PENOSIL

TECHNICAL DATA SHEET

Insulating glass silicone 341

NEUTRAL IG SILICONE SEALANT FOR PRODUCTION OF GLASS UNITS

PRODUCT DESCRIPTION

PENOSIL Insulating glass silicone 341 is a one-part, neutral IG system silicone sealant, ready to use without previous mixtures.

It has a high speed curing time and it becomes a very resistant and flexible rubber and with high insulating performances. It has an excellent adhesion to all kind of glass without primer. Solvents free.

MAIN BENEFITS

- Neutral cure sealant. Odourless and non corrosive.
- Ultra fast curing.
- Solvent free.
- Excellent adhesion to glass, aluminium, galvanized steel, zinc.
- Resistant to UV and to ozone.
- High level of mechanical properties.
- Great thermal stability: -55°C a +150°C.
- Suitable for all types of climates.
- Low water absorption.
- Outstanding aging properties.
- Compatible with Structural Silicones.

PRODUCT CERTIFICATIONS

PENOSIL Insulating glass silicone 341 meets the following specifications:

- EN 1279-2
- EN 1279-4
- EN 1279-6 G

It is approved as a second barrier sealant for IGU (Insulating Glass Units) Certifications:

- N of AENOR
- A+ of APPLUS

ENVIRONMENTAL REGULATIONS

French VOC-emission class A+.

PACKAGING INFORMATION

This product is available in 310 ml cartridges (24 u./box, 56 boxes/pallet)

* European pallets: 120x80 cm
Other packaging is available under request.

COLOURS INFORMATION

Black.

STORAGE

The shelf life is 12 months in its unopened original packaging, in dry conditions and protected from direct sunlight at temperatures between +5°C and +25°C.











FIELDS OF APPLICATION





PENOSIL Insulating glass silicone 341 is formulated for use as the secondary sealant in a dual sealed insulating glass units (IGU).

It can be applied in glass with one or two air spaces. It can be used with system of metallic separating profile with aluminium and steel intercalates. It is compatible with most of butyls in primary seal.

IG sealant helps with thermal and sound insulation, condensation control, structural integrity and creating moisture barrier.

Assembles all types of glass: conventional flat glass, coated glass, low emissive, tinted, enamelled, pyrolytic, laminated, tempered, curved; stepped glass or with free edges.

It can be applied also in sealing of insulating glass in facade with Structural Glazing systems. It is compatible with PENOSIL structural silicone, one and two components.

The immediate manipulation of the assembled units is possible due to its fast cure time.

TYPICAL TECHNICAL DATA

Basis:		Neutral oxime silicone		
Consistency:		Thixotropic paste		
Specific gravity:	(ISO 2811-1)	Approx. 1,24 g/cm ³		
Skin time:	(OQ.16-internal)	7-12 minutes (at 23°C; 50% R.H.)		
Manipulation time:		3 hours (room temperature) (At high temperatures this time is reduced, at low temperatures it lengthens)		
Shore A hardness:	(ISO 868)	30±5 (24 hours)		
	(130 606)	35±5 (final: 7 days room temperature)		
Non volatile material:		100%		
VOC content:	(SCAQMD rule 1168)	30 g/l		
Volatile content:	(EN 1279-6G)	3,98% - 49 g/l		
Vapor transmission rate:	(EN 1274-4C)	< 15 g (m ² /24 h./Film 2 mm.)		
Aging resistance:		Excellent		
Chemical resistance:		Excellent		
Application temperature:		+5°C to +35°C		
Service temperature:		-55°C to +150°C		
Tensile properties:				
ISO 37 (2mm thickness, S2 dumbbells, 7 days, 23°C;50% R.H.)				
Tensile strength		1,50 MPa		
Elongation at break		400%		

These values may vary depending on environmental factors such as temperature, moisture, and type of substrates. The time until complete curing may be extended at lower temperature, lower humidity or increasing film thickness.

DIRECTIONS FOR USE

Surface preparation and application

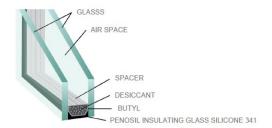
A. Preparation:

Surfaces to be sealed should be clean and dry, free of dust or grease, which could cause a deficient adherence. Butyl cords must be continuous, mainly in the angles.

