications at the time of application or use. The product must be stored in accordance with Momentive Performance Materials India recommendations, and used or applied before the earliest of (1) the indicated "Use Before Date", (2) one year from date of purchase, or (3) expiration of such other period or recommended storage time started in the Momentive Performance Materials India product literature. If notified, in writing, of a claim within one month of the product's use or application, Momentive Performance Materials India will, at its option, replace or refund the purchase price of any Momentive Performance Materials India product which does not satisfy the foregoing warranty.

CONTACT DETAILS

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A 3mm section of Winsil 20 sealant will cure through in approximately 24 hours at 25⁰C and 50% RH. Use of Winsil 20 sealant should be limited to thickness of 6mm.

Normally, sufficient strength will develop in 12 to 24 hours to permit handling. Minimum stress should be applied to the sealant until full physical properties are developed.

CLEAN UP AND REMOVAL

Before cure, solvents such as naphtha, xylene, or toluene are most effective. Refer to solvent use warnings in the section on surface preparation. After cure, select chemical strippers which will remove the silicone rubber are available from other manufacturers. Specific product information may be obtained on request.

HANDLING AND SAFETY

These products are manufactured for industrial use only.

Uncured product contact irritates eyes. In case of contact with eyes, immediately flush with water for 15 minutes. If irritation persists, get medical attention.

Uncured product may irritate the skin. To clean from the skin, wipe very thoroughly with a dry cloth or paper towel, before washing with soap and water.

By-product released during application and curing may irritate the skin and eyes.

PACKAGING AND STORAGE

Winsil 20 is available in 300 ml plastic cartridges. Shelf life is 6 months from the date of manufacture, if stored in the original unopened container at normal room temperature.



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