B. Application:

The application is simple, quick and safe because product is ready to use, it does need previous mix.

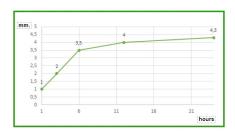
It is applied with a hand or pneumatic gun, in case of cartridges or sausages, and an automatic sealing machine with 1 or 2 pillows, as well as by means of a semiautomatic sealing machine in case of drums.



C. Cure:

PENOSIL Insulating glass silicone 341 has a fast cure speed.

The curing speed depends on the temperature and the relative humidity. The graph shows the values at 23°C and 50% R.H.



D. Cleaning:

We recommend cleaning up extrusion machines with cleaner product hydrocarbons free, re-use and not dangerous, before product polymerization, after only mechanical clean is possible.

E. Storage:

It is recommended to store the IGU manufactured in inclined desks at right angles. Stack 50 cm.

Compatibilities

The first barrier sealants of Butyl Polyisobutylene, certified according to European standard EN 1279, are compatible in full contact, with PENOSIL Insulating glass silicone 341.

In the table are indicated the Butyls compatible with PENOSIL Insulating glass silicone 341.



Reference/s	Manufacturer
BUTYL IG	WOLF GROUP
GD 115, Naftotherm BU S	KÖMMERLING
BUTYLVER	FENZI
IGK 511	IGK
JS680, JS780, JS880	TREMCO ILLBRUCK
PIB 996, KU-83B	NEDEX

Remarks after to use

The quality and durability of the Insulating Glass Units (IGU) depends on the following factors:

- DESIGN
- SUITABILITY AND QUALITY MATERIALS
- MANUFACTURING
- INSTALLATION

Insulating Glass Units intended for residential or commercial glazing should be designed with secondary sealant dimensions in accordance with local regulation and adapt to the required performance.

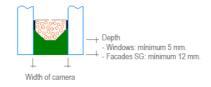
It is recommended to verify the limits of use of all its elements, as well as previous tests of suitability and compatibility.

The application on coated glass requires the technical approval of its manufacturers to confirm if it is necessary to remove the area where the sealant will contact the coated glass. A good adhesion is usually obtained on clear and tinted float glass and on hard pyrolithic coatings.

Coverage

Calculation of LINEAR METERS per LITER of PENOSIL Insulating glass silicone 341:

m.l. x 1 liter	JOINT DEPTH	
Camera	5 mm.	12 mm.
16 mm.	12,5 m.l.	5,5 m.l.
12 mm.	17,5 m.l.	7,5 m.l.
10 mm.	20 m.l.	9 m.l.
8 mm.	25 m.l.	11 m.l.
6 mm.	35 m.l.	15 m.l.



Safety

Provide good ventilation.

Avoid contact with eyes and skin. In case of eyes contact, rinse immediately with plenty of water and seek medical advice if necessary. In case of skin contact, remove mechanically and rinse immediately with plenty of water and seek medical advice if cause irritation.

Keep out of the reach of children.

They are not special necessary cautions during their transport.

The information regarding the safety of the product is available on safety data sheet (SDS). Before using the product, we recommend to read carefully the SDS and the safety labels.

GUARANTEE INFORMATION

WOLF GROUP warrants that its product complies, within its shelf life, to its specification.

If any responsibility were to be considered ours, this would be only for any damages and for the value of the merchandise supplied by us and used by the customer. It is over understood that we warranty the irreproachable quality of our products in accordance with our General Conditions of Sales and Supply.

Liability

The information in this document, in particular recommendations regarding the application and final use of our products, are given in good faith based on our knowledge and is the result of tests and experience and are intended as guidelines. It is the responsibility of the user to determine whether the product is suitable for the application. Due to the great variety of materials and conditions, which are beyond our knowledge and control, we recommend carrying out sufficient previous trials.

The property rights of third parties must be respected.

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This TDS replaces and supersedes all previous data sheets on the same product.

